

Minerals and Waste Joint Plan



Sustainability Appraisal Appendix 3 Part 2 (g-l) Assessment of Sites October 2016

**Appendix 3g: Assessment of Sites in Ryedale District
Joint Minerals and Waste Plan**

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Sustainability Appraisal Score

Score	Description
++	The Site option is predicted to have higher positive effects on the achievement of the SA objective. For example, this may include a highly significant contribution to issues or receptor of regional or wider significance, or to several issues or receptors of local significance.
m+	The Site option is predicted to have moderate positive effects on the achievement of the SA objective. For example, this may include a positive, but not highly positive contribution to issues or receptor of more than local significance, or to several issues or receptors of local significance.
+	The Site option is predicted to have minor positive effects on achievement of the SA objective. For example, this may include a significant contribution to an issue or receptor of more local significance.
0	The Site option will have no effect on the achievement of the SA objective ¹ .
-	The Site option is predicted to have minor negative effects on the achievement of the SA objective. For example, this may include a negative contribution to an issue or receptor of local significance.
m-	The Site option is predicted to have moderate negative effects on the achievement of the SA objective. For example, this may include a negative, but not highly negative contribution to an issue or receptor of more than local significance.
--	The Site option is predicted to have higher negative effects on the achievement of the SA objective. For example, this may include a significant negative contribution to an issue or receptor of more than local significance.
?	The impact of the Site option on the SA objective is uncertain.

¹ This includes where there is no clear link between the site SA objective and the site

MJP08 - Settrington Quarry

Site Name	MJP08 (Settrington Quarry, Settrington, Malton, Ryedale) (XY 482790 469682)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of Jurassic limestone as proposed extension to existing quarry and importation of soils for the use in restoration
Size	5.6ha
Proposed life of site	20 to 25 years (Estimated date of commencement – 2018)
Notes	Possible restoration – no detailed design yet, but submitter proposes nature conservation and grazing with a continuation of the existing practice of battering the quarry sides using on-site material supplemented by imported subsoil and topsoil.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and	<u>Proximity of international / national and local designations and key features</u> Natura 2000 sites: 3.5km north-west is the River Derwent Special Area of Conservation (SAC). 4 Sites of Special Scientific Interest (SSSIs) within 5km: Three Dykes 2.5km south-west, Cow Cliff Pasture and Quarry 3.7km south-east, Nine Spring Dale 3.8km east and River Derwent 3.5km north-west. No Sites of Importance for Nature Conservation (SINC) lie within 2km of the site. No priority habitats have been identified within 200m of the	✓	✓	✓		-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
improve habitat connectivity	<p>site.</p> <p>The site consists of improved grassland with field boundary hedgerows. No priority habitats have been identified onsite or in close proximity. Protected species that could be affected by the development of the site include badger and nesting birds.</p> <p>Local effects This site is considered unlikely to have a significant effect on Natura 2000 sites, SSSIs or SINC's as a result of the proximity to designated sites and type of development. A Habitats Regulation Assessment (HRA) undertaken for the site identified no pathways to designated sites that are likely to give rise to significant effects.</p> <p>Overall, some minor negative impacts are anticipated in the short, medium and early long term due to disturbance to / possible impacts upon protected species during the operational phase of the quarry.</p> <p>There is currently no detailed design on proposed restoration, but the submitter proposes nature conservation and grazing with a continuation of the existing practice of battering the quarry sides using on-site material supplemented by imported subsoil and topsoil. Following restoration there is potential for benefits to biodiversity through sympathetic restoration, including creation of / natural regeneration of priority habitats such as limestone grassland.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors it is considered that there would be no significant impact on the integrity of Natura 2000 sites. It is also considered that there would be no impact upon SSSIs.</p>							?
2. To enhance or maintain water quality	<p>Proximity of water quality / quantity receptors The site is in a Nitrate Vulnerable Zone (NVZ) for groundwater but lies outside of a groundwater Source Protection Zone (SPZ).</p> <p>According to the Humber River Basin Management Plan (RBMP) the nearest section of river is 'Settrington</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and improve efficiency of water use	<p>Beck catchment (tributary of Derwent)' 810m east of the site. This river is of moderate ecological quality and does not require assessment for chemical quality. No RBMP lakes present. In terms of groundwater the site lies in a groundwater unit called 'Derwent (south) Mercia Mudstone, Lias, Ravenscar and Norton Corallian' (quantitative quality=good, chemical quality=good, overall risk=probably at risk).</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 50% of time. At low flows new extraction licenses may be more restricted.</p> <p>Local effects Because this site is in a NVZ, groundwater may be vulnerable during the restoration phase of the project if fertilisers are used. Some nitrogen enrichment may come through traffic from site depositing nitrogen close to roads, though this is likely to be at insignificant levels for this type and size of site. As with all minerals sites there is a risk of water pollution from fuel spills however, such occurrences should be readily avoidable through good site management.</p> <p>Overall the effect is predicted to be neutral in the short, medium and long term as although there is some risk to water quality due to onsite operations, it is assumed that the relevant environmental permits and regulations will operate effectively. Following restoration, impacts are considered to be neutral with an element of uncertainty as restoration to grazing and nature conservation is proposed (although the exact details are unknown).</p> <p>Plan level/ regional/ wider effects There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by the environmental permitting system during operation.</p>							?
3. To reduce transport miles and associated emissions from transport	<p>Proximity of transport receptors The site is relatively distant from larger markets (York 25km, Hull, 45km), though only 2.7km from Norton / Malton. Access: confirmed as the existing Settrington Quarry access from the C350 road (between Settrington & B1248 from Norton) approximately 75m east of Langton Lane (U8022 unclassified road). No direct access from MJP08 site to the public highways.</p> <p>Light vehicles: 24 two-way movements (based on application details MIN3070); Heavy Goods Vehicle</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and encourage the use of sustainable modes of transportation	<p>(HGV): 36 two-way movements (typical), with maximum of 44 two-way movements.</p> <p>Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0. Transport assessment rating: Green – <i>'The light vehicle and HGV generations of the site will remain as at present although likely future HGV restrictions in Malton are likely to require HGVs to travel through the centre of Norton, passing a number of sensitive receptors although the additional traffic relating to the MJP08 submission site is unlikely to be perceptible.'</i>²</p> <p>Public Right of Way (PRoW): A right of way 'other route with public access' runs adjacent to the west of the site along Langton Lane.</p> <p>Rail: 3.3km north-west (station at Malton is 4.2km north-west). Strategic Road: A64 is 2.8km north (to junction with B1248 direct) B1248 is a timber route; Canal / Freight waterway: 29km south-west (Ouse).</p> <p>Local effects Site would generate up to 44 HGV and 22 light vehicle movements (however, the site currently has planning consent to operate until 2042, so impact should be seen as a continuation of current levels within this time period, where impacts would otherwise have been expected to cease). HGV movement is acceptable onto the road; however, minor works may be required to improve the existing access arrangements so a traffic assessment would be required. Access to the site will be via the existing Settrington Quarry rather than the adjacent 'other route with public access' (Langton Lane). Although users of the adjacent 'other route with public access' may experience some further disturbance as a result of the operation of the site, this impact is considered to be of a very minor magnitude.</p> <p>Overall, the site will lead to the continuation of traffic and transport miles which is considered a minor negative in these time frames.</p> <p>No sustainable transport is likely to contribute to the site. Some longer journeys may be generated alongside more local journeys (e.g. to Malton). Minor negative (pending site specific traffic assessment).</p>							

² Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<u>Plan level / regional / wider effects</u> None noted.							
4. To protect and improve air quality	<p><u>Proximity of air quality receptors</u> The site is not within an Air Quality Management Areas (AQMA). No hazardous substances consent sites nearby. The nearest settlement is Settrington 850m north-east although individual properties including Sparrow Hall 100m north-west and Settrington Grange 390m east lie closer to the site.</p> <p><u>Local effects</u> Traffic would be generated by this extension as a continuation of existing levels to and from the site (see SA Objective 3). Possible air pollution impacts may result from traffic fumes and the generation and deposition of dust, though there are no local receptors other than Sparrow Hall. Nearby individual properties, particularly Sparrow Hall may be in range for dust impacts from the site, though again such receptors are relatively few. It is however acknowledged that mitigation may reduce any impacts significantly however this is currently unknown until a dust / air quality assessment is undertaken and any required mitigation is outlined.</p> <p>Some uncertainty is added as if traffic is routed through Malton, or re-routed through Norton, the traffic from this site, together with other traffic, may either continue to generate traffic that could make it more difficult to remove Malton's AQMA status, or add to air pollution in Norton. Due to the low number of vehicles from this site this effect is very small, but uncertain.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓	✓	-	-	0
						?	?	
5. To use soil and land efficiently and	<u>Proximity of soil and land receptors</u> Land is Agricultural Land Category (ALC) Grade 3. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
safeguard or enhance their quality	<p>Local effects The proposed extension to the existing quarry is adjacent to a limestone quarry. This is likely to extend the limestone pit in this location but is unlikely to have major effects on this objective. Nonetheless, the land is currently being farmed, so small scale negative effects are noted. 5.6ha of ALC Grade 3 land (best and most versatile land)³ will be lost. No detailed restoration design of yet, but the submitter proposes nature conservation and grazing with a continuation of the existing practice of battering the quarry sides using on site material supplemented by imported soils and topsoil, However, to be sure, mitigation should be to retain on-site soils for restoration. (e.g. use as bund)</p> <p>Plan level / regional / wider effects If best and most versatile agricultural land is lost at the site, it would add cumulatively to the loss of agricultural land to development land in England. However, the loss is considered to be a very small in relation (0.009%) to the overall agricultural land lost in England per annum to development⁴ but could have a small scale effect on national food production capacity.</p> <p>The overall level of contribution to the objective is considered to be minor negative.</p>							?
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change The site is bounded by hedgerows and is predominantly used for agriculture.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p>	✓			✓	-	-	-

³ The best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping the site is located within ALC Grade 3 land, without further investigation it is not known whether it is Grade 3a or 3b. For the purposes of this SA the precautionary principle has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

⁴ 5.6ha (assuming all land is best and most versatile) annualised across the potential 25 year life of the site would be an annual 0.22ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.22ha loss would represent a 0.009% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Plan level / regional / wider effects There would be some loss of vegetation including hedgerows; however this impact is considered to be insignificant in terms of climate change. The site is relatively distant from larger markets (York 25km, Hull 45km) and therefore depending upon where the stone will ultimately be used, this may increase the climate change impact of the site with transport miles and associated climate change emissions potentially being significant. A significant amount of energy will be required for machinery to extract the minerals from the site, with associated emissions and use of natural resources.</p> <p>Following restoration, impacts are uncertain as it is not clear whether 'restoration for nature conservation' would include the creation of new carbon sinks. Overall during the operational phase of the proposed site is expected to have a minor negative effect on the SA Objective.</p>							?
7. To respond and adapt to the effects of climate	<p>Proximity of factors relevant to the adaptive capacity⁵ of a site Site lies in Flood Zone 1. Surface water flooding does not affect this site. No ecological networks identified. Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 50% of time. At low flows new extraction licenses may be more restricted.</p>					-	-	-

⁵ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
change	<p>The proposed site is on ALC Grade 3 agricultural land.</p> <p>Local effects Flooding risk is seen as negligible at this site which is classified as 'less vulnerable' in terms of its flood risk vulnerability classification. Climate change to river flood risk is unlikely to affect the site in the latter part of the Plan period. Climate change effects on surface water flooding may impact the site in the latter Plan period; however, the level of risk is likely to be low.</p> <p>Overall, the effects on this SA objective are likely to be minor negative although there is some uncertainty as to any long term effects post restoration of the site.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>							?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will extract virgin sand and gravel which will be unavailable for future use (unless recycled). This is considered to have a high negative effect on the SA objective⁶.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>	✓		✓		--	--	--

⁶ Proposals for new mineral extraction at a rate in excess of 75,000 tonnes per annum should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has been applied also to minerals output for the purposes of Development Management, Policy D11.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects None noted.</p> <p>Plan level / regional / wider effects The site may have an indirect negative impact on the prioritising the management of waste up the waste hierarchy as a result of providing virgin sand and gravel and reducing the need to recycle sand and gravel from other locations.</p>		✓		✓	-	-	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors Settrington Conservation Area (DNY1063) lies 740m north-east. No Registered Parks and Gardens, Registered Battlefields or World Heritage Sites within 5km. One Scheduled Monument lies within 2km: medieval settlement earthworks on and around Town Green (ID 1,019,092) 730m north. Village of Settrington lies circa 800m north-east at closest point and 51 listed buildings lie within this settlement (49 Grade II and 2 Grade II*). 2 further listed buildings lie within 1km - nearest to site is 'Farm buildings approx. 40m north of Settrington Grange Farmhouse' 375m south-east. Settrington House Named Designed Landscape lies 660m east.</p> <p>Historic Landscape Characterisation (HLC) Broad Type – enclosed land, HLC Type- unknown planned enclosure. Undesignated archaeology in this area includes evidence for early prehistoric activity and settlement. Monuments include ditched enclosures, ring ditches and ladder settlements. This evidence suggests a multi-period settlement continuing into the Romano-British period.</p> <p>Local effects The HLC type of this area is unknown planned enclosure and the allocation site is a smaller part of a larger area of similar character type, of which the legibility is significant. The proposed extraction is unlikely to have a major impact upon the HLC of the immediately surrounding area, although it is acknowledged that within the site the HLC will become invisible as development will replace an earlier field system. As 17% of the whole HLC project area has been identified as planned enclosure, this effect is not considered to be significant. The setting of nearby historic assets, particularly the Listed Building nearby</p>	✓		✓	✓	m-	m-	m-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Settrington Grange may be sensitive to this development. Further assessment of impacts of the sites on heritage assets should be undertaken prior to the development.</p> <p>There is high archaeological potential for the survival of archaeological remains within the site from the early prehistoric period onwards and, although the site has not been archaeologically evaluated, it is assumed that allocating this site would be likely to cause the loss of these archaeological remains if the site is extracted without mitigation. Archaeological potential is however deemed uncertain until such time as an archaeological field evaluation is carried out. The results of such work would provide more certainty about the nature and significance of below ground deposits.</p> <p>It is assumed that the archaeological impact will occur throughout the duration of extraction. It is assumed that mineral extraction will result in the total destruction of the undesignated archaeological remains. As archaeology is a finite, irreplaceable resource, the impact will therefore be significant. However, it is likely that investigation works required by the Joint Plan Policy D08 (Historic Environment) 'mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.' would result in an overall minor negative effect.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks or Heritage Coast within 10km. Howardian Hills Areas of Outstanding Natural Beauty (AONB) lies 6km west. The site is also located within an area that has been mooted as a potential AONB (the Yorkshire Wolds). No Inheritance Tax Exemption land within 5km. Site is within Ryedale Borough Council Area of High Landscape Value. In terms of tranquillity the site is 'disturbed'. Light pollution: the site ranges from 0.25 to 5NanoWatts/cm²/ sr⁷.</p> <p>The relevant National Character Area (NCA) is Yorkshire Wolds. The North Yorkshire and York Landscape Character Assessment (NY&Y LCA) lists site as Character Area 30 Sand and Gravel Vale Fringe. This is characterised by high visual sensitivity as a result of strong inter-visibility with Enclosed Vale Farmland Landscape Character Type and open views along the Sand and Gravel Fringe; Low ecological sensitivity resulting from the fact that this landscape predominantly consists of improved agricultural fields; and, high landscape sensitivity as a result of the striking settlement pattern, archaeological sites and designed landscapes.</p> <p>Local effects It is considered that the allocation site could have a potential impacts locally on an Area of High Landscape Value. Photos from site visits in summer 2014 show that the site is largely screened by vegetation and / or topography, but winter views would need to be assessed. The site is approximately 1km from the village of Settrington and from photographs it does not appear that its setting would be affected.</p> <p>In terms of visual intrusion, the site lies approximately 50 to 60m Above Ordnance Datum (AOD) and is not likely to be unduly prominent. In terms of wider landscape there is scope for the extension area to benefit from the same factors that screen the existing quarry. Locally, the area adjacent to Langton Lane would need to be assessed as it might be best left as a continuation of the field opposite Sparrow Farm that was taken out of the original boundary (Section 106 agreement dated 19 December 2002).</p>	✓	✓	✓	✓	-	-	-

⁷ Light pollution and dark skies are measured on a scale <0.25 (darkest) to >32(brightest) NanoWatts/ cm²/ sr. CPRE, 2015; England's Light Pollution and Dark Skies – Interactive Map. Available at <http://www.cpre.org.uk/>. Accessed September 2016.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>In the short term, soil stripping and early phases of work before mitigation planting has reached full effectiveness may make the quarry more visible. There will be a continuing loss of agricultural land. In the medium term the area affected by extraction will continue to enlarge, but restoration will be under way in the existing quarry. In the long term impacts are likely to be the same as the medium term as extraction could take place for up to 30 years. Irreversible changes will have occurred in the landscape, although progressive restoration will soften effects.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth The site is relatively distant from larger markets (York 25km, Hull 45km).</p> <p>Local effects The allocation would result in 3 million tonnes of limestone being made available to the market over 20 to 25 years. This would make a significant contribution to the building sector by helping to boost supply of a key building material. It would also directly support jobs in extraction and freight. However, the extraction of minerals is not considered a long term industry as the economic boost and jobs provided at the site is limited to the lifetime of mineral extraction. The site does not represent low carbon development however as possible markets are relatively spread out, which could increase the carbon footprint of construction using limestone from this site. The effect overall is however positive.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability Index of Multiple Deprivation (IMD) Area is Derwent. Not within the most deprived 20%. Nearest significant communities: within 5km of the site lies Norton on Derwent / Malton, Langton, North Grimston, Settrington, Scagglethorpe and the edge of Rillington. The Ryedale Plan Local Plan Strategy identifies Malton and Norton as a Principal Town which is the primary focus for growth. Rillington is listed as a service village under policy SP1⁸ where limited small scale growth is the ambition. The other settlements within 5km are not specifically listed in the settlement hierarchy however policy SP1 states that in all other villages, hamlets and in the open countryside development will be restricted to that which is necessary to support the economy and communities, can be justified in terms of improvements to the environment or the conservation of heritage assets or is justified through the neighbourhood planning process.</p> <p>Local effects Settrington is largely screened from the site and most other communities are too distant to experience significant amenity impacts that may impact on tourism. This site could support a modest amount of jobs in extraction and freight. It would also supply a useful supply of building materials to support</p>		✓	✓	✓	+	+	0

⁸ General Location of Development and Settlement Hierarchy

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>the planned growth housing stock in nearby settlements.</p> <p>Plan level / regional / wider effects The proposal for clay extraction at this site is unlikely to affect communities in the wider area.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors An 'other route with public access' lies adjacent to the site to the west. Yorkshire Wolds National Cycle Network (NCN) lies 270m north of the site at the closest point. The Centenary Way leisure trail passes 670m east of the site at the closest point.</p> <p>Local effects Access to the site will be via the existing Settrington Quarry rather than the adjacent 'other route with public access' (Langton Lane). Although users of the adjacent 'other route with public access' may experience some further disturbance as a result of the operation of the site, this impact is considered to be of a very minor magnitude. The site is well screened from the Yorkshire Wolds NCN and Centenary Way leisure trail, however users of the NCN may experience increased traffic along the C350 should this route be utilised for vehicle access. Following restoration, there may be some opportunities for learning should the site for restored to nature conservation purposes.</p> <p>Plan level / regional / wider effects The Yorkshire Wolds NCN and Centenary Way leisure trail connect into the wider area and further afield, however the distance between the site and routes means they are unlikely to be adversely affected.</p>		✓	✓		-	-	0
15. To protect and improve the wellbeing, health and safety of local	<p>Proximity to population / community receptors / factors relevant to health and wellbeing The village of Settrington lies approximately 850m north-east. A number of individual properties including Sparrow Hall 100m north-west and Settrington Grange 390m east lie close to the site. No clinics, hospitals or health centres within 1km. Primary School approximately 1.1km north-east.</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
communities	<p>Local effects Traffic on roads is likely to continue to be experienced beyond the current quarry lifetime as a result of this extension and without mitigation it is possible that noise and dust could increase. The site may also heighten traffic levels affecting an area used by walkers and cyclists. As these impacts are localised and there are a limited amount of nearby receptors, impacts are considered to be negligible to minor negative during the operation of the site.</p> <p>Some uncertainty is added as if traffic is routed through Malton, or re-routed through Norton, the traffic from this site, together with other traffic, may either continue to generate traffic that could make it more difficult to remove Malton's AQMA status, or add to air pollution in Norton. Due to the low number of vehicles from this site this effect is very small, but uncertain.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site lies in Flood Zone 1. Surface water flooding does not affect this site.</p> <p>The site lies in a 1km square that are used to assess the likelihood of groundwater flooding. <25% of the area is susceptible to Clearwater groundwater flooding. As the site is at the top of a hill groundwater flood risk is considered low, though much will depend on the depth of the quarry. Excavation in the existing site to the immediate north (which is at a similar elevation) is to 25m AOD which was above the water table⁹.</p> <p>This site is not at risk from a 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'¹⁰. Flooding risk is seen as negligible at this site which is classified as 'less vulnerable' in terms of its flood risk vulnerability classification. A site specific flood risk assessment should consider any potential risk from groundwater flooding and seek to manage any runoff utilising SuDS where</p>					0	0	0

⁹ North Yorkshire County Council Environmental Services Committee, Development Control Sub Committee. 1 February 2000. Proposed Extension Settrington Quarry for Fenstone Minerals Ltd (Ryedale District – Rillington Electoral Division) [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=3998>]

¹⁰ No other Jurassic limestone site has been identified as suitable for SFRA assessment and this site is located in Flood Zone 1.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	appropriate, ensuring that flood risk is not increased at any receiving waterbody. Plan level / regional / wider effects None noted.							
17. To address the needs of a changing population in a sustainable and inclusive manner	Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans. Local effects The site would make a small contribution to self-sufficiency in the supply of limestone and may also support markets outside of the Plan area. Plan level / regional / wider effects None noted.		✓	✓		+	+	0
Cumulative / Synergistic effects¹¹								
Planning context	Within 5km of the site lies Norton on Derwent / Malton, Langton, North Grimston, Settrington, Scagglethorpe and the edge of Rillington. Only Settrington lies within 2km. The Ryedale Plan Local Plan Strategy identifies Malton and Norton as a Principal Town which is the primary focus for growth. This is not specifically listed in the settlement hierarchy however policy SP1 states that in all other villages, hamlets and in the open countryside development will be restricted to that which is necessary to support the economy and communities, can be justified in terms of improvements to the environment or the conservation of heritage assets or is justified through the neighbourhood planning process. The site does not overlap or is adjacent to any allocations in the existing Ryedale Local Plan Proposals Map (though is in an Area of High Landscape Value (not a saved policy).							
Other Minerals and Waste Joint Plan Sites	There is one site located within 5km – MJP63 (Brows Quarry, Malton) approximately 5km west. Settrington active Jurassic limestone quarry lies adjacent to the north, Whitewall active Jurassic limestone quarry lies 3.5km west and Whitewall quarry waste transfer station lies 3.3km west. Malton Household Waste Recycling Centre lies 4.6km north-west, Palm Recycling Ltd WTS 4.8km north-west and Porky's Auto Spares recycling (ELV) 4.8km north-west.							
Historic	Historic landfill sites lie to the east and west of the site (both within 1km). A sewage treatment works lies 1.7 km north. The original part of							

¹¹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

minerals and waste sites	Settrington Quarry is adjacent.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on protected species and any potential hydrological impacts on the River Derwent SAC (if applicable) and protected species. • Design to minimise impact on the best and most versatile agricultural land and to protect high quality soil resources. • Design to include landscaping to mitigate impact on heritage assets (Town Green Scheduled Monuments, other potential archaeological remains, Listed Buildings (including: Settrington Grange Farmhouse and farm buildings and buildings in Settrington and Settrington Conservation Area) and their settings and local landscape features • Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate • Design to include suitable arrangements for other rights of way such as Langton Lane including associated mitigation, as appropriate. • Improvements to access. • Appropriate arrangements for control of and mitigation of the effects of blasting, noise and dust. • Appropriate restoration scheme using opportunities for habitat creation, with well-informed justification for any wetland creation, considering also the potential adverse impacts of new wetland (as opposed to restoration to agriculture). 	

MJP30 – West Heslerton Quarry

Site Name	MJP30 (West Heslerton Quarry, West Heslerton, Ryedale (XY 491615 476633))
Current Use	Bungalow and associated land
Nature of Planning Proposal	Extraction of sand as proposed extension to existing quarry
Size	0.29ha
Proposed life of site	1 year (estimated date of commencement 2019)
Notes	Site restoration to low level agriculture, similar to the scheme for adjacent existing quarry with batters on sides to tie in with existing restored areas. Planning permission to replace the bungalow may be sought in the future.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPROTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000: 9km west-River Derwent SAC, 10km north-west - Ellers Wood and Sand Dale SAC. 3 SSSIs within 5km - East Heslerton Brow 1.06km south-east, Ladyhills 4km south and Wintringham Marsh 4.95km south-west. 2 SINC's within 2km- West Heslerton Brow Road Cutting (ratified SINC, SE97-05) 1.48km south and West Heslerton Links (ratified SINC, SE97-04). No UK priority habitats lie within 200m. The sites does not lie within a recognised ecological network however a green infrastructure corridor lies 165m south and north East Wolds Scarp Living Landscape lies 600m south.</p> <p>Local effects This site is unlikely to have a significant effect on any Natura 2000 sites, SSSI or SINC's as a result of the proximity and type of development. A HRA identified no pathways to designated sites that are likely to give rise to significant effects. The site is currently occupied by a bungalow and garden possibly with mature trees and hedgerows. Protected species that could be affected include roosting bats and nesting birds. Overall, it is considered that minor negative impacts may occur in the short term due to possible</p>	✓	✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>impacts upon protected species. Impacts following restoration are considered to be minor negative should the site be restored to low level agriculture without compensating for the loss of habitat (trees) as a result of the development.</p> <p>Plan level / regional / wider effects None noted.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is not located within a NVZ or a groundwater SPZ. The site falls within the Humber River Basin District. The nearest section of RBMP river is 'Sherburn Beck catchment (tributary of Derwent)' which is of moderate ecological quality and does not require assessment for chemical quality. CAMS: Surface water resources available at least 30% of the time (at least 30% of the time water resource availability is categorised as 'red' so water may be severely restricted).</p> <p>Local effects As with all minerals sites there is a risk of water pollution from fuel spills and site operations. However, overall the effect is predicted to be neutral in the short term as although there is some risk to water quality due to onsite operations, it is assumed that the relevant environmental permits and regulations will operate effectively. In the medium and long term effects are likely to be neutral following restoration to agriculture.</p> <p>Plan level/ regional/ wider effects There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by the environmental permitting system during operation.</p>					0	0	0
3. To reduce transport miles and associated emissions from transport and encourage the	<p>Proximity of transport receptors Site is located in close proximity to the A64 and is relatively well connected to markets in Scarborough and York. Access: confirmed to be the existing West Heslerton Quarry access onto A64 approximately 490m east of West Heslerton village. The mineral would be taken direct into the existing quarry without transport on the public highway.</p> <p>HGV vehicles: 14 two-way movements (estimate based on Application details NY/2010/0097/73); Light vehicles: 10 two-way movements (estimate based on Application details NY/2010/0097/73).</p> <p>Net change in daily vehicle trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: Green –</p>		✓	✓		-	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
use of sustainable modes of transportation	<p><i>'Given the low traffic and HGV generation of the site which remain at present levels, the traffic impact of the site is thus limited and Highways England have confirmed that they would have no objection in principle to the continued use of the site.'</i>¹²</p> <p>PRoW: The site is not affected by a registered PRoW.</p> <p>Rail: 1.1km north / nearest known railhead: 49km south-west; Strategic Road: A64 170m south; Canal / Freight waterway: Ouse is 36.2 km south-west.</p> <p>Local effects Vehicles will not access the public highway from this site. Instead they will go to the West Heslerton Quarry where there will be extant operations. Although indirectly this may extend traffic from West Heslerton Quarry for an additional 1 year period), this will be at low levels rated as non-significant in this assessment particularly as there are no intervening settlements between the quarry and the A64. However, one negative aspect is noted. This is because the site does not include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway. A traffic assessment will be needed which should investigate this issue.</p> <p>As the access is onto the A64 the Joint Plan traffic assessment has investigated personal injury collision data around the access point and found it to be not significant, and indicated that Highways England have confirmed in principle that they would not object.</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors This site is not within a Hazardous Substances Consultation Zone or an AQMA. There are properties associated with the settlements of East Heslerton (650m) and West Heslerton (450m) and a number of individual properties are in the range of dust.</p> <p>Local effects The site is a very small land parcel that is surrounded on three sides by an area that has already been consented for sand extraction and is currently active. Due to the very small size of the site, its</p>					0	0	0

¹² Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>situation in relation to an already active site and proximity to residential receptors, impacts in relation to air quality as a result of this development are considered to be negligible. Following restoration to agriculture impacts are considered to be neutral.</p> <p>Plan level / regional / wider effects None noted.</p>							
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Site is ALC Grade 3, although part of the site currently accommodates a residential building and its garden.</p> <p>Local effects The site constitutes a very small area (0.29ha) of previously developed land, with a possible best and most versatile agricultural land (Grade 3) land being lost¹³. Effects on land use and soil quality during the 1 year operational phase of the site are therefore considered to be negligible. Restoration to agriculture would represent a (very small) increase in productive agricultural land in comparison to the baseline situation.</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a very small in relation to the overall agricultural land lost in England per annum to development¹⁴ but could have a small scale effect on national food production capacity.</p>	✓		✓		-	-	+
6. Reduce the causes of climate	<p>Proximity of factors relevant to exacerbating climate change No Priority Habitats lie within 200m. A number of trees are located onsite surrounding the bungalow. Site is located in close proximity to the A64</p>	✓			✓	-	0	0

¹³ The best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping the site is located within ALC Grade 3 land, without further investigation it is not known whether it is Grade 3a or 3b. For the purposes of this SA the precautionary principle has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

¹⁴ 0.29ha (assuming all land is BMV) annualised across the 1 year life of the site would be an annual 0.29ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.29ha loss would represent a 0.01% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
change	<p>and so is relatively well connected to markets in Scarborough and York.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan Level / regional / wider effects The land / habitats lost to this development would not significantly affect climate change while access to markets is relatively well connected to Scarborough and York. The site would form an extension to an existing site and would utilise the access track, processing plant and weigh bridge already existing at the adjacent site. This is therefore considered to be a more sustainable option in terms of the embodied energy of associated plant than a standalone site that would be likely to require additional infrastructure.</p> <p>During the 1 year operational period of the site 10 two-way light vehicle movements and 14 two-way HGV movements are anticipated per day resulting in a very small contribution towards climate change. Therefore the site is considered to have a minor negative effect in the short term, with a neutral effect in the medium to long term following site restoration.</p>							?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹⁵ of a site The site is in Flood Zone 1 and is not affected by surface water flooding. No ecological networks present.</p> <p>Site is ALC Grade 3, although part of the site currently accommodates a residential building and its garden.</p> <p>Local of effects on climate change adaptation Climate change to river flood risk is unlikely to affect the site in the latter part of the Plan period. Climate change effects on surface water flooding may impact the site in the latter Plan period; however, the level of risk is likely to be low. There would be a loss of</p>					-	-	0

¹⁵ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>agricultural land during the operation of the proposed site.</p> <p>Overall, the effects on this SA objective are likely to be minor negative although there is some uncertainty as to any long term effects post restoration of the site</p> <p>Plan level / regional / wider effects None noted.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects Site is small, so on its own it is not possible to identify if this site is necessary or unnecessary. The extraction of sand is, however, the extraction of a primary resource. Depending on the end use there may be alternatives available, such as colliery spoil.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		-	-	-
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects None noted.</p> <p>Plan level / regional / wider effects The site may have an indirect negative impact on the prioritising the management of waste up the waste hierarchy as a result of providing virgin sand and gravel and reducing the need to recycle sand and gravel from other locations.</p>					-	0	0
10. To conserve or enhance the	<p>Proximity of historic environment receptors No Conservation Areas within 1km, Scampston Hall Registered Park and Garden lies 4.6km south-west, no Registered Battlefields or World Heritage Sites within 5km. In terms of Scheduled Monuments 'Heslerton Brow barrow group: a bowl barrow 250m north-</p>	✓		✓		m-	m-	m-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
historic environment and its setting, cultural heritage and character	<p>west of Wold Barn' (ID 1,011,582) lies 1.65km south, 'Heslerton Brow barrow group: a bowl barrow 230m north-east of Wold Barn' (ID: 1,011,585) lies 1.7km south-east and 'Heslerton Brow barrow group: three bowl barrows 300m north-east of Wold Barn' (ID 1,011,586) lies 1.7km south-east. 11 Listed Buildings lie within 1km (1 Grade I, 10 Grade II), closest to site 'Coach house and yard wall attached to the Old Rectory' (Grade II, NHLE No. 1,315,730) 670m south-west). The site lies within the English Heritage Vale of Pickering Statement of Significance area. West Heslerton Hall (country estate) Named Designed Landscape lies 880m south-west.</p> <p>HLC Broad type - Enclosed land, HLC Type – Planned large scale parliamentary enclosure. Undesignated archaeology in this area includes evidence for early Bronze Age settlement features, including domestic pits with large Beaker ceramics and lithics assemblages, ring ditches and ring gullies and cremation burials. A Bronze Age trackway has been identified and later Iron Age activity also. A Neolithic- Anglo –Saxon cemetery also lies outside of the allocation area.</p> <p>Local effects The HLC type of this area is planned large scale parliamentary enclosure and the allocation site is a small part of a larger area of similar character type, of which the legibility is significant. The proposed extraction is unlikely to have a major impact upon the HLC of the immediately surrounding area, although it is acknowledged that within the site the HLC will become invisible as development will replace an earlier field system. As the proposed allocation is so small, this effect is not considered to be significant.</p> <p>There is high archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards and, although the site has not been archaeologically evaluated, it is assumed that allocating this site would be likely to cause the loss of these archaeological remains if the site is extracted without mitigation. It should be noted that the existing adjacent site owned by the same operator has a good mitigation method / strategy in place and so potential may exist to apply this method of archaeological work to this site also. Archaeological potential is however deemed uncertain until such time as an archaeological field evaluation is carried out. The results of such work would provide more certainty about the nature and significance of below ground deposits.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>It is assumed that the archaeological impact will occur throughout the duration of extraction. It is assumed that mineral extraction will result in the total destruction of the undesignated archaeological remains. As archaeology is a finite, irreplaceable resource, the impact will therefore be significant. Nearby scheduled monuments and listed buildings are unlikely to be significantly impacted in terms of character. However, it is expected that investigation works required by the Joint Plan Policy D08 (Historic Environment) – ‘mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.’ would result in an overall minor negative effect¹⁶.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character North York Moors National Park lies 7.5km north. No AONBs or Heritage Coast lie within 10km. Although the site does not lie within a district level landscape designation, Ryedale Borough Councils Area of High Landscape Value lies 170m south. The Yorkshire Wolds area has been accepted by Natural England as worthy of assessment for a future AONB (although there is no certainty regarding timescales or the outcome of this). Light pollution: the site ranges from <0.25 to 0.5NanoWatts/ cm²/ sr¹⁷.</p> <p>Site is in Vale of Pickering NCA. The North Yorkshire and York LCA places this site in Landscape Character Type 30: Sand and Gravel Vale Fringe. This character type has: high visual sensitivity as a result of strong inter-visibility with Enclosed Vale Farmland Landscape Character Type and open views along the Sand and Gravel Fringe; Low ecological sensitivity resulting from the fact that this landscape predominantly consists of improved agricultural fields; High landscape sensitivity as a result of the striking settlement pattern of villages located along the spring line, archaeological sites and designed landscapes. In terms of ‘intrusion’ the area is classified as disturbed.</p>	✓	✓	✓		-	-	-

¹⁶ Comprehensive archaeological and paleoenvironmental investigation may provide information to enhance the significance of the monument by adding to our knowledge of the past landscape.

¹⁷ Light pollution and dark skies are measured on a scale <0.25 (darkest) to >32(brightest) NanoWatts/ cm²/ sr. CPRE, 2015; England’s Light Pollution and Dark Skies – Interactive Map. Available at <http://www.cpre.org.uk/>. Accessed September 2016.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects The site is small and set within an existing sand quarry on the edge of the Vale of Pickering where there are wide open views. The additional visual impact is considered to be of little significance in the wider landscape context. The site appears to be being worked from north to south towards the edge of the area of high landscape value (AHLV) and the A64, and the extension would be part of this process. However, working this area would involve loss of mature trees. The site will not have a significant adverse impact on the setting of West Heslerton village, which lies approximately 450m distant. The land slopes away from the village and there are some intervening hedges and shelterbelts. In the short term impacts are considered to be negligible to minor negative. In the medium and long term impacts are minor negative as the sunken landscape resulting from agriculture in the quarry base is unlikely to be capable of satisfactory integration with its surroundings.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is located in close proximity to the A64 and so is relatively well connected to markets in Scarborough and York.</p> <p>Local effects Due to the small size and short operational period (1 year) of the site, it is considered unlikely that any additional jobs would be created as a result of the allocation (but the additional area of quarrying may keep existing workers at the adjacent quarry in employment for longer). The site would make a small contribution to the supply of a valuable building product: sand. Ultimately this may help keep the construction sector competitive. The site would utilise the access track, processing plant, weighbridge, etc. already in place at the existing adjacent quarry and this will help to keep costs down associated with extraction from the site. Overall, impacts are considered to be a minor positive in the short term and neutral in the medium and long term.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	+	0	0
13. Maintain and enhance the viability	<p>Proximity of factors relevant to community vitality / viability IMD Area is Rillington. This is not in the most deprived 20%. Nearest significant communities: within 5km of the site lies Sherburn, East Heslerton, West Heslerton, Wintringham, East Knapton, West Knapton and Yedingham. The Ryedale Plan Local Plan</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and vitality of local communities	<p>Strategy identifies Sherburn as a service village under policy SP1 where limited small scale growth is the ambition. The other settlements within 5km are not specifically listed in the settlement hierarchy however policy SP1 states that in all other villages, hamlets and in the open countryside development will be restricted to that which is necessary to support the economy and communities, can be justified in terms of improvements to the environment or the conservation of heritage assets or is justified through the neighbourhood planning process.</p> <p>Local effects Job opportunities arising from this site are likely to be very limited, and while the site would provide a source of sand which could aid future development the immediate settlements are unlikely to directly benefit in any significant way. The site is unlikely to either hinder or boost local tourism. Overall any effect is considered to be insignificant.</p> <p>Plan level / regional / wider effects The proposal for sand extraction at this site is unlikely to affect communities in the wider area.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A local footpath (25.47/4/1) runs 190m north of the site. An area of open access land lies circa 950m south of the site.</p> <p>Local effects It is considered that the allocation of this small parcel of land surrounded by an existing quarry would not lead to any significant additional impacts on leisure, recreation and learning over the baseline situation.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing The village of East Heselton lies 650m east and West Heselton 450m west. Individual properties – one property is located within the site area, Sand Lane Farm and a number of other properties 250m west, property 140m south, property 330m east. West Heselton School lies 800m south. No hospitals, clinics or health centres within 1km.</p> <p>Local effects The development proposals would need to undertake an appropriate assessment of the</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>construction impacts on residents / property¹⁸ within the site area. It is considered that the allocation of this small parcel of land surrounded by an existing quarry would not lead to any significant additional impacts on the wellbeing, health and safety of local communities over the baseline situation.</p> <p>As the access is onto the A64 the Joint Plan traffic assessment has investigated personal injury collision data around the access point and found it to be not significant, and indicated that Highways England have confirmed in principle that they would not object.</p> <p>Plan level / regional / wider effects None noted</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones The site is in Flood Zone 1 and is not affected by surface water flooding. The site lies in a 1km square where >75% of the area has conditions that could support superficial deposits groundwater flooding.</p> <p>A previous application at the existing quarry adjacent to this site stated that “<i>although little detailed information is available, rapid recharge by rainfall....combined with the highly permeable nature of unconsolidated superficial deposits, can be expected to give rise to considerable fluctuations in groundwater levels, with localised flooding and seasonal and or intermittent flow in nearby streams. Trial pitting, undertaken in August 1997, showed the depth to the water table at that time to vary considerably across the site, ranging from approximately 1.5, below surface in the worked northern section of the quarry to an estimated depth of up to ten metres in the unworked central and southern parts of the site</i>”¹⁹. Groundwater, however, is considered to be an inherent issue with many sand quarries.</p>					0	0	0

¹⁸ Planning permission to replace the bungalow may be sought in the future

¹⁹ Hallett-Hughes Associates, 1999, Statement in support of an application for planning consent to extend sand workings at West Heslerton Quarry near Malton North Yorkshire [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=4092>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Summary of effects on flooding A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'²⁰. No significant effects are predicted. A site specific flood risk assessment is not required as this site is in Flood Zone 1 and is less than 1ha. However, proposals should consider any potential risk from groundwater flooding and seek to manage any discharge from the site utilising SuDS where appropriate (unless it is wet worked), ensuring that flood risk is not increased at any receiving waterbody. Due to the highly fluctuating groundwater levels in this area the proposals should consider this in the safe site operation plan.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects Due to the small scale and 1 year lifetime, the site would make a small contribution to self-sufficiency in the supply of sand.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		+	0	0
Cumulative / Synergistic effects²¹								
Planning context	<p>Planning Context: Nearest significant communities: Within 5km of the site lies Sherburn, East Heslerton, West Heslerton, Wintringham, East Knapton, West Knapton and Yedingham. However, only West Heslerton and East Heslerton lie within 2km. These are not specifically listed in the settlement hierarchy however policy SP1 states that in all other villages, hamlets and in the open countryside development will be restricted to that which is necessary to support the economy and communities, can be justified in terms of improvements to the environment or the conservation of heritage assets or is justified through the neighbourhood planning process. The site does not overlap or is adjacent to</p>							

²⁰ This site is at slightly lower risk from surface water flooding than MJP44 and MJP54, both of which are also in Flood Zone 1. MJP22 is at significantly higher flood risk from rivers. Therefore this site should be considered before but alongside MJP44 and MJP54 and in preference to MJP22.

²¹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

	any allocations in the Ryedale Local Plan Proposals Map.
Other Minerals and Waste Joint Plan Sites	There are no other MJWP sites within 5km.
Historic minerals and waste sites	Apart from previous applications associated with West Heslerton Quarry adjacent to this site, there are no further historic minerals or waste sites. The site does, however, lie within a PEDL / DECC Onshore License Block. Due to the small scale and very limited lifetime of the site combined with its setting surrounded by an existing quarry, it is not considered that the allocation site would result in any significant cumulative impacts.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on protected species. • Design of development and landscaping of site to mitigate impact on: heritage assets (archaeological remains) and landform of the area, including the undertaking of an appropriate archaeological evaluation. • Design to ensure protection of the aquifer. • Maintenance of appropriate standard of access onto the A64. • Appropriate arrangements for the assessment, control of and mitigation of the effects of noise and dust. • Appropriate restoration scheme using opportunities for habitat creation. 	

MJP63 – Brows Quarry, Malton

Site Name	MJP63 Brow Quarry, Malton (XY 477700 471100)
Current Use	Part disused quarry containing woodland and part agriculture
Nature of Planning Proposal	Extraction of building stone from part of a former quarry and a proposed extension to the quarry.
Size	0.48ha
Proposed life of site	25 years
Notes	<p>Planning permission for the extraction of building stone at Brows Quarry (NY/2007/0293/FUL) was granted in 2009, but the permission was not implemented within the specified timescale so has lapsed.</p> <p>No drilling or blasting proposed. About 50% of the stone quarried will be unsuitable for use as building stone due to quality so the operation would involve the extraction of about 1500 tonnes per year to achieve the output, but the surplus material would remain on site in order to form the sloping sides of the restored site.</p> <p>Possible restoration: shallow sloping valley from north-west corner to join existing quarry floor which would be used for agriculture (pasture).</p>

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and	<p>Proximity of international / national and local designations and key features Natura 2000: SAC / SPA: River Derwent SAC 260m south-east; SSSI: River Derwent 150m south-east, Jeffry Bog 4.5km south-west, Kirkham Park and Riverside 4.6km south-west, Beck Dale Meadow 5km south, The Ings, Amotherby 4.15km north-west, Three Dykes 3.8km south-east.</p>	✓	✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
improve habitat connectivity	<p>SINC: 6 sites within 2km – SE77-16 Malton Bypass Cuttings (ratified) 475m north-west, SE77-17 Broughton Lane (Ratified) 945m west, SE77-11 Norton Ings (deleted), 1.5km north-east, SE77-12 Kings Mill Riverbank (Potential SINC) 1.5km north-east, SE77-08 Lady Spring Wood (ratified) 1.6km north-east, SE77-18 Bazeley's Lane (ratified) 1.9km south-east.</p> <p>UK Priority Habitat: circa 15% of the site lies is deciduous woodland priority habitat. Further deciduous woodland lies adjacent to the access track and the south eastern area of the site.</p> <p>Local effects There may be a hydrological link between this site and the River Derwent. However, due to the size and type of proposal there would be no likely significant effect. In addition, there are no likely effects predicted on and SSSI or SINC sites. Due to the limited size of the site and small scale of building stone extraction combined with limited pathways for pollutants it is considered unlikely that there would not be a significant impact on the River Derwent SAC. The adjacent site has been quarried previously without impact on the water table²² and it is thought highly unlikely there would be a hydrological impact on the conservation objectives of the SAC given the very small scale of this site when compared to the large catchment of the Derwent, and the likelihood that the site would not be worked below the water table.</p> <p>Habitats in and around the site make it possible that bats, nesting birds and badger could be present and affected by the proposals. Up to date surveys would be required.</p> <p>There is woodland (not ancient) on site that may be affected by the proposals, but it is not clear to what extent it will be affected or what the mitigation might be (adds uncertainty to this assessment). As a relatively small site on the edge of a rural town any benefits from restoration are likely to be local.</p> <p>Broadly effects would range from negligible to minor negative depending on whether woodland or bats are lost. In the longer term there may be some slight benefit from restoration to agriculture if it builds in features for biodiversity.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?

²² North Yorkshire County Council. Planning Application NY/2007/0293/FUL [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=5138>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Site is located on the Corallian Limestone Principal aquifer (Jurassic Limestone); NVZ: the site is in a NVZ for groundwater; SPZ: No; RBMP: In Derwent CFMP. Nearest water body is River Derwent from River Rye to Kirkham 160m south-east of the site. Ecological quality is moderate potential / chemical quality: does not require assessment. No RBMP lakes. Groundwater: Derwent Malton Corallian Limestone (current quantitative quality – poor, current chemical quality - poor, overall risk- at risk).</p> <p>CAMS: Surface water available at least 30% of the time.</p> <p>Local effects This small site is unlikely to present a serious risk to water quality or quantity. While the River Derwent is located 160m from the site, the risks to pollution of the watercourse are thought to be minimal. There is a small possibility of ingress of pollutants to the river in the event of a fuel spill, but this is a low level risk compared to larger sites and avoidable through good site management and adherence to relevant environmental permits. Water availability unlikely to be a particular problem for this small site.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors The site is close to the A64 giving it good access to markets. Access: main site access would be onto B1248 approximately 220m south-west of Rockingham Close, Malton. However, there would be a temporary access approximately 280m to the west of the proposed main site entrance to enable the delivery of the excavator and the formation of the main site entrance from within the site; HGVs: none. Stone to be removed in vehicle of up to 7 tonnes weight only; light vehicles: 4 (submitter information).</p> <p>Planning consent (NY/2007/0293/FUL) was previously granted in 2009 for the site and has since lapsed but established the principle of being able to provide to the site from the B1248 and it is likely that any future access to the site will be able to follow the same principles.</p> <p>Net change in daily vehicle trip generations: Light vehicles: 4; HGVs: 0. Transport assessment rating: Green – <i>'The submission site is likely to have a negligible additional traffic impact and it is envisaged that the only major transportation barrier to the site is potentially being able to form a safe point of access although this</i></p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>has been established previously.</i>²³ PRoW: None on site / affecting access.</p> <p>Rail: 230m south, nearest station Malton 800m east; Major Road: A64 500m west; Canal / water freight: none within 10km; Railhead / wharves: none within 20km</p> <p>Local effects This site would generate just a maximum of 4 vehicles per day, with no vehicles over 7 tonnes. This is not considered significant.</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors Site is not within a Hazardous Substances Consent Zone or within 2km of AQMA.</p> <p>Local effects While dust may be generated at a low level, the site is relatively well screened from housing. Given the low level of working here risks will be low. Some further screening may reduce the already low dust impact (as well as help with other issues such as visual / noise impacts).</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		-	-	0
5. To use soil and land efficiently and safeguard or enhance their	<p>Proximity of soil and land receptors ALC Grade 3. Contaminated land: part of the site is former quarry though as building stone risk is thought to be low. Subsidence: the site does not lie within or adjacent to a development high risk area or gypsum dissolution area.</p> <p>Local effects Up to 0.48ha of possible best and most versatile agricultural land (Grade 3) land may be</p>		✓	✓		-	-	0

²³ Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
quality	<p>lost²⁴. This site would lead to a small loss of possible best and most versatile land. In the long term restoration to agriculture would ensure the impact is only temporary.</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be very small in relation to the overall agricultural land lost in England per annum to development²⁵ but could have a small scale effect on national food production capacity.</p>							?
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Circa 15% of the site lies is deciduous woodland priority habitat; the remainder of the site is predominantly used for agriculture. Further deciduous woodland lies adjacent to the access track and the south eastern area of the site.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects A small amount of carbon storage habitat may be lost (e.g. loss of trees, agricultural land and hedgerows). Traffic generated is very low and therefore depending upon where the stone will ultimately be used, this may increase the climate change impact of the site.</p> <p>Following proposed agricultural restoration, impacts are uncertain as it is not clear whether restoration would include the creation of permanent carbon sinks. Overall during the operational phase of the proposed site is expected to have a minor negative effect on the SA Objective.</p>					-	-	-
								?

²⁴ The best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping the site is located within ALC Grade 3 land, without further investigation it is not known whether it is Grade 3a or 3b. For the purposes of this SA the precautionary principle has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

²⁵ 0.48ha (assuming all land is best and most versatile) annualised across the 25 year life of the site would be an annual 0.02ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.02ha loss would represent a 0.0008% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity²⁶ of a site Flooding: the site is in Flood Zone 1. Low level surface water flooding (1/1000 risk) affects circa 5% of site. England Habitats Network: No. CAMS: Surface water available at least 30% of the time.</p> <p>Local effects Flooding is not a significant issue here, and there are no significant issues with water availability or flooding. Climate change to river flood risk is unlikely to affect the site in the latter part of the Plan period. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively. There would be loss of agricultural land during the operation of the proposed site. Overall, the effects on this SA objective are likely to be minor negative although there is some uncertainty as to any long term effects post restoration of the site.</p> <p>Plan level / regional / wider effects None noted.</p>					-	-	-
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will extract a relatively low quantity of building stone (750 tonnes annually), which is a non-renewable resource. This works against the SA objectives and have been scored with a minor negative.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		-	-	-
9. To minimise waste generation and prioritise management of waste as high up the	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects The site would not deal with waste and no details are provided of how waste would be managed on site.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

²⁶ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
waste hierarchy as practicable								
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> Conservation Areas (within 1km): Malton 330m north-east. Registered Parks and Gardens (within 5km): Castle Howard (Grade I) 4.4km west; Registered battlefields (within 5km): None; World Heritage sites (within 5km): None; Scheduled Monuments (within 2km): 2 within 2km, these are Site of Malton Castle (ID 1,004,051) which is 1.1km north-east, and Roman Fort (ID 1,004,885) 1.25km north-east.</p> <p>Listed buildings: Numerous listed buildings lie within 1km of the site and these are all located in Malton. The nearest building is 575m north-east.</p> <p>Named Designed Landscapes: 7 within 2km – unnamed allotments 110m north-east, Malton Castle Garden 1.1km north-east, Malton Designed Landscape 1.2km north-east, unnamed 1.3km north-east, Norton Cemetery 1.6km east, Unnamed 1.9km east, Swinton Grange 1.9km west. The site also lies 1.2km south of statement of significance area.</p> <p>The HLC type of this area is planned large scale parliamentary enclosure and as this allocation site is a smaller part of a larger area of similar character type, the proposed extraction is unlikely to have a major impact upon the HLC of the immediately surrounding area, although it is acknowledged that within the site the historic HLC will become invisible as development will replace an earlier field system. This effect is not considered to be significant.</p> <p><u>Local effects</u> There is potential for the survival of archaeological remains within the site from the later prehistoric period onwards and, although the site has not been archaeologically evaluated, it is assumed that allocating this site would be likely to cause the loss of these archaeological remains if the site is extracted without mitigation. However, it is likely that investigation works required by the Joint Plan Policy D08 (Historic Environment) – <i>'mitigation of damage will be ensured through preservation of the remains in</i></p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>’ would result in an overall minor negative effect²⁷.</p> <p>Archaeological potential is deemed uncertain until such time as an archaeological field evaluation is carried out. The results of such work would provide more certainty about the nature and significance of below ground deposits.</p> <p>The impact upon HLC is not felt to be significant.</p> <p>Plan level / regional / wider effects A relatively large amount of waste stone would be available for restoration to acceptable levels. In the long term, the availability of local building stone would have positive benefits for sustaining and enhancing local distinctiveness²⁸.</p>							
11. To protect and enhance the quality and character of landscapes	<p>Proximity of landscape / townscape receptors and summary of character National Parks: no National Parks within 10km; AONBs: 500m W Howardian Hills AONB. Heritage Coast: None within 10km; ITE: None within 5km. District Level Landscape Designations: Ryedale AHLV lies 1.4km south.</p> <p>NCA: 29 Howardian Hills; North Yorkshire and York. LCA – 05 Limestone Ridge; District LCA – North</p>		✓	✓		-	-	+

²⁷ Comprehensive archaeological and paleoenvironmental investigation may provide information to enhance the significance of the monument by adding to our knowledge of the past landscape.

²⁸ Historic England support the allocation of this site as a preferred area for the supply of building stone. Stone from the adjacent site has been used for the construction of a number of important buildings in the local area and stone from this site would help the maintenance and repair of the heritage assets in the local area.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and townscapes	<p>Ryedale LCA – Howardian Hills Foot Slope.</p> <p>Urban Intrusion: The site is rural but close to Malton, the York Road, and an industrial estate, and within an area that is disturbed, according to CPRE 2007 mapping. Light pollution: the site ranges from 2 to 8NanoWatts/ cm²/ sr²⁹.</p> <p>Local effects The site is unlikely to affect views form designated landscapes. The visual impact on the setting of the settlements of Malton and Norton is likely to be very slight or negligible. Although the site is on the northern bank of the River Derwent and close to the York Road on the approach to Malton from the south west, there is a lot of potential screening from woodland that has grown up on the disused quarry, and also from older mixed or coniferous woodland (shown on the 1st edition OS maps) that lies along the north side of York Road.</p> <p>The proposed extension to this disused quarry is small and it is likely (subject to landscape and visual impact assessment) that it can be accommodated within the local landscape without significant adverse impact.</p> <p>A relatively large amount of waste stone would be available for restoration to acceptable levels. In the long term, the availability of local building stone would have positive benefits for sustaining and enhancing local distinctiveness.</p> <p>Plan level / regional / wider effects None noted.</p>							?
12. Achieve sustainable economic growth and create and	<p>Proximity of factors relevant to sustainable economic growth Site is close to the A64 giving it good access to markets (e.g. Malton and York).</p> <p>Local effects The allocation would result in building stones made available to local market. This would make a contribution to the building sector by helping to boost supply of a key building material for the maintenance and repair of heritage assets in the local area. The site may support a low level of</p>		✓	✓		+	+	0

²⁹ Light pollution and dark skies are measured on a scale <0.25 (darkest) to >32(brightest) NanoWatts/ cm²/ sr. CPRE, 2015; England's Light Pollution and Dark Skies – Interactive Map. Available at <http://www.cpre.org.uk/>. Accessed September 2016.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
support jobs	<p>employment. However, the extraction of minerals is not considered a long term industry as the economic boost and jobs provided at the site is limited to the lifetime of mineral extraction. Overall the allocation is considered to have a minor positive effect in the short term and medium and neutral in the long term following closure of the site.</p> <p>Plan level / regional / wider effects None noted.</p>							
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD Area: Malton - Not in the most deprived 20%. Malton is very close to this site (200m east).</p> <p>Local effects The scale of this site and the lack of blasting or significant vehicle numbers would lead to negligible effects. The site may provide a very small number of jobs but not at a level that is likely to boost the vitality of Malton.</p> <p>Plan level / regional / wider effects The proposal for building stone extraction at this site is unlikely to affect communities in the wider area.</p>					0	0	0
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors PRow: Centenary Way passes 200m south east of the site at the closest point. Footpath 25.60/51/1 lies 110m east of the site. Common land / village greens: none within 500m.</p> <p>Local effects Fleeting glimpses of the site might be possible from the footpath to the east, while intervening features probably mean the site is not visible from the Centenary Way. Minor negative impact is predicted in the short and medium term, however impacts are easy to mitigate through screening.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		-	-	0
15. To protect and improve the wellbeing, health and safety of local	<p>Proximity to population / community receptors / factors relevant to health and wellbeing Malton is 200m east, and an allotment site lies between this site and housing in Malton. Hospital 720m north-east, School 1.7km east, Industrial estate 140 m south-west, no on-site National Grid infrastructure (e.g. pipelines).</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
communities	<p>Local effects Some slight dust episodes are possible at a very low level. Though this is unlikely to affect wellbeing in a significant way, until screened it is possible that low numbers of individuals very occasionally experience short and very low level dust episodes.</p> <p>A traffic assessment identified that the only major transportation barrier to the site is potentially being able to form a safe point of access. The lapsed planning consent (NY/2007/0293/FUL) established an access to the site from the B1248 and it is considered that a future access would be able to follow the same principle.</p> <p>Overall, the effects on this SA objective are likely to be minor negative although there is some uncertainty as to any long term effects post restoration of the site.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Flooding: Site is in Flood Zone 1. Low level surface water flooding (1/1000 risk) affects circa 5% of site.</p> <p>The site is in a 1km square where <25% of the area has conditions that could support 'superficial deposits' groundwater flooding.</p> <p>A previous planning application on part of the site did not raise any groundwater flooding concerns³⁰.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'³¹. No significant effects are predicted. A site specific flood risk assessment is not required as this site is in Flood Zone 1 and is less than 1ha. Surface water runoff from this site should be managed using SuDS where appropriate.</p>					0	0	0

³⁰ North Yorkshire County Council Planning and Regulatory Functions Committee. 4 August 2009. C3/07/01071/CPO – Planning application for the extraction of building stone on land at Brows Quarry, York Road, Malton on behalf of Fitzwilliam (Malton) Estates (Ryedale District) (Malton Electoral Division) [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=5138>]

³¹ No other building stone site has been identified as suitable for SFRA assessment and this site is located in Flood Zone 1.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<u>Plan level / regional / wider effects</u> None noted.							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> The site would make a small contribution to self-sufficiency in the supply of building stone in the local area and may also support markets outside of the Plan area.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		+	+	0

Cumulative / Synergistic effects ³²	
Planning context	Malton is 200m east. Malton is the Principal Town in Ryedale and therefore the focus for the majority of new development and growth including new housing, employment and retail space. The adopted proposals map of the Ryedale Local Plan remains part of the Development Plan. No development allocations are noted within 500m, though an existing industrial / business area is noted to the west of this site and an allotment to the east (both within 500m).
Other Minerals and Waste Joint Plan Sites	There is one MWJP site approximately 5km east - Settrington Quarry, MJP08.
Historic minerals and	Malton Waste Water Treatment Works 430m south-east. PEDL License blocks lie to the north (800m) and east (650m). An active Jurassic limestone site lies around 2km (Whitewall Quarry). 3 waste facilities (Household Waste Recycling Centre, plus a vehicle

³² Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

waste sites	recycling and non-hazardous waste recycling facility lie in the centre of Malton (circa 1.5km east).
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage ³³ .	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on protected species and any potential hydrological impacts on the River Derwent SAC. • Design to minimise impact on best and most versatile agricultural land. • Design of development and landscaping of site to mitigate impact on: heritage assets (archaeological remains), local landscape features and their respective settings. • Design to include suitable arrangements for safe access onto the B1248 and local roads. • Appropriate arrangements for control of and mitigation of the effects of noise, dust, fuel spillage. • Appropriate restoration scheme using opportunities for habitat creation and geodiversity. 	

MJP12 – Whitewall Quarry, near Norton

Site Name	MJP12 (Whitewall Quarry, Welham Road, Norton, Ryedale) (XY 479108 468996)
Current Use	Agriculture and woodland
Nature of Planning Proposal	Extraction of limestone as proposed extension to existing quarry.
Size	9ha
Proposed life of site	2031
Notes	No detailed design for the proposed extension yet, but would be compactable with the approved scheme for the existing quarry, which is undulating grassland with tree and shrub planting. The southern half of the site would not be extracted, but would be used for landscape screening purposes only.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

³³ Planning permission for the extraction of building stone at Brows Quarry (NY/2007/0293/FUL) was granted in 2009, but the permission was not implemented within the specified timescale so has lapsed

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Special Area of Conservation (SAC) / Special Protection Area (SPA): 1.4km north-west is the River Derwent SAC. Special Sites of Scientific Interest (SSSI): 1.2km east is the Three Dykes SSSI, 1.4km north-west River Derwent SSSI. Site of Interest for Nature Conservation (SINC): Bazeley's Lane (SE77-18) 785m to north. Welham Hill Verges SINC (SE76-10) immediately adjacent along adjoining road.</p> <p>Priority Habitat: Block of deciduous woodland on site (circa 5% of site). The Site visit noted hedgerows on site.</p> <p>Local Effects The site is relatively close to the River Derwent although there is no apparent surface water connectivity. However, a planning application³⁴ close to the site highlights concerns raised over</p>	✓	✓	✓	✓	m-	m-	+

³⁴ For an Asphalt Production Plant and the creation of Aggregate Storage Bins. North Yorkshire County Council Planning and Regulatory Affairs Committee, 2015. C3/13/00086/CPO-Planning Application for the purposes of the installation of an Asphalt Production Plant and the creation of Aggregate Storage Bins (5 No.) on land at Whitewall Quarry, Whitewall Corner Hill, Norton on behalf of W Clifford Watts Limited (Ryedale District) (Norton Electoral Division): Report of the Corporate Director – Business and Environmental Services

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>pollution of groundwater due to removal of some of the protection for the aquifer. This may also present a risk to the nearby River Derwent and the objectives of its international SAC designation if there is a link between it and underlying groundwater. A habitats regulations assessment of the site reported that the likelihood of significant impacts to the SAC are uncertain, but would likely be resolved through routine measures to prevent fuel spills means that impacts at this site are also likely to be readily avoidable.</p> <p>There may, however, be potential impacts to Welham Hill Verges SINC if Heavy Goods Vehicles (HGV) traffic increases and impacts arise due to encroachment, salt spray and highway improvement works.</p> <p>Potential habitat for bats and badgers exists on site, which could be disturbed. In the longer term, the site provides the opportunity to restore to limestone grassland which is a priority habitat. The existing quarry restoration scheme is for undulating grassland and tree/shrub planting but there could be potential biodiversity benefits through creation of priority habitats e.g. limestone grassland as part of restoration scheme.</p> <p>Plan level / regional / wider effects No further pathways have been identified that are likely to give rise to significant impact on the integrity of Natura 2000 sites in the wider area.</p>					?	?	?
2. To enhance or maintain water quality and	<p>Proximity of water quality / quantity receptors The northern 40% is in a Nitrate Vulnerable Zone (NVZ) for groundwater / the southern 60% is in NVZ for surface water. Site not in Source Protection Zone (SPZ). In Humber River Basin Management Plan (RBMP) SUNO Management Area. Nearest</p>	✓	✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
improve efficiency of water use	<p>water body is Menethorpe Beck Catchment (tributary of Derwent) 1.5km south. Ecological status moderate. Overall status moderate. Status objective good by 2027. No RBMP lakes. Groundwater: Derwent (south) Mercia Mudstone, Lias, Ravenscar and Norton Corallian (Current overall status: good / objective: good by 2015).</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows). However, it seems unlikely that significant water extraction will be required for this small site (possibly small amounts for processes such as wheel washing).</p> <p>Local Effects No surface water connectivity is noted with Menethorpe Beck and site is quite distant. Extracting may expose groundwater to risks such as fuel spills but these are likely to be readily mitigatable and the groundwater body appears to be already good and unlikely to be significantly affected by this relatively small site. However, without mitigation there are minor risks. No information is provided as to whether working would take place above or below the saturated zone, though the adjacent existing site is well above the water table so this is not considered to be a significant issue.</p> <p>Plan level / regional / wider effects There is potential for pollution from the site to pass into the wider water environment via surface and groundwater pathways.</p>					?	?	?
3. To reduce transport miles and associated	<p>Proximity of transport receptors The site is relatively close to A64 giving reasonably good access to York and Hull. Access: the existing quarry access approximately 330m south of edge of Norton on Whitewall Corner Hill road (C177). Access to the A64, to the north, would require routing vehicles from</p>		✓		✓	m-	m-	m-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
emissions from transport and encourage the use of sustainable modes of transportation	<p>the site through the urban areas of Norton, and in close proximity to the Malton Air Quality Management Area (AQMA), potential air quality effects are discussed in SA objective 4 below.</p> <p>HGVs: 50 two-way movements (submitter information); Light vehicles: 46 two-way movements (based on application details NY/2013/0058/FUL). Net change in daily two-way trip generations: Light vehicles: 0; Heavy Goods Vehicles (HGV): 0. Traffic assessment rating: Green. Public Right of Way (PRoW): No PRoW issues affecting immediate access though on road route No.166 (on road cycle route) lies 150m north-west.</p> <p>Rail: 1.8km north to Malton Station / nearest known railhead 39.2km south-west. Strategic Road: A64 is 2.5km north-west (though nearest junction is more distant (closer to 5km by road). Canal / Freight waterway: 26km south-west.</p> <p>Local Effects This site will generate up to 96 vehicle movements per day (though as these movements are in line with those which could be associated with the current site, they should be seen as a continuation of current levels longer into the future rather than new traffic movements (the current site has planning permission to operate until 2023).</p> <p>According to the Joint Plan traffic assessment the summary from the report states “<i>The likely routing to the Strategic Road Network (A64) does however require quarry traffic to route through the centre of Norton and Malton. The likely future implementation of restrictions preventing HGVs from passing through the centre of Malton is therefore likely to require HGVs from the site to continue along the B1248 to the eastern A64 junction. This will involve additional HGV traffic passing through the centre of Norton which would involve passing a number of sensitive receptors including residences fronting onto the B1248, a care home and retail and employment sites</i>”³⁵</p>					?	?	?

³⁵ Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Plan level / regional / wider effects While HGV movement is acceptable onto the road minor works may be required to improve the existing access arrangements. If quarrying was undertaken concurrently with extant works the situation may be temporarily worse and the Highways Assessment has highlighted that in circumstance where this traffic becomes additional traffic the Local Highways Authority would want to limit the total traffic generated.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors Not in a hazardous substances consent zone or within 2km of an Air Quality Management Area (AQMA). The Malton AQMA is located approximately 2.1km north and is declared for exceedances of nitrogen dioxide (NO₂).</p> <p>Local Effects Welham Wold Farm is 230m from the site and may be within range of dust impacts, while Welham Hall Farm and Whitewall Stables are more distant and less likely to be affected (though impacts cannot be ruled out). Pollution from traffic will depend on the direction taken, though if traffic is prevented from going through the centre of Malton this will prevent impacts on the AQMA, though receptors in Norton may still receive pollution impacts at low levels. Traffic pollution impacts may be cumulative with other development (e.g. MJP08)</p> <p>Plan level / regional / wider effects The Joint Plan traffic report states “<i>The likely routing to the Strategic Road Network (A64) does however require quarry traffic to route through the centre of Norton and Malton. The likely future implementation of restrictions preventing HGVs from passing through the centre of Malton is therefore likely to require HGVs from the site to continue along the B1248 to the eastern A64 junction. This will involve additional HGV traffic passing through the centre of Norton which would involve passing a number of sensitive receptors including residences fronting onto the B1248, a care home and retail and employment sites</i>”³⁶.</p>		✓	✓		m-	m-	m-
						?	?	?
5. To use soil and land efficiently	<p>Proximity of soil and land receptors The land within the site is Agricultural Land Classification (ALC) Grade 3. It is a greenfield site so there are no known risk factors for contaminated land. No known</p>		✓	✓		-	-	?

³⁶ Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and safeguard or enhance their quality	<p>subsidence issues.</p> <p>Local effects Minor negative effects are attributed to the potential loss of 9ha of Grade 3³⁷ possible best and most versatile agricultural land. Land may be returned to agriculture but this is unclear at this stage.</p> <p>Plan level / regional / wider effects The loss of agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development³⁸ but could have a small scale effect on national food production capacity.</p>							
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change There is a block of deciduous woodland on site (circa 5% of site). Site visit noted hedgerows on site.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects A small amount of woodland would be lost to site development. The site would generate an estimated 46 daily two-way light vehicle movements, and 50 HGVs daily two-way. The site has good access to York and Hull. Minor effect on the SA objective.</p>	✓			✓	-	-	0
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity³⁹ of a site The site is in Flood Zone 1. No surface water flood risk. Not part of any known ecological network. Northern part of site in Derwent Catchment Flood Management Plan (CFMP) / Unit: Malton and Norton / Policy 3. CAMS: surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows). However, it seems unlikely that significant water extraction will be required for this</p>					-	-	?

³⁷ ALC Grade 3 land is sub-divided into Grade 3a and 3b, with the best and most versatile agricultural land ALC Grade 1 to 3a. Without further investigation it is not known whether Grade 3 land at this site is 3a or 3b and best and most versatile. For the purposes of this SA the precautionary principle approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

³⁸ 9ha of potential best and most versatile land could be lost. There was 2365ha of agricultural land was lost to development in 2014/15 across England.

³⁹ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>small site (possibly small amounts for processes such as wheel washing if required).</p> <p>The land within the site is ALC Grade 3.</p> <p>Local Effects No significant effects noted.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local Effects This site will contribute to the availability of sources of supply of Jurassic limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted it may to a degree offset recycled materials that could potentially replace them. This works against the SA objective, so it is scored negatively.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		--	--	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local Effects The site would not deal with waste and no details are provided of how waste would be managed on site.</p> <p>Plan level / regional / wider effects The site may have an indirect negative impact on the prioritising the management of waste down the waste hierarchy as a result of providing limestone and reducing the need to recycle limestone from other locations.</p>		✓		✓	-	-	0
10. To conserve or enhance the	<p>Proximity of historic environment receptors Conservation Areas: none within 1km. Registered parks and gardens: none within 5km. Registered battlefields: none within 5km. World Heritage Sites: none</p>	✓		✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
historic environment and its setting, cultural heritage and character	<p>within 5km. Scheduled monuments: The Three Dykes (or Five Riggs)' (ID1,004,911) is circa 1.2km east. West Wold Farm Round Barrow (ID1,004,103) is 1.1km south-east. Listed buildings: two listed buildings within 1km (circa 800m north at Whitewall Corner).</p> <p>English Heritage Vale of Pickering Statement of Significance: not within the significant area boundary⁴⁰, but is approximately 2km to the south of significant area. Named designated landscapes (from pre-validated dataset derived from Historic Landscape Characterisation (HLC)): Norton Cemetery (designed landscape) is 1.8km to north. Menethorpe Hall (designed landscape / country estate) is 1.9km south-west. Langton Hall (designed landscape / country estate) is 1.6km south-east.</p> <p>HLC Broad type – Enclosed land; HLC Type - Planned large scale parliamentary enclosure. The proposed quarry extension lies within an area of undesignated archaeological interest to the south of areas of Romano-British settlement, burial and industrial activity at Norton. Archaeological recording has been undertaken in response to previous extensions to Whitewall Quarry and this has recovered evidence for a double-ditched Romano-British track way, known from aerial photography, which crosses the western side of the current allocation site. Other archaeological remains have also been identified dating from the prehistoric and Romano-British periods, including a linear ditch interpreted as belonging to a wider system of prehistoric dykes which are known in the Yorkshire Wolds.</p> <p>Local Effects The HLC type of this area is planned large scale parliamentary enclosure. Although the legibility of this is significant, the allocation site is a smaller part of a larger area of similar character type, hence, the proposed extraction is unlikely to have a major impact upon the HLC of the immediately surrounding area. It is acknowledged that within the site the HLC will become invisible as development will replace an earlier field system. As 17% of the whole HLC project area has been identified as planned enclosure, this effect is not considered to be significant.</p> <p>There is high archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards and, although the site has not been archaeologically evaluated, it is</p>							

⁴⁰ English Heritage have developed the Vale of Pickering Statement of Significance as the first stage in developing an overall strategy for the Vale of Pickering. The document is intended to raise awareness of the significance of the Vale of Pickering, and defines a significant area boundary.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>assumed that investigation and extraction would be in line with Joint Plan Policy D08 (Historic Environment) '<i>mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>', and therefore a negative effect no greater than minor is expected.</p> <p>Archaeological potential is deemed uncertain until such time as an archaeological field evaluation is carried out. The results of such work would provide more certainty about the nature and significance of below ground deposits.</p> <p>The impact upon HLC is not considered to be significant.</p> <p>Some designated assets could be affected by the proposed extension of the existing quarry onto this site, these include Scheduled Monuments, Listed Buildings and Langton Conservation Area (1.7km south). The expansion needs to consider any potential impact on the setting of these designated heritage assets.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character National Parks: none within 10km; Area of Outstanding Natural Beauty (AONB): Howardian Hills is 2.4km east (site is within area of search for a potential Yorkshire Wolds AONB (Natural England has confirmed this but there is no current timetable for starting the process); Heritage Coast: None within 10km; Inheritance Tax Exemption (ITE): none within 5km; Local Landscape: Ryedale Area of High Landscape Value.</p> <p>National Character Area (NCA): Yorkshire Wolds NCA; NY Landscape Character Assessment (LCA): Landscape character type 05: Limestone Ridge (Limestone Landscapes); Local LCA: No. Intrusion: Disturbed.</p> <p>Local Effects The site is approximately 1.3km from Norton-on-Derwent, and located on a ridge so there is potential for a quarry to affect its setting. It could also affect Sutton Wold, a ridgeline in the Jurassic</p>	✓	✓	✓	✓	-	m-	m-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>limestone, which currently screens the existing quarry in views from the south.</p> <p>The area is defined as 'disturbed', and in terms of urban intrusion it is adjacent to an existing quarry and about 1.3km from the town of Norton-on-Derwent. Light pollution is moderate, with the Campaign to Protect Rural England (CPRE) map showing levels of 92 on a scale of 1-255, with 1 representing maximum darkness. Overall, there is a moderate level of intrusion.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to A64 giving reasonably good access to York and Hull.</p> <p>Local Effects This site is expected to provide an estimate of two million tonnes of to the market. This would make a significant contribution to the building sector by helping to support availability of a range of sources of supply of aggregate. It would also directly support jobs in extraction and freight. The long term effect includes some uncertainty as it is not known when this would occur. The site is located in an area where the horse racing industry forms an important part of the local economy. Increased or prolonged traffic and noise or vibration associated with the site may could have the potential to have some adverse impact on this neighbouring form of economic activity (the site lies adjacent to an identified exercise route for horses). The effect overall is considered to be negative in the short and medium term and neutral in the long term, with uncertainty noted as it is not known when the proposal would commence.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	-	-	0
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability Index of Multiple Deprivation (IMD) Norton West - not in most deprived 20%, Whitewall Corner is the nearest settlement with Norton the next nearest at around 1.2km. Malton / Norton is defined as a principal town and is the primary focus of development in Ryedale. The site is located in 'wider open countryside' where development that is necessary to support a sustainable and healthy rural economy will be supported. Across the Ryedale Plan, 3000 net new homes will be delivered between 2012 and 2027. In Malton / Norton this means</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>1500 houses mainly in and adjacent to the built up area (via large extension sites). Residential sites could, if allocated come within 600m of this quarry with a connecting minor road.</p> <p>Local Effects Job opportunities arising from this site are likely to be limited, and while the site would provide a source of limestone which could aid future development, the immediate settlements are unlikely to directly benefit in any significant way. The site is unlikely to either hinder or boost local tourism. Overall any effect is considered to be insignificant.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors On road route No.166 (on road cycle route) lies 150m north-west. Bridleway (25.55/1/1) is 610m east. Long distance cycle way (Centenary Way) 2km north. No draft common land within 500m. No village greens listed within 500m.</p> <p>Local Effects Noise, dust and visual impacts may be evident on route No.166. It is not certain how long such impacts would endure for before returning to baseline conditions with restoration.</p> <p>The existing quarry access approximately 330m south of the edge of Norton onto Whitehall Corner Hill road (C177), with no access to MJP12 site direct from public highways. There would be potential negative impacts for users of the on road cycle route including increased traffic impacts and loss of amenity (noise and dust).</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		-	-	0
15. To protect and improve the wellbeing, health and safety of local	<p>Proximity to population / community receptors / factors relevant to health and wellbeing No schools or health centres within 1km. Nearest settlement is Norton on Derwent 1.2km to the north east. There are several properties along Whitewall Corner Hill which come within 700m of the extraction site.</p> <p>Local Effects There are several properties along Whitewall Corner Hill which come within 700m of the</p>		✓	✓	✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
communities	<p>site, as well as other scattered properties, the nearest of which is a farm 200m south-west. There is a reasonable possibility that this property could be affected by dust and noise and a lower probability that more distant properties would be affected. Local roads to the A64 would see quarry related traffic movements continue over an extended period of time (and potentially cumulatively with MJP13) which could add to noise and pollution levels depending on the route taken (particularly if traffic is not routed to avoid the Malton AQMA, but also where traffic goes through the centre of Norton, in order to access the major road network, such that there is a potential for significant moderate impact on local communities. As the site lies on an identified equestrian exercise route, there may be some concerns regarding the safety of jockeys and horses, due to increased traffic levels as a result of the development. Impacts are considered to be uncertain to moderate negative.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1. No surface water flood risk. Northern part of site in Derwent CFMP / Unit: Malton and Norton / Policy 3.</p> <p>Local Effect No significant effects.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local Effects The site would make a significant contribution to self-sufficiency in the supply of limestone.</p> <p>Plan level / regional / wider effects The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>⁴¹</p> <p><u>Planning Context:</u> Whitewall Corner is the nearest settlement with Norton the next nearest at around 1.2km. Malton / Norton is defined as a principal town and is the primary focus of development in Ryedale. The site is located in 'wider open countryside' where development that is necessary to support a sustainable and healthy rural economy will be supported. Across the Ryedale Plan, 3000 net new homes will be delivered between 2012 and 2027. In Malton / Norton this means 1500 houses mainly in and adjacent to the built up area (via large extension sites). Residential sites could, if allocated come within 600 metres of this quarry. The site does not overlap or is adjacent to any allocations in the existing Ryedale Local Plan Proposals Map (though is in an Area of High Landscape Value (not a saved policy).</p> <p><u>Other Joint Minerals and Waste Plan Sites:</u> There are two other discounted MWJP allocations within 2km: MJP13 250m north, WJP09 240m north. Allocated site MJP08 is 3.4km east.</p> <p><u>Historic Minerals and Waste Sites:</u> A PEDL licenced area lies 2.1km north-west. There are a number of active/dormant minerals and waste sites within 5km, but only two within 2km. These are Whitewall active Jurassic limestone quarry which lies 600m north of the site and Whitewall Quarry WTS lies 125m north-east. Further afield Brows active building stone site lies 2.3km north-west and Settrington active Jurassic limestone quarry lies 3.5km east. Palm Recycling WTS lies 3.4km north. There are no authorised landfill sites within 2km and 1 historic landfill site (2km north).</p> <p><u>Air quality:</u> Cumulative effects are observed in relation to this site plus additional planned development in Norton and Malton, particularly if traffic from this site is routed through the Malton AQMA.</p> <p><u>Transport:</u> While HGV movement is acceptable onto the road (though minor works may be required to improve the existing access arrangements), the site is very close to Malton/Norton and strain on the road network towards the A64 is a key consideration.</p>							
	<p>⁴¹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.</p>							

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including impact on designated sites (such as the River Derwent SAC), protected species and habitats. • Implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. • Mitigate potential air quality impacts (including to the Malton AQMA). • Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources. • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise and dust. • Design to mitigate impacts to heritage assets, including appropriate archaeological investigation and mitigation. • Design to mitigate landscape and visual intrusion issues. • Design to reduce amenity impact on right of way users and other recreation activities in the vicinity • Appropriate restoration scheme using opportunities for habitat creation. 								

MJP64 – Cropton Quarry, Cropton

Site Name	MJP64 Cropton Quarry, Cropton, Ryedale (XY 475997 486903)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of Jurassic limestone from proposed extension to former quarry for use as building stone and aggregates
Size	2.4ha
Proposed life of site	10 years
Notes	The land immediately to the south of the MJP64 site is a dormant quarry, which can only be re-opened if new planning conditions are submitted to and determined by North Yorkshire County Council. To the south of that is a former quarry area which does not have planning permission for extraction but which is the former location of the weighbridge). Restoration: No detailed design yet, but would be to nature conservation.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000: North York Moors SPA is 3.9km north; SSSI: 8 SSSIs within 5km: Cropton Banks and Howlgate Head Woods (1.1km west), Bull Ings (1.1km north-west) are the closest with others greater than 3km away. SINC: 2 sites within 2km - SE78-03 (Bedale Wood - ratified) is 1.2km east, SE&8-02 (Stables Wood) is 1.1km west (both ratified SINCs).</p> <p>UK Priority Habitat: Site appears on maps to coincide with area of deciduous woodland (95% coverage), However, site visits confirmed that much of this has been lost / doesn't exist.</p> <p>Local Effects While dust may have effects on on-site and adjacent habitats, the impact is likely to be insignificant.</p> <p>The southern part of the site is previously quarried area which appears not to have been worked for several years and aerial photos show areas of natural regeneration including scrub and ruderal vegetation, which through quarrying could potentially be lost. It is also possible that early successional calcareous grassland may have developed and this will need to be assessed by survey. Other habitats</p>	✓	✓	✓		-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>appearing to be present include exposed rock faces, bare ground, soil / rubble / rock piles. Aerial photos show the northern extension area to include arable, pasture grassland, hedgerows, trees and scrub which could potentially be lost. Associated species could include bats, reptiles, badger, nesting birds, amphibians (if water bodies present).</p> <p>There may be an opportunity through restoration to create priority habitats including calcareous grassland and woodland / scrub which will link with other semi-natural habitats in the area to strengthen the network and improve connectivity and movement for species.</p> <p>Impacts in the short and early medium term are associated with habitat loss, while in the medium to longer term restoration may be beneficial as new habitats are created.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites in the wider area.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is in a groundwater NVZ; SPZ: the site is in groundwater SPZ 2; RBMP: In Derwent CFMP. Nearest water body is Costa Beck from Source to Pickering Beck (500m west). Ecological quality is moderate potential / chemical quality: does not require assessment / at risk (overall potential: good by 2027). No RBMP lakes. Groundwater: Derwent Vale of Pickering Corallian Limestone (current overall status: poor / Good by 2027) / at risk.</p> <p>CAMS: Surface water available at least 30% of the time (q95 and q70 red so water may be unavailable for at least 30% of the time).</p> <p>Local Effects The site is 500m from a surface water body, and there is intervening topography making risks low. However, as the site is in a SPZ for Yorkshire Water abstraction at Pickering. Hence, there may be a risk from fuel or chemical spills on exposed rock if worked above the water table (work below the water table is considered less likely but would carry greater risk). This is thought to be a moderate but manageable risk given the size of the site and as it is assumed this site would be worked above the water</p>		✓	✓		m-	m-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>table. Restoration to nature conservation may have a positive effect on the NVZ.</p> <p>Development should be accompanied by a hydrological risk assessment and implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level.</p> <p>Plan level / regional / wider effects There is potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors The site is 1.3km north of the A170 with reasonable access to Pickering and the coast, but more distant from major cities.</p> <p>HGVs: 90 two way movements per day. Light vehicles: 20 per day. Access: no direct access to the site from the public highway rather the access would be via the former quarry site entrance approximately 160m to the south-east, onto Cropton Lane (C63 road) and south to the A170 at Wrelton.</p> <p>Rail: nearest 16km south (Malton Station); Road: A170 is 1.2km south; Canal / freight waterway: none within 10km; Railheads / wharves none within 10km (nearest 59.6km south).</p> <p>Local Effects This site would bring up to 90 HGVs per day into Wrelton, leading to an increase in traffic levels in the village and an increase in vehicles turning onto the A170. Given the site's proximity to the National Park (a potential tourist route), and the fairly narrow roads and tight turns of Wrelton there could be major negative impacts for the duration of this site.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		--	--	0
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within a hazardous substances consultation zone or near to an AQMA. The nearest significant settlement is Wrelton (1.3km south). Loand House lies 25m west, Hillside Farm lies 320m north and Cass Hagg Farm is 530m south. Sensitive habitats include. Patch of deciduous woodland to east of site at Wrelton Dale 300m east.</p> <p>Local Effects There are a few individual properties that may be within range of dust impacts and which</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	would likely need further assessment / mitigation. An increase in vehicles in Wrelton may also occur, though this is unlikely to significantly affect air quality. Impacts are expected to be minor negative for the duration of the site. Plan level / regional / wider effects None noted.							
5. To use soil and land efficiently and safeguard or enhance their quality	Proximity of soil and land receptors The site is ALC Grade 3. Contaminated land: greenfield site, no known risk factors. Not in gypsum dissolution area. Subsidence: Not in a development high risk area. Local effects Site could potentially result in the loss of 2.4ha of best and most versatile land ⁴² being lost. Plan level / regional / wider effects The loss of agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development ⁴³ but could have a small scale effect on national food production capacity	✓		✓		-	-	-
6. Reduce the causes of climate change	Proximity of factors relevant to exacerbating climate change There are a few trees on site. Local effects As climate change is a global issue, effects are reported in wider effects below. Plan level / regional / wider effects 90 HGVs journeys daily (at peak) would use this site. The site is quite far from significant markets but may serve more local markets such as Pickering / the coast. Minor negative are predicted, with uncertainty about when they will end.	✓		✓		-	-	0 ?

⁴² ALC Grade 3 land is sub-divided into Grade 3a and 3b, with the best and most versatile agricultural land ALC Grade 1 to 3a. Without further investigation it is not known whether Grade 3 land at this site is 3a or 3b and best and most versatile. For the purposes of this SA the precautionary principle approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

⁴³ 2.4ha annualised across the 10 year life of the site would be an annual 0.24ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.24ha loss would represent a 0.01% contribution to this category of soil loss across England for each year of the site

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁴⁴ of a site The site is in Flood Zone 1. Very low level surface water flooding (mainly 1/1000 risk) affects circa 5% of site. No ecological networks noted.</p> <p>CAMS: Surface water available at least 30% of the time (Q95 and q70 red so water may be unavailable for at least 30% of the time).</p> <p>ALC Grade 3 agricultural land.</p> <p>Local Effects No significant effects predicted.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>		✓		✓	-	-	0
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial effects identified.</p> <p>Local Effects Depending on whether it is extracted as crushed rock or whether some building stone is extracted, the output from this site may to a degree offset recycled materials that could potentially replace them. This site will permanently extract a key natural resource, this is considered to have a high negative effect in relation to this SA objective</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		--	--	0

⁴⁴ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local Effects The site would not deal with waste and no details are provided of how waste would be managed on site.</p> <p>Plan level / regional / wider effects The site may have an indirect negative impact on the prioritising the management of waste down the waste hierarchy as a result of providing limestone and reducing the need to recycle limestone from other locations.</p>		✓		✓	-	-	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors Conservation Areas: none within 1km; Registered Parks and Gardens: None within 5km; Registered battlefields: None within 5km; World Heritage sites: None within 5km.</p> <p>Scheduled Monuments: two within 2km. 'Nutholme Cross Dyke, 100m south of Appleton Mill Farm' (ID: 1,018,596) (1.4km north-west) and 'The Old Hall, 50m north west of All Saints Church' (ID: 1,017,992) (1.57 km south-west of site); Listed buildings: three listed buildings within 1km: one is adjacent to south west corner of site (Loand House Farmhouse Grade II) and two Grade II farmhouses to north-west. Named Designed Landscapes: None within 2km</p> <p>HLC Broad type - Enclosed land; HLC Type – Strip fields. The HLC type of this area is strip fields and as this allocation site is a smaller part of a larger area of similar character type, the proposed extraction is unlikely to have a major impact upon the historic landscape character of the immediately surrounding area, although it is acknowledged that within the site the historic landscape character will become invisible as development will replace an earlier field system. This effect is not considered to be significant.</p> <p>Local Effects There is potential for the survival of archaeological remains within the site from the later prehistoric period onwards and, although the site has not been archaeologically evaluated, it is assumed that investigation and extraction would be in line with Joint Plan Policy D08 (Historic Environment) <i>'mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution.</i></p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>, and therefore a negative effect no greater than minor is expected.</p> <p>Archaeological potential is deemed uncertain until such time as an archaeological field evaluation is carried out. The results of such work would provide more certainty about the nature and significance of below ground deposits.</p> <p>The impact upon historic landscape character is not considered to be significant.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							
11. To protect and enhance the quality and character of landscapes and	<p><u>Proximity of landscape / townscape receptors and summary of character</u> National Parks: North York Moors is 1.3km west; AONB: Howardian Hills is 11.2km south west; Heritage Coast: not within 10km; ITE: Appleton Hill farm and Nutholme is 1.3km north-west; District landscape designations: the site lies within Ryedale Area of High Landscape Value (AVLH) (Fringe of the Moors AHLV).</p>		✓	✓		m-	m-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
townscapes	<p>NCA25: North York Moors and Cleveland Hills; NYLCA: 04 - Limestone Valleys and Foothills.</p> <p>District LCA: North Ryedale LCA: 'Fringe of the Moors'.</p> <p>Local Effects The development of the site is unlikely to affect views from key visual receptors such as landscape designations, nor would it be likely to directly affect the setting of the nearest settlement, Wrelton. However, the overall landscape character type (NY&Y LCA) has high visual sensitivity. The current dormant quarry is sited in a dry upland valley within the south-facing slopes of the Tabular Hills and is partly enclosed by landform. The extension would be upslope into a more open area. The landscape is generally open undulating farmland with narrow wooded valleys. A northern extension will potentially be more visible than the existing dormant quarry as it would move into this more open landscape. The site is near a minor road, which could be a visual receptor, but not close to public rights of way. Traffic from this site may also affect perceptions of the landscape, depending on the frequency, but there is likely to be some impact on the current level of tranquillity.</p> <p>There is some uncertainty about this assessment as more detailed work would be needed to establish impacts more fully. There is an extant restoration scheme for the existing dormant quarry (agriculture). However, a new set of planning conditions would need to be determined prior to that part of the site becoming operational again. So there is a need for integration of restoration across these sites through a restoration scheme for both the existing and proposed quarries.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is reasonably accessible to Pickering, though other markets may be more distant.</p> <p>Local Effects This site would ultimately result in 1.8 million tonnes of limestone being made available to the market. This would help maintain a range of sources of supply of Jurassic Limestone, including for building purposes. It would also directly support jobs in extraction and freight. This effect would last for the 10 years of operation.</p>	✓	✓	✓		+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects None noted.							
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD area: Cropton – not in the most deprived 20%. The nearest significant settlement is Wrelton (1.3km south).</p> <p>Local Effect A small amount of jobs may be provided, but Wrelton may experience a significant increase in traffic levels. Overall effects are expected to be minor negative.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>		✓	✓		-	-	0
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors Public Rights of Way: Bridleway 25.26/5/2 is 650m north. Footpath 26.26/4/1 is 760m south. Common land: None within 500m; Village Green: None within 500m.</p> <p>Local Effects The site is distant from public rights of ways so is unlikely to affect views from them apart from fleeting glimpses, though if blasting occurs this may be audible occasionally. Negligible. Restoration to nature conservation may be positive, particularly if access is provided.</p> <p>Plan level / regional / wider effects None noted.</p>	✓	✓	✓		0	0	+
15. To protect and improve the wellbeing, health and safety of	Proximity to population / community receptors / factors relevant to health and wellbeing Wrelton is circa 1km away. No on-site National Grid infrastructure (e.g. pipelines). No schools or hospitals within 1km.		✓	✓	✓	--	--	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
local communities	Local Effects Traffic levels in Wreton would increase (which may increase the risk of accidents, vibration and noise. Given the number of vehicles and the compact layout of Wreton, a major negative effect on that receptor is predicted.							
16. To minimise flood risk and reduce the impact of flooding	Proximity to flood zones Site is in Flood Zone 1. Very low level surface water flooding (mainly 1/1000 risk) affects circa 5% of site. Local Effects No significant effects. Plan level / regional / wider effects None noted.					0	0	0
17. To address the needs of a changing population in a sustainable and inclusive manner	Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans. Local Effects The site would make a significant contribution to self-sufficiency in the supply of Magnesian limestone. Plan level / regional / wider effects The site may also support markets outside of the Plan area.		✓	✓		+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>⁴⁵</p> <p>Planning context: within 2km: Wrelton is circa 1km away to the south, Cropton is 1.9km north and Sinnington is 1.8km south west. Pickering is more distant at 3.7km. None of the settlements within 2km are listed in the Ryedale Local Plan Strategy as Principal Towns or Local Service Centres.</p> <p>Other minerals and waste plan sites: none within 2km.</p> <p>Historic minerals and waste activity: not within 2km but site is in a PEDL license block.</p> <p>Transport / wellbeing: traffic from this site may be cumulative with tourist traffic leading to issues of congestion, noise, vibration in the village of Wrelton.</p>							
Limitations / data gaps	No data gaps are noted. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including impact on protected species and habitats. • Development should be accompanied by a hydrological risk assessment and implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. • Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources. • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise and dust. • Design to mitigate impacts to heritage assets, including appropriate archaeological investigation and mitigation. • Design to mitigate landscape and visual intrusion issues. • Design to reduce amenity impact on right of way users and other recreation activities in the vicinity • Appropriate restoration scheme using opportunities for habitat creation. 								

⁴⁵ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

MJP50 – Sands Wood, Land to East of Sandy Lane, Wintringham

Site Name	MJP50 (Sands Wood, Sandy Lane, Wintringham, Ryedale) (XY 487612 474931)
Current Use	Agriculture and forestry
Nature of Planning Proposal	Extraction of sand from proposed new extraction site
Size	56ha
Proposed life of site	20 years
Notes	Possible restoration to woodland, agriculture and nature conservation areas.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPROTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p><u>Proximity of international / national and local designations and key features</u> Natura 2000: 4.3km west – River Derwent SAC, 10km north – Ellers Wood and Sand Dale SAC. Five SSSIs within 5km – Wintringham Marsh 450m south, Ladyhills 3.9km south-east, East Heslerton Brow 4.2km east, Nine Spring Dale 4.4km south and River Derwent 4.3km west. One SINC lies entirely within site boundary, Sandy Lane Fields (ratified SINC, SE87-02). A further SINC lies adjacent to the north of the site, West Knaption Road Verge (ratified SINC, SE87-01). A further three SINC are located within 2km (two potential and one ratified).</p> <p>Priority Habitat – an area of lowland dry acid grassland lies onsite (covering approximately 10% of the site, located in the north-west corner and along the western boundary of the site). An area of coastal and floodplain grazing marsh also lies approximately 30m south-west of the site.</p> <p>Ecological Networks – circa 10% of the site covered by core EHN (north western area), A64 Knaption Lane End verge Local Habitat Network lies adjacent to the site to the north, circa 5 to 10% of the site in NY23 North East Wolds Scarp Living Landscape. Key habitats – Calcareous grassland/scrub.</p> <p>Management issues – concentrate on managing and linking good sites with key valley patterns, link</p>	✓	✓	✓	✓	--	--	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>valley patterns via strategic road verges, hedge boundaries and 'island' sites.</p> <p>Local Effects The site lies in close proximity to Wintringham Marsh SSSI and there is the potential for impacts to this site, however without further investigation it is unknown whether this site would be significantly affected. The allocation would have a significant impact on the SINC site (Sandy Lane Fields SE87-02) and possibly damage another (West Knapton Road Verge SE87-01). There is uncertainty in relation to the depth of extraction that will be required, in order to establish whether the site could impact upon the hydrological situation in the area (having knock-on effects on nearby SSSI and SINC sites).</p> <p>The site would result in the loss of a UK priority habitat – lowland dry acid grassland. Dry acid sandy grassland community (NVC type U1c) occurs only locally in North Yorkshire on the Vale of Pickering sand belt. Sandy Lane Fields SINC is the best example with an assemblage of locally uncommon plants. The SINC is currently in a higher level stewardship agreement (the environmental gains through this scheme may be lost). Protected/priority species that could be affected include bats, badger, farmland birds and brown hare.</p> <p>Impacts are considered to be major negative in the short and medium term due to the loss of a SINC site containing UK priority habitat and due to possible impacts to protected species. In the long term, restoration to woodland, agriculture and natural areas may have some beneficial impacts for biodiversity depending upon how this is implemented (whether this is a positive or negative impact in relation to the baseline situation would be dependent on the details of the restoration plan, whether areas of priority habitat are created, etc.). The site lies partly within the North-East Wolds Scarp Living Landscape and this should be taken into account in the design of the restoration scheme and habitat connectivity should be prioritised. It is considered that there may be potential to recreate the rare SINC habitat however this is considered difficult.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites in the wider area.</p>					?	?	

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is within a NVZ (surface water). Site not within or adjacent to a groundwater SPZ.</p> <p>The site falls within the Humber River Basin District. The nearest section of river is 'Scampston Beck catchment (tributary of Derwent)' 200m west of the site (ecological quality- moderate potential, chemical quality-does not require assessment, overall risk- at risk). No RBMP lakes present. No RBMP groundwater water body present (Hull and East Riding chalk lies adjacent).</p> <p>CAMS: surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows).</p> <p>Local Effects This site is in a NVZ, surface water may be vulnerable during the restoration phase of the project if fertilisers are used. Some nitrogen enrichment may come through traffic from site depositing nitrogen close to roads, though this is likely to be at insignificant levels for this type of site. There is a risk of water pollution from fuel spills; however, such occurrences should be readily avoidable through good site management.</p> <p>Overall the effect is predicted to be neutral in the short and medium term as although there is some risk to water quality due to onsite operations, it is assumed that the relevant environmental permits and good site management will mitigate impacts. There is however an element of uncertainty as it has not yet been established if private boreholes exist on site. Following restoration, impacts are considered to be neutral with an element of uncertainty as restoration to woodland, agriculture and natural areas is proposed (although the exact details are unknown).</p> <p>Some uncertainty is also noted due to the possible restrictions on water extraction at the site. This is, however, expected to be dealt with through the water licensing regime.</p> <p>Plan level / regional / wider effects There is potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>		✓	✓		0	0	0
							?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is adjacent to A64 giving good access to York and Scarborough (32km and 20km respectively). Access: exact location not yet known, but site abuts Sandy Land (U1765) and the A64.</p> <p>HGVs: 12 to 24 (estimate based on estimate of output); Light Vehicles: two to five (estimate based on estimate of output).</p> <p>Rail: 1.4km north / nearest known railhead: circa 48km south-west; Strategic Road: Site is adjacent to A64; Canal / Freight waterway: Ouse is 39.5km east.</p> <p>Local Effects Access is likely to be on to Sandy Lane for a very short distance then on to the A64. Estimated vehicle numbers for the site are relatively low.</p> <p>According to a highways assessment, works will be required to improve the Sandy Lane and extend the existing footway / street lighting to improve safety at the site access. Further investigation of sustainable transport will also need to be determined by a traffic assessment and / or travel plan identifying travel modes beyond the local highway network.</p> <p>Plan level / regional / wider effects As the A64 is a trunk road Highways England will need to be consulted. Additional facilities / service provision for passenger transport may be needed if determined by a traffic assessment.</p>		✓	✓		-	-	0
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within a hazardous substances consultation zone or an AQMA. Possible receptors are located at settlements – West Knapton 150m north, East Knapton 600m north-east, Scampston 1km north-west, Wintringham 600m south and a number of individual properties are in range of dust.</p> <p>Local Effects As the site is located within 200m of the village of West Knapton there is potential for minor negative impacts in relation to dust during the construction and operational phase of the development. It is however acknowledged that mitigation may reduce any impacts significantly, however this is currently unknown until a dust / air quality assessment is undertaken and any required mitigation</p>		✓	✓		-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>is outlined.</p> <p>Air pollution resulting from site traffic and on-site processes may also contribute towards a minor negative impact in relation to air quality during the construction and operational phase. In the longer term, impacts will depend upon the final restoration scheme that is implemented and therefore there is an element of uncertainty, however it is considered that if the identified possible restoration scheme to woodland, agriculture and natural areas is pursued, no significant impacts would occur in relation to this objective.</p> <p>Plan level / regional / wider effects None noted</p>							
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Approximately 90% of the site is ALC Grade 3 and 10% ALC Grade 4. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area or an area affected by gypsum dissolution.</p> <p>Local Effects The site is a greenfield site so inevitably some land will be lost until restoration is put in place. As the site is relatively large (56ha) and of Grade 3⁴⁶ (good to moderate quality) and poor quality land classification. Impacts are predicted to be moderate negative due to the loss of potential best and most versatile agricultural land. Restoration would be to agriculture, woodland and natural areas so potential benefits for soil in the long term.</p> <p>Plan level / regional / wider effects The loss of agricultural land cumulatively could have an effect on</p>		✓	✓		m -	m -	0

⁴⁶ ALC Grade 3 land is sub-divided into Grade 3a and 3b, with the best and most versatile agricultural land ALC Grade 1 to 3a. Without further investigation it is not known whether Grade 3 land at this site is 3a or 3b and best and most versatile. For the purposes of this SA the precautionary principle approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development ⁴⁷ but could have a small scale effect on national food production capacity.							
6. Reduce the causes of climate change	<p><u>Proximity of factors relevant to exacerbating climate change</u> Priority Habitat – an area of lowland dry acid grassland lies onsite (circa 10% of the site and located in the north-west corner and along the western boundary of the site). One SINC lies entirely within site boundary, Sandy Lane Fields (lowland dry acidic grassland) and Sands Wood and an area of copse also lie within the site. A number of hedgerows lie within the site (south side of south-east field; west sides of Sandy Lane Fields SINC fields; north side of SINC north field).</p> <p><u>Local effects</u> As climate change is a global issue, effects are reported in wider effects below.</p> <p><u>Plan level / regional / wider effects</u> An area of lowland dry acid grassland priority woodland, a relatively large area of forestry, a small copse and a number of hedgerows would be lost as a result of the site. Coniferous woodland, which forms over 50% of the site, has relatively high carbon storage potential, impacts have been recorded as moderate negative in the short and medium term.</p> <p>Additionally, although the annual output of the site and operational period of the site are currently unknown, it is likely that a site of this size will generate a relatively significant amount of traffic movements and therefore emissions. The site is well connected to York and Scarborough, however larger markets such as Hull and those in South Yorkshire and West Yorkshire are more distant.</p> <p>In the long term, restoration to agriculture, woodland and natural areas is proposed and a neutral effect has been recorded here as this is largely similar to the baseline situation.</p>	✓			✓	m	m	0
7. To respond and adapt to the	<u>Proximity of factors relevant to the adaptive capacity⁴⁸ of a site</u> The site is in Flood Zone 1. Only		✓		✓	m	m	0

⁴⁷ 56ha annualised across the 20 year life of the site would be an annual 2.8ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 2.8ha loss would represent a 0.12% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
effects of climate change	<p>small areas of surface water flooding affect the site (less than 5%).</p> <p>Ecological Networks – approximately 10% of the site covered by core EHN (north western area); A64 Knapton Lane End verge Local Habitat Network lies adjacent to the site to the north, circa 5 to 10% of the site in NY23 North East Wolds Scarp Living Landscape.</p> <p>CAMS: surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows).</p> <p>Approximately 90% of the site is ALC Grade 3 and 10% ALC Grade 4 land.</p> <p>Local Effect. Flooding is not a particular issue for this site.</p> <p>Some uncertainty is also noted due to the possible restrictions on water extraction at the site. This is, however, expected to be dealt with through the water licensing regime.</p> <p>Impacts are considered to be moderate negative in the short and medium term due to the destruction of woodland areas.</p> <p>Plan level / regional / wider effects Agriculture and forestry is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a major negative.</p>					-	-	
8. To minimise the use of resources and encourage their	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local Effects The site will contribute to the need for sand in the Plan area and outside markets. The site will however result in the extraction of virgin materials during the operational lifetime of the site which will be unavailable for future use (unless recycled). This works against the SA objective, so it is</p>	✓		✓		--	--	--

⁴⁸ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
re-use and safeguarding	scored as a major negative impact. Plan level / regional / wider effects Considered to be the same as local effects.							
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified. Local Effects The site would not deal with waste and no details are provided of how waste would be managed on site. Plan level / regional / wider effects The site may have an indirect negative impact on the prioritising the management of waste down the waste hierarchy as a result of providing limestone and reducing the need to recycle limestone from other locations.		✓		✓	-	-	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	Proximity of historic environment receptors Wintringham (DNY1035) Conservation Area lies 890m south. Scampston Hall Registered Park and Garden lies adjacent to the site to the west. No Registered Battlefields or World Heritage Sites within 5km. Four Scheduled monuments within 2km – 'a cross dyke on Knapton Wold, 500m west of West Farm' (ID 1,008,381) 930m east, 'Staple Howe: a palisaded hilltop enclosure in Knapton Plantation' (ID 1,008,367) 1.7km east, 'Iron Age barrow cemetery, East Field' (ID 1,004,072) 1.45km west, 'Three round barrows on West Heselton Wold' (ID 1,004,110) 2km south-east. 12 Listed Buildings within 1km (two Grade II* and 10 Grade II). The majority of these are concentrated in Scampston circa 800m north-west of the site. The closest is a Listed Building Deer Park House (Grade II) 180m west. Approximately 20% of the site (northern area) lies within Vale of Pickering Statement of Significance Area. Three Named Designed Landscapes lie within 2km – Scampston Park country estate adjacent to the site to the west, Knapton Hall country estate 60m north-east, Place Newton country estate 1.4km south-east.	✓	✓	✓	✓	m	m	m

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>HLC Broad type – Woodland, HLC Type – Coniferous plantation and HLC Broad type – Enclosed Land, HLC Type – Modern improved fields.</p> <p>Undesignated archaeology in this area includes evidence for prehistoric activity dating from the early prehistoric period. The area includes numerous Bronze Age round barrows and ring ditches as well as enclosures and trackways. Aerial photo transcription shows many of these features continuing into the allocation site.</p> <p>Local Effects The HLC type of this area is coniferous plantation and modern improved fields and the allocation site is a smaller part of larger areas of similar character type, of which the legibility is fragmentary. The proposed extraction is unlikely to have a major impact upon the historic landscape character of the immediately surrounding area. It is acknowledged that within the site the historic landscape character will become invisible as development will replace an earlier field system. This effect is not considered to be significant. The site lies adjacent to Scampston Park Registered Park and Garden and in close proximity to a number of Listed Buildings and the impact of the site on these historic assets will need to be considered.</p> <p>There is high archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards and, although the site has not been archaeologically evaluated, it is assumed that investigation and extraction would be in line with Joint Plan Policy D08 (Historic Environment) '<i>mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>', and therefore a negative effect no greater than minor is expected. Archaeological potential is deemed uncertain until such time as an archaeological field evaluation is carried out. The results of such work would provide more certainty about the nature and significance of below ground deposits.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> North York Moors National Park lies 7.2km north and Howardian Hills AONB lies 10km west. No Heritage Coast within 10km. Site lies within Ryedale Area of High Landscape Value.</p> <p>Light pollution: In 2000, the CPRE assessed it as 45 on a scale of 1-255, with 1 representing maximum darkness. Although this is a relatively low score, light pollution may subsequently have increased.</p> <p>Scampston Hall Inheritance Tax Exempt Land lies adjacent to the site to the west.</p> <p>Approximately 80% of site lies in Yorkshire Wolds NCA (the Yorkshire Wolds has been accepted by Natural England as worthy of further assessment for potential future AONB designation) and 20% in Vale of Pickering NCA. The North Yorkshire and York LCA places this site in Landscape Character Type 30: Sand and gravel vale fringe. This character type has high visual sensitivity as a result of strong inter-visibility with Enclosed Vale Farmland Landscape Character Type and open views along the sand and gravel fringe. High landscape sensitivity as a result of the striking settlement pattern of villages located along the spring line, archaeological sites and designed landscapes. Approximately 50% of site is categorised in Landscapes of Northern Ryedale LCA category J, Wooded Open Vale. In terms of intrusion, circa 90% of the site is classes as disturbed (northern area) whilst the remaining 10% is undisturbed.</p> <p><u>Local Effects</u> It is considered that the site could affect views from the Yorkshire Wolds escarpment, Scampston Hall, which is a Registered Park and Garden, and the undesignated historic designed landscape of Knapton Park which lies to its east.</p> <p>The impact to landscape setting is likely to be neutral for most settlements. The small villages of Scampston and East Knapton are located on the far side of well wooded parks. Rillington, a larger village to the west of Scampston Park is also likely to be similarly screened. There is an intervening wood between West Knapton, the nearest settlement, and the site. The approach to Wintringham, about 800m to the south of the site, could be affected.</p> <p>In terms of landscape character, the area is characterised by historic designed landscapes at the foot of</p>	✓	✓	✓		m -	m -	m -

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>the Yorkshire Wolds and mineral extraction would be intrusive. Knapton Quarry is less than 500m distant and no longer active (further information needed). West Heslerton Quarry is 4km distant and cumulative effects are unlikely to be significant.</p> <p>The site is on the edge of the Yorkshire Wolds where the land starts to rise (it may be on a spring line), providing a backdrop for two designed landscapes. An area of coniferous plantation woodland, currently characteristic of the local countryside although angular in outline, would be lost, affecting (but not necessarily adversely) the setting of both of the designed landscapes. Historically the area was farmland, not woodland, so felling alone is not necessarily an issue. The area of excavation could potentially be visible in distant views from the Vale of Pickering. The result of quarrying would be an artificial sunken landform which would not be in keeping with the rounded outlines of the Wolds escarpment.</p> <p>Additional vehicle movements to site may change the character of the surrounding landscape and may be detrimental to the visitor experience at Scampston Park.</p> <p>In summary effects are considered to be moderate negative in the short and medium term and following restoration to woodland, agriculture and natural areas a moderate negative effect is also anticipated as quarrying would result in an artificial sunken landform which would not be in keeping with the rounded outlines of the Wolds escarpment.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth The site is adjacent to A64 giving good access to York and Scarborough (32km and 20km respectively).</p> <p>Local Effects The site would make a contribution to the supply of a valuable building product and ultimately this may help keep the construction sector competitive. It would also directly support jobs in extraction and freight. While the site does not represent 'low carbon development' the proximity of this site to an established market is not likely to significantly increase the carbon footprint of construction projects etc. that ultimately use this sand. Overall the contribution is moderate positive in the short and</p>		✓	✓	✓	m +	m +	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>medium term. A neutral effect is recorded in the long term following restoration to agriculture, woodland and natural areas.</p> <p>Plan level / regional / wider effects None noted.</p>							
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD Area is Rillington. This is not in most deprived 20%. Settlements: within 5km of the site lies West Knapton, East Knapton, Rillington, Scagglethorpe, Thorpe Bassett, Wintringham, West Heslerton, East Heslerton and Yedingham. The Ryedale Plan Local Plan Strategy identifies Rillington as a service village under policy SP1 where limited small scale growth is the ambition. The other settlements within 5km are not specifically listed in the settlement hierarchy however policy SP1 states that in all other villages, hamlets and in the open countryside development will be restricted to that which is necessary to support the economy and communities, can be justified in terms of improvements to the environment or the conservation of heritage assets or is justified through the neighbourhood planning process.</p> <p>Local Effects The site is likely to support small numbers of jobs onsite. Whilst the site would provide a source of sand which could aid future development, it is considered that the immediate settlements are unlikely to directly benefit in any significant way. The site lies in close proximity to a number of visitor attractions including Scampston Hall and Walled Gardens (adjacent to north west) and Wolds Way Lavender (adjacent to the west). It is considered that the allocation site may impact upon these adjacent tourist attractions (due to noise, dust, traffic, visual impacts during the operational period). It is therefore considered that a moderate negative effect would result in the short to medium term. Following restoration effects are considered to be neutral.</p> <p>Plan level / regional / wider effects Considered the same as local effect.</p>		✓	✓	✓	m	m	0
14. To provide opportunities to enable recreation,	<p>Proximity to recreation, leisure and learning receptors Footpath 25.81/9/1 begins circa 40m north of the site. Bridleway 25.81/15/1 runs circa 100m east of the site. Footpath 25.81/33/1 begins circa 160m north-east of the site. The Wolds Way passes within 800m of the site and the Centenary Way approximately 500m south of the site.</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
leisure and learning	<p>Local Effects The users of nearby rights of way may experience an increase in dust and noise and effects on visual amenity and will experience an increase in HGVs on the intersecting roads. These users will already be used to noise and fumes coming from the A64 so the rights of way are already likely to be disturbed in close proximity to the site. Due to intervening distance and screening elements, impacts upon the Wolds Way and Centenary Way are not considered to be significant. It is considered that minor negative impacts may result in the short and medium term. It is considered that restoration to agriculture, woodland and natural areas would result in a neutral impact in relation to this objective.</p> <p>Plan level / regional / wider effects None noted.</p>							
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing There are no hospitals, clinics or health centres within 1km. West Knapton lies 150m north, East Knapton is 600m north-east, Scampston is 1km north-west and Wintringham is 600m south. Individual properties lie adjacent to the site to the west, The Linton Mill is 280m west and Scampston Mill Farm is 700m west.</p> <p>Local Effects Without mitigation it is possible that noise and dust could increase, including noise and dust from traffic travelling along the A64. This may affect a number of individual properties and settlements (particularly West Knapton) and may heighten traffic levels in the area. As these impacts are generally localised they are considered to be minor negative in the short and medium term and neutral in the long term following restoration.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	-	-	0
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site lies in Flood Zone 1. Only very small areas of surface water flooding affect the site (less than 5%).</p> <p>Local Effects Flooding is not a particular issue for this site and as sand extraction is 'water compatible' there are no significant effects.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any other known development allocations in other plans.</p> <p><u>Local Effects</u> The site would make a contribution to self-sufficiency in the supply of sand.</p> <p><u>Plan level / regional / wider effects</u> The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>⁴⁹</p> <p><u>Planning Context:</u> within 2km of the site lies West Knapton, East Knapton, Rillington, Thorpe Bassett, and Wintringham. The Ryedale Plan Local Plan Strategy identifies Rillington as a service village under policy SP1 where limited small scale growth is the ambition. The other settlements within 2km are not specifically listed in the settlement hierarchy however policy SP1 states that in all other villages, hamlets and in the open countryside development will be restricted to that which is necessary to support the economy and communities, can be justified in terms of improvements to the environment or the conservation of heritage assets or is justified through the neighbourhood planning process. The site does not overlap or is adjacent to any allocations in the Ryedale Local Plan Proposals Map. Map (though is in an Area of High Landscape Value (not a saved policy).</p> <p><u>Other Joint Minerals and Waste Plan Sites:</u> none within 2km.</p> <p><u>Historic Minerals and Waste Sites:</u> Knapton Chalk Quarry and Knapton Gravel Pit are 430m east and 580m east respectively. This gravel pit has also dealt with waste in the past. Knapton Gas Station is 1.8km north-east. Site is in a PEDL / DECC onshore licensed block.</p> <p>Traffic from this site may combine with other sites along the A64 increasing traffic on this route and raising dust and air pollution levels without mitigation. Noise and visual amenity impacts would also be cumulative. It is not however considered that this cumulative impact would raise effects above a minor negative.</p>							
Limitations /	More detailed assessment would be required to fully evaluate a number of effects. This should be addressed at any subsequent planning application stage. Private boreholes may be present on site and if this is the case, impacts from the development upon this water supply							

⁴⁹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
data gaps	would need to be carefully considered.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including impact on designated sites, protected species and habitats. • Implementation of mitigation measures to reduce risks to water quality and water resources to an acceptable level. • Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources. • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise and dust. • Design to mitigate impacts to heritage assets, including appropriate archaeological investigation and mitigation. • Design to mitigate landscape and visual intrusion issues. • Design to reduce amenity impact on right of way users and other recreation activities in the vicinity • Appropriate restoration scheme using opportunities for habitat creation. 								

MJP13 – Whitewall Quarry near Norton (Recycling)

Site Name	MJP13 Whitewall Quarry Recycling, near Norton (XY 479163 469527)
Current Use	Part quarry, part existing recycling area
Nature of Planning Proposal	Expansion of area used for recycling of construction, demolition and soil waste for secondary aggregates within existing quarry void
Size	2.25ha
Proposed life of site	Until 2023 (permitted lifespan of existing quarry)
Notes	Proposed restoration to the approved scheme for the existing quarry, which is undulating grassland with tree and shrub planting

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES / SITE ASSESSMENT SPREADSHEET).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000 sites – 1.4km west - River Derwent SAC. Five SSSIs within 5km – River Derwent 1.4km north-west, Three Dykes 1.6km south-east, Beck Dale Meadow 4.2km south-west, Jeffry Bog 3.9km south-west, Kirkham Park and Riverside 4.6km south-west. Three SINC's within 2km – Welham Hill Verges (SE76-10) 160m south-west, Bazeley's Lane (SE77-18) 370m north-east, Norton Ings (SE77-11) 1.9km north.</p> <p>In terms of priority habitat, two strips of lowland calcareous grassland lie in close proximity to the site (100m west and 160m south-west).</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>No ecological networks noted onsite or adjacent.</p> <p>Local Effects The site is relatively close to the River Derwent but there is no apparent surface water connectivity. However, a recent nearby planning application⁵⁰ highlights concerns raised over pollution of groundwater due to removal of some of the protection for the aquifer. A habitats regulations assessment of the site reported that the likelihood of significant impacts to the SAC are uncertain, but would likely be resolved through routine measures to prevent fuel spills means that impacts at this site are also likely to be readily avoidable.</p> <p>It is considered unlikely that there will be any significant impact upon nearby SSSIs and SINCS (unless the development requires road widening in which case impacts on Welham Hill Verges SINC may occur) due to the nature and scale of this development. The site is an existing active quarry/ recycling facility. There are areas of colonising vegetation but it is considered unlikely there would be adverse effects to priority habitats or protected species as a result of the proposal. Overall, a neutral impact on biodiversity is anticipated in the short and medium term. Restoration would be to the existing approved scheme (undulating grassland with tree and shrub planting) and therefore impacts would also be neutral in the long term. It is however acknowledged that opportunities exist for positive biodiversity impacts as a result of site restoration e.g. the natural regeneration of priority habitats, especially limestone grassland (it should be noted that the importation of non-lime based material may limit the potential biodiversity of the quarry floor upon restoration).</p> <p>Plan level / regional / wider effects No further pathways have been identified that are likely to give rise to significant impact on the integrity of Natura 2000 sites in the wider area.</p>					?	?	?

⁵⁰ For an Asphalt Production Plant and the creation of Aggregate Storage Bins - North Yorkshire County Council Planning and Regulatory Affairs Committee, 2015. C3/13/00086/CPO-Planning Application for the purposes of the installation of an Asphalt Production Plant and the creation of Aggregate Storage Bins (5 No.) on land at Whitewall Quarry, Whitewall Corner Hill, Norton on behalf of W Clifford Watts Limited (Ryedale District) (Norton Electoral Division): Report of the Corporate Director – Business and Environmental Services

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is in a NVZ (groundwater). The site is not within or adjacent to a SPZ. Site lies in Humber RBMP district and the nearest RBMP water body is 'River Derwent from River Rye to Kirkham' circa 750m north-east (Current ecological quality is 'moderate potential' / chemical quality 'does not require assessment' (no clear visible connectivity). Groundwater: Derwent (south) Mercia Mudstone, Lias, Ravenscar and Norton Corallian water body - good quantitative quality / good chemical quality.</p> <p>CAMS: surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows). Recycling of Construction Demolition and Excavation (CDE) waste may require the use of water.</p> <p>Local Effects The site is relatively distant from Water Framework Directive (WFD) surface water bodies. Nonetheless impacts may occur, for instance to groundwater, through fuel spills or changes to the chemistry or turbidity of minor water bodies (although the waste accepted is inert, so the risk is relatively low). It is considered that such impacts could readily be mitigated through good operating procedures and the operation of the relevant environmental permits and regulations. It is therefore considered that operational impacts would be neutral and impacts following restoration would also be neutral as this would be to the currently approved scheme.</p> <p>Whitewall Quarry has an environmental permit for the treatment of inert wastes. An extension of the permitted area within the quarry may require a variation to the permit or a new permit.</p> <p>Plan level / regional / wider effects There is potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>					0	0	0
3. To reduce transport miles and associated emissions from	<p>Proximity of transport receptors The site lies in relatively close proximity to the A64 giving access to a number of potential sources of waste. It is approximately 380m from the edge of the Norton / Malton settlement, which is also a potential source of waste. Access: existing quarry access approximately 330m south of Norton on Whitewall Corner Hill road (C177). Access to the A64, to the north, would require</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
transport and encourage the use of sustainable modes of transportation	<p>routing vehicles from the site through the urban areas of Norton, and in close proximity to the Malton Air Quality Management Area (AQMA), potential air quality effects are discussed in SA objective 4 below.</p> <p>HGV: 25, based on 50% being backhauled using existing quarry vehicles (or MJP12 Vehicles - if permitted, once existing permitted stone extracted). Light vehicles: no additional vehicles (to those of the existing quarry or MJP12 if it follows the existing operation).</p> <p>PRoW: No PROW issues noted, but possible impacts on Yorkshire Wolds Cycle Network (see also SA Objective 14)</p> <p>Rail: 1.8km north to Malton Station / nearest known railhead 39.3km south-west. Strategic Road: A64 is 2.5km north-west (though nearest junction is more distant (closer to 5km by road); Canal / Freight waterway: 26km south-west.</p> <p>Local Effects The site would generate additional vehicles onto the road network. The Joint Plan traffic assessment report states <i>'the likely routing to the Strategic Road Network (A64) does however require quarry traffic to route through the centre of Norton and Malton. The likely future implementation of restrictions preventing HGVs from passing through the centre of Malton is therefore likely to require HGVs from the site to continue along the B1248 to the eastern A64 junction. This will involve additional HGV traffic passing through the centre of Norton'</i>⁵¹</p> <p>The additional vehicles to the road network and likely routing of vehicles away from the most direct route is considered to have a negative on the SA objective, although this is offset by backhauling vehicles, and is expected to be minor negative.</p> <p>Plan level / regional / wider effects While HGV movement is acceptable onto the road minor works may be required to improve the existing access arrangements. If quarrying was undertaken concurrently with extant works the situation may be temporarily worse and the Highways Assessment has highlighted that in circumstance where this traffic becomes additional traffic the local Highways Authority would want to</p>							

⁵¹ Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	limit the total traffic generated.							
4. To protect and improve air quality	<p>Proximity of air quality receptors. The site is not within a hazardous substances consultation zone. It is not within an AQMA however Malton AQMA lies 2km north. Norton-on-Derwent lies 1km north. A number of individual properties lie within 1km including Whitewall Stables 340m north, Welham Wold Farm 750m south-west, Wold House Stables 830m east. School lies 1.1km north-east.</p> <p>Local Effects The site would generate additional vehicles onto the road network, which if routed to the A64 through the Norton and Malton urban areas could have air quality impacts from vehicle emissions to sensitive receptors along the B1248 and the Malton AQMA (designated for exceedances of nitrogen dioxide (NO₂)) a key traffic pollutant. This is considered to be a moderate negative effect in the short and medium term.</p> <p>In terms of dust, it is considered that expansion of the current site would result in very minor changes to the existing baseline situation. Overall, impacts on this objective are considered to be neutral.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		m-	m-	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors The land within the site is in ALC Grade 3 (though this land is already being used for mineral extraction and part of the site also accommodates recycling infrastructure). In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local Effects No direct effect predicted above the baseline situation. Impacts in the late medium term and long term are also likely to be neutral as restoration would be to the currently approved scheme.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Areas of woodland lie along the quarry edges to the north, east and west and a number of standalone trees are located on the quarry slopes.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects It is not considered that the expansion of the existing site within the quarry void would not affect any significant carbon sinks and the operation itself is unlikely to produce significant greenhouse gases above the baseline situation. The extension of the site would be for a purpose that would move existing waste up the waste hierarchy thereby possibly reducing emissions (as recycled materials may be used to replace virgin materials). Overall, impacts are considered to be neutral in the short, medium and long term, as site restoration would be to the currently approved scheme.</p>		✓		✓	0	0	0
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁵² of a site Surface water flooding affects parts of the site, including small patches at a 1 in 30 year return (circa 3%), 1 in 100 year return (additional circa 2%), and 1 in 1000 year return (additional circa 3%). Site is in Flood Zone 1.</p> <p>CAMS: surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows). Recycling of CDE waste may require the use of water.</p> <p>The land within the site is in ALC Grade 3 (though this land is already being used for mineral extraction and part of the site also accommodates recycling infrastructure)</p> <p>Local Effects Surface water flooding is a problem in small areas of the site, and this is expected to get worse with climate change. These effects are avoidable. For instance, it will be important for the plant to avoid areas at highest risk through applying a sequential approach to positioning within the site where possible and to execute appropriate emergency planning. This has been assessed as uncertain until</p>	✓		✓		?	?	0

⁵² Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>further information is available regarding the site layout.</p> <p>Although surface water may be significantly restricted in terms of availability for extraction, the assessment notes only uncertainty here as it will be for the water licensing regime to decide the significance of impacts.</p> <p>Plan level / regional / wider effects None noted.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local Effects The extension of operations at this facility will enable more construction, demolition and soil waste to be recycled. It is considered that provision of this capacity may offset the need for virgin materials to a small degree. Overall impacts are considered to be minor positive during the site operation.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>		✓		✓	+	+	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local Effects This extended facility would recycle construction, demolition and soil waste. It is assumed that this facility could facilitate a greater throughput of waste than the existing site and therefore impacts are considered to be minor positive.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	+	+	0
10. To conserve or enhance the historic environment and its setting,	<p>Proximity of historic environment receptors No Conservation Areas within 1km. No Registered Parks and Gardens, Registered Battlefields or World Heritage Sites within 5km. Four Scheduled Monuments lie within 2km - 'The Three Dykes (or Five Rigs)' (ID1,004,911) is circa 1.26km south-east, West Wold Farm Round Barrow (ID1,004,103) is 1.52km south-east, Roman fort (ID1,004,885) is 2km north, Site of Malton Castle (ID1,004,051) is 2km north-north-west. Three listed buildings lie within 1km (two circa 400m north</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
cultural heritage and character	<p>at Whitewall Corner, one 900m north at Sutton Grange).</p> <p>A number of designed landscapes lie within 2km of the site (from a dataset derived from the HLC) - Norton Cemetery (designed landscape) is 1.4km north. Langton Hall (designed landscape / country estate) is just over 2km (2.3km) south-east. HNY24065 (no name listed, designed landscape - allotments) is 1.9km north-north-east. Malton Castle Gardens is 2km north-north-west. HNY24530 (no name listed – designed landscape / allotments) is 2km north-west.</p> <p>The HLC broad type is extractive and the HLC type is quarry limestone. The proposed extension to the materials recycling facility lies within an area of existing mineral extraction. Within the surrounding area, the undesignated archaeological interest includes areas of Romano-British settlement, burial and industrial activity at Norton. Archaeological recording has been undertaken in response to previous extensions to Whitewall Quarry and this has recovered evidence for a double-ditched Romano-British trackway, known from aerial photography, which crosses the western side of the current allocation site.</p> <p>Local Effects The HLC type of this area is quarry limestone. The legibility of this is fragmentary, as the allocation site is a smaller part of a larger area of similar character type, the proposed extraction is unlikely to have an impact upon the HLC of the immediately surrounding area. It is anticipated that there will be no impact upon the archaeological resource as the proposed development is for the use of a former quarry, where it is assumed with a high degree of certainty that any archaeological resource has previously been destroyed. Impacts in the longer term are considered to be neutral as the site will be restored to the currently approved scheme.</p> <p>Plan level / regional / wider effects None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> No National Parks or Heritage Coast lie within 10km. Howardian Hills AONB lies 2.5km west. No Inheritance Tax Exemption Land lies within 5km. In terms of tranquillity landscape is 'disturbed'. Light pollution – the 2000 CPRE map shows moderate light pollution (124 on a scale of 1-255, with 1 representing maximum darkness).</p> <p>Site lies in Ryedale District Council Area of High Landscape Value.</p> <p>Site lies in the Yorkshire Wolds NCA (which has been accepted by Natural England as worthy of further assessment towards a potential AONB designation) and is classed as Limestone Ridge landscape character type in the North Yorkshire and York LCA. This character type is characterised by: High visual sensitivity (as a result of prominent ridge which facilitates panoramic views across the Vale of Pickering, coupled with strong inter-visibility with adjacent Landscape Character Types). High ecological sensitivity (as a result of the patchwork of high quality limestone grassland (mainly linked to grass banks) mature parkland and woodland trees and species rich grass road verges). High landscape and cultural sensitivity (as a result of numerous country houses, historic buildings, historic settlement pattern, mature parkland trees and strong historic character within villages).</p> <p><u>Local Effect</u> The site is within a quarry which has already had a negative impact on local landscape character, and the proposals are unlikely to result in a significant further change. There is concern that through the continued and expanded recycling operations at the site, the quarry may become a brownfield site in perpetuity, meaning that development in what is a rural area will be more acceptable in the future. Most directly this could be manifested in the potential extension of life of the site and its potential scale should the principle of a recycling facility become established and be sought to be retained. Impacts are however considered to be neutral in the short, medium and long term.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> The site lies in relatively close proximity to the A64.</p> <p><u>Local Effects</u> The expansion of the current site may provide limited additional employment opportunities. The allocation of the site may enable value to be added to a greater quantity / type of waste products, another minor positive impact. The site is located in an area where the horse racing industry forms an important part of the local economy. Increased or prolonged traffic and noise associated with the site may have the potential to have some adverse impact on this neighbouring form of economic activity (the site lies adjacent to an identified exercise route for horses). The effect overall is considered to be negative in the short and medium term and neutral in the long term, with uncertainty noted as it is not known when the proposal would commence.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓	✓	- ?	-	0
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> IMD area is Norton West. Not in the most deprived 20%. Within 5km of the site lies Malton / Norton on Derwent, Broughton, Swinton, Huttons Ambo, Kennythorpe, Burythorpe, Langton and Settrington. The Ryedale Plan Local Plan Strategy identifies Malton and Norton as a Principal Town which is the primary focus for growth. Swinton is listed as a service village under policy SP1 where limited small scale growth is the ambition. The other settlements within 5km are not specifically listed in the settlement hierarchy however policy SP1 states that in all other villages, hamlets and in the open countryside development will be restricted to that which is necessary to support the economy and communities, can be justified in terms of improvements to the environment or the conservation of heritage assets or is justified through the neighbourhood planning process.</p> <p>Across the Ryedale Plan, 3000 net new homes will be delivered between 2012 and 2027. In Malton / Norton this means 1500 houses mainly in and adjacent to the built up area (via large extension sites). However, policy SP3 allows 100% rural exception site (for sites with affordable housing). These must be contiguous or well connected with settlements. Local Plan sites are still being evaluated through the potential sites are listed here http://www.ryedaleplan.org.uk/local-plan-sites/78-potential-development-</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>sites-norton. Residential Sites could, if allocated come within 450m of this site.</p> <p>Local Effects There are a number of growing communities in the surrounding area, though the location of this existing recycling site and possible extension within an existing quarry void, limits impacts upon nearby communities (including visual impacts that could possibly impact upon tourism and community vitality). It is considered that impacts on this objective would be negligible in comparison to the existing baseline situation. Impacts in the longer term are considered to be neutral as restoration would be to the currently agreed restoration scheme.</p> <p>Whitewall Quarry has an Environmental Permit for the treatment of inert wastes. An extension of the permitted area within the quarry may require a variation to the permit or a new permit. The Environment Agency note that for any new permit or variation to be permitted, the quarry would need to satisfy that there would be no unacceptable impacts on the local community.</p> <p>Plan level / regional / wider effects None noted.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors Yorkshire Wolds National Cycle Network (route No. 166) runs to the west and north of the site and passes within 100m at the closest point.</p> <p>Local Effects The existing site is well screened due to its location within a quarry void. Additional visual impacts on surrounding recreation routes / leisure facilities are therefore not anticipated. No further traffic impacts are anticipated as a result of the expansion of this site and therefore further impacts on the Yorkshire Wolds Cycle Network route are not anticipated. Impacts are considered to be neutral.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
15. To protect and improve the wellbeing, health and safety of local	<p>Proximity to population / community receptors / factors relevant to health and wellbeing Norton-on-Derwent lies 1km north. Individual properties- Whitewall Stables 340m north, Welham Wold Farm 750m south-west, Wold House Stables 830m east. School lies 1.1km north-east. No clinics, hospitals or health centres within 1km.</p>					m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
communities	<p>Local Effects Local roads to the A64 would see recycling facility related traffic movements continue, which could add to noise and pollution levels depending on the route taken (particularly if traffic is not routed to avoid the Malton AQMA, but also where traffic goes through the centre of Norton, in order to access the major road network, such that there is a potential for moderate negative effect on local communities. As the site lies on an identified equestrian exercise route, there may be some concerns regarding the safety of jockeys and horses, due to increased traffic levels as a result of the development. Impacts are considered to be uncertain to moderate negative.</p> <p>Whitewall Quarry has an Environmental Permit for the treatment of inert wastes. An extension of the permitted area within the quarry may require a variation to the permit or a new permit. The Environment Agency note that for any new permit or variation to be permitted, the quarry would need satisfy that there would be no unacceptable impacts on the local community.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Surface water flooding affects parts of the site, including small patches at a 1 in 30 year return (circa 3%), 1 in 100 year return (additional circa 2%), and 1 in 1000 year return (additional circa 3%). Site is in Flood Zone 1.</p> <p>Local Effects Surface water flooding affects small parts of the site, and this is expected to get worse with climate change. These effects are avoidable. For instance, it will be important for the plant to avoid areas at highest risk through applying a sequential approach to positioning within the site where possible and to execute appropriate emergency planning. We have assessed this as uncertain until the situation is made clear.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local Effects</u> The site would make a small contribution to self-sufficiency in the supply of recycled aggregate / construction materials and soil.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		+	+	0
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>⁵³</p> <p><u>Planning Context:</u> Whitewall Corner is the nearest settlement with Norton the next nearest at around 920m. Malton / Norton is defined as a principal town and is the primary focus of development in Ryedale. The site is located in ‘wider open countryside’ where development that is necessary to support a sustainable and healthy rural economy will be supported. Across the Ryedale Plan, 3000 net new homes will be delivered between 2012 and 2027. In Malton / Norton this means 1500 houses mainly in and adjacent to the built up area (via large extension sites). Residential Sites could, if allocated come within 450 metres of this quarry⁵⁴. The site does not overlap or is adjacent to any allocations in the existing Ryedale Local Plan Proposals Map (though is in an Area of High Landscape Value (not a saved policy).</p> <p><u>Other Joint Minerals and Waste Plan Sites:</u> Two discounted site lie within 2km: WJP09 is 20m east, MJP12 is 250m south. Both are also associated with Whitewall Quarry. An allocated site MJP63 is 2km north-west.</p> <p><u>Historic Minerals and Waste Sites:</u> Whitewall active Jurassic limestone quarry is onsite and Brows active building stone site lies 2.1km north-west. Whitewall Quarry Waste Treatment Site lies 125m north-east.</p>							
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.							

⁵³ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

⁵⁴ Ryedale District Council, 2015. The Ryedale Plan: Potential Development Sites – Norton [URL: <http://www.ryedaleplan.org.uk/local-plan-sites/78-potential-development-sites-norton>]

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues, including impact on designated sites (such as the River Derwent SAC), protected species and habitats.
- Implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level.
- Mitigate potential air quality impacts (including to the Malton AQMA).
- Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources.
- Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise and dust.
- Appropriate restoration scheme using opportunities for habitat creation.

WJP09 – Whitewall Quarry Materials Recycling Facility, near Norton

Site Name	WJP09 Whitewall Quarry, Norton, Ryedale (XY 479289 469535)
Current Use	Quarry
Nature of Planning Proposal	Materials recycling facility to sort / treat household waste including composting
Size	0.87ha
Proposed life of site	Commencement date unknown but end-date proposed to be 2030
Notes	Proposed restoration to the approved scheme for the existing quarry, which is undulating grassland with tree and shrub planting.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000 sites – 1.5km north-west – River Derwent SAC. Five SSSIs within 5km – River Derwent 1.5km north-west, Three Dykes 1.5km south-east, Beck Dale Meadow 4.3km south-west, Jeffry Bog 4.25km south-west, Kirkham Park and Riverside 4.75km south-west. 4 SINC's lie within 2km of the site- Bazeleys Lane (ratified SINC, SE77-18) 310m north, Welham Hill Verges (ratified SINC, SE76-10) 280m south-west, Norton Ings (Deleted SINC, SE77-11) 1.9km north, Kings Mill Riverbank (Potential SINC (does not qualify) SE77-12) 2km north.</p> <p>No ecological networks noted onsite or adjacent.</p> <p>Local Effects While the site is relatively close to the River Derwent there is no apparent surface water connectivity. However, a recent nearby planning application⁵⁵ highlights concerns raised over pollution of</p>					0	0	0

⁵⁵ For an Asphalt Production Plant and the creation of Aggregate Storage Bins North Yorkshire County Council Planning and Regulatory Affairs Committee, 2015. C3/13/00086/CPO-Planning Application for the purposes of the installation of an Asphalt Production Plant and the creation of Aggregate Storage Bins (5 No.) on land at Whitewall Quarry, Whitewall Corner Hill, Norton on behalf of W Clifford Watts Limited (Ryedale District) (Norton Electoral Division): Report of the Corporate Director – Business and Environmental Services

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>groundwater due to removal of some of the protection for the aquifer. This may also present a risk to the nearby River Derwent and the objectives of its international SAC designation if there is a link between it and underlying groundwater. A habitats regulations assessment of the site reported that the likelihood of significant impacts to the SAC are uncertain, but would likely be resolved through routine measures to prevent fuel spills means that impacts at this site are also likely to be readily avoidable.</p> <p>It is considered unlikely that there will be any significant impact upon SSSIs and SINCS (unless the development requires road widening/ results in a significant increase in traffic in which case impacts on Welham Hill Verges SINC may occur) due to the nature and scale of this development. The site is an existing active quarry. There are areas of colonising vegetation but it is considered unlikely there would be adverse effects to priority habitats or protected species as a result of the proposal. Overall, a neutral impact on biodiversity is anticipated in the short and medium term, whilst impacts are neutral in the longer term as site restoration would be to the existing approved scheme (undulating grassland with tree and shrub planting). It is considered that the natural regeneration of priority habitats, especially limestone grassland would have the potential for beneficial biodiversity impacts.</p> <p>Plan level / regional / wider effects No further pathways have been identified that are likely to give rise to significant impact on the integrity of Natura 2000 sites in the wider area.</p>							
2. To enhance or maintain water quality and improve efficiency of	<p>Proximity of water quality / quantity receptors The site is in a NVZ (groundwater). Site not within or adjacent to a SPZ. The site lies in Humber RBMP district and the nearest RBMP waterbody is 'River Derwent from River Rye to Kirkham' circa 650m north-east (current ecological quality is 'moderate potential' / chemical quality 'does not require assessment' (no clear visible connectivity). Groundwater: Derwent (south) Mercia Mudstone, Lias, Ravenscar and Norton Corallian water body - good quantitative</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
water use	<p>quality / good chemical quality.</p> <p>CAMS: surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows). Waste treatment may require the use of water.</p> <p>Local Effects The site is relatively distant from WFD surface water bodies. Nonetheless impacts may occur, for instance to groundwater, through fuel spills during site construction. It is however considered that such impacts could readily be mitigated through good operating procedures and the operation of the relevant environmental permits and regulations. It is therefore considered that operational impacts would be neutral and long term impacts would also be neutral as restoration would be to the existing approved scheme for the quarry.</p> <p>Although surface water may be significantly restricted in terms of availability for extraction, the assessment notes only uncertainty here as it will be for the water licensing regime to decide the significance of impacts.</p> <p>Plan level / regional / wider effects There is potential pollution from the site could pass into the wider water environment via surface and groundwater pathways</p>					?	?	?
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable	<p>Proximity of transport receptors The site lies in relatively close proximity to the A64 giving access to a number of locations further afield for waste disposal. It is approximately 380m from the edge of the Norton / Malton settlement: a key source of waste. Access: existing quarry access approximately 330m south of edge of Norton on Whitewall Corner Hill road (C177). Access to the A64, to the north, would require routing vehicles from the site through the urban areas of Norton, and in close proximity to the Malton Air Quality Management Area (AQMA), potential air quality effects are discussed in SA objective 4 below.</p> <p>HGV vehicles: 28 to 32 two-way daily movements (submitter information); light vehicles: 2 two-way daily</p>		✓		✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
modes of transportation	<p>movements (submitter information).</p> <p>PRoW: no issues noted, but possible impacts on Yorkshire Wolds Cycle Network (see also SA Objective 14).</p> <p>Rail: 1.8km north to Malton Station / nearest known railhead 39.3km south-west. Strategic Road: A64 is 2.5km north-west (though nearest junction is more distant (closer to 5km by road), Canal Freight waterway: 26km south-west.</p> <p>Local Effects The site would generate 28 to 32 HGV movements per day. According to the Highways Assessment HGV movement is acceptable onto Welham Norton. Minor works may be required to improve the existing access arrangements.</p> <p>Plan level / regional / wider effects The site is very close to Malton / Norton and strain on the road network to the A64 is a key consideration (dependent on route taken). If this is additional traffic to that already generated by the local cluster of sites the local Highway Authority may wish to further scrutinise the impact with a view to limiting traffic impacts given proximity to the nearby settlements. Therefore, a traffic assessment / travel plan will be needed which can also determine sustainable modes of travel to this site.</p>							
4. To protect and improve air	<p>Proximity of air quality receptors The site is not within a Hazardous substances consultation zone. It is not within an AQMA however Malton AQMA lies 2km north. Norton-on-Derwent 950m north. Individual properties - Whitewall Stables 340m north, Welham Wold Farm 810m south-west, Wold House Stables</p>		✓	✓		m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
quality	<p>740m east, Auburn Hill House 850m north-east.</p> <p>Local Effects No confirmed route by which traffic / external waste streams will arrive at the site (i.e. where accepted household waste will arrive from, although Malton and Norton would provide a nearby waste stream), though this site is relatively proximal to the A64. It should be noted however that some of the possible routes to the A64 pass through the Malton AQMA and it is considered that should these routes be utilised by additional traffic generated by this new materials recycling facility, a moderate negative impact would arise, particularly in combination with other sites in this grouping and other additional development.</p> <p>In terms of dust, it is considered that some additional impacts may arise during the construction of the materials recycling facility and from heavy goods vehicles delivering / collecting materials from the facility. As a number of individual properties lie in close proximity to the site and it is possible that the site access route will pass through a number of nearby settlements, a minor negative impact may arise. Impacts in the longer term are neutral as restoration would be to the existing approved scheme for the quarry.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors The site is in an area of Grade 3 agricultural land (though this land forms part of a quarry and has already been used for mineral extraction). In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local Effects No effect predicted above the baseline situation (current quarry is permitted until 2023). Impacts in the longer term are neutral as restoration would be to the existing approved scheme for the quarry.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Areas of woodland lie along the quarry edges to the north, east and west and a number of standalone trees are located on the quarry slopes.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects It is not considered that the development of a materials recycling facility within the quarry void would affect any significant carbon sinks. The new facility would be for a purpose that would move existing waste up the waste hierarchy thereby possibly reducing emissions (as recycled materials may be used to replace virgin materials). Overall, impacts are considered to be neutral to minor positive in the short and medium term and neutral in the longer term as restoration would be to the existing approved scheme for the quarry.</p>		✓		✓	+	+	0
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁵⁶ of a site The site is not affected by surface water flooding. Site is in Flood Zone 1. The site is in an area of Grade 3 agricultural land (though this land forms part of a quarry and has already been used for mineral extraction). There are no intersecting ecological networks.</p> <p>CAMS: surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows). Waste treatment may require the use of water.</p> <p>Local Effects Mostly no effects are predicted in the short, medium and long term. Although surface water may be significantly restricted in terms of availability for extraction, the assessment notes only uncertainty here as it will be for the water licensing regime to decide the significance of impacts.</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	?	?	0

⁵⁶ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
8. To minimise the use of resources and encourage their re-use and safeguarding	<p><u>Proximity of factors relevant to the resource usage of a site.</u> No spatial factors identified.</p> <p><u>Local Effects</u> A materials recycling facility would an estimated 25,000 tonnes per annum of household waste products to be recycled. It is considered that this recycled waste may offset the need for the manufacture of new materials (e.g. glass and plastic products). Overall impacts are considered to be moderate positive during the site operation.</p> <p><u>Plan level / regional / wider effects</u> Considered to be the same as local effects.</p>		✓	✓		+	+	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local Effects</u> This materials recycling facility would enable up to 25,000 tonnes per annum of waste products to be recycled. This would move waste management up the waste hierarchy and therefore would result in a major positive impact in relation to this objective.</p> <p><u>Plan level / regional / wider effects</u> Considered to be the same as local effects.</p>		✓	✓		+	+	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> No Conservation Areas within 1km. No Registered Parks and Gardens, Registered Battlefields or World Heritage Sites within 5km. Four Scheduled Monuments lie within 2km 'The Three Dykes' (ID 1,004,911) 1.2km east, 'West Wold Farm round barrow' (ID 1,004,103) 1.46km south-east, 'Roman Fort' (ID 1,004,885) 1.96km north and 'Site of Malton Castle' (ID 1,004,051) 1.96km north. Three listed buildings lie within 1km (all Grade II), closest Whitewall House and attached outbuilding (NHLE no. 1,149,544) 400m north-west.</p> <p>A number of designed landscapes lie within 2km of the site (from a dataset derived from the HLC)- Norton Cemetery 1.4km north, Unnamed allotments 1.8km north and Malton Castle Garden 2km north.</p> <p>The HLC broad type is extractive and the HLC type is quarry limestone. The proposed materials recycling facility lies within an area of existing mineral extraction. Within the surrounding area, the undesignated</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>archaeological interest includes areas of Romano-British settlement, burial and industrial activity at Norton. Archaeological recording has been undertaken in response to previous extensions to Whitewall Quarry and this has recovered evidence for a double-ditched Romano-British trackway, known from aerial photography, which crosses the western side of the current allocation site.</p> <p>Local Effects The HLC type of this area is quarry limestone. The legibility of this is fragmentary. As the allocation site is a smaller part of a larger area of similar character type, the proposed extraction is unlikely to have an impact upon the historic landscape character of the immediately surrounding area. It is anticipated that there will be no impact upon the archaeological resource as the proposed development is for the use of a former quarry, where it is assumed with a high degree of certainty that any archaeological resource has previously been destroyed. Impacts in the longer term are neutral as restoration would be to the existing approved scheme for the quarry.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks or Heritage Coast lie within 10km. Howardian Hills AONB lies 2.7km W. No Inheritance Tax Exemption Land lies within 5km. In terms of tranquillity landscape is 'disturbed'. Light pollution: Moderate - in 2000, levels were assessed as 124 on a scale of 1-255, with 1 representing maximum darkness. As the site is close to Norton-on-Derwent, an expanding settlement, this is likely to have increased.</p> <p>Site lies in Ryedale District Council Area of High Landscape Value.</p> <p>Site lies in the Yorkshire Wolds National Character Area (accepted by Natural England as worthy of further assessment as potential AONB) and is classed as Limestone Ridge landscape character type in the North Yorkshire and York Landscape Character Assessment. This character type is characterised by: High visual sensitivity (as a result of prominent ridge which facilitates panoramic views across the Vale of Pickering, coupled with strong inter-visibility with adjacent Landscape Character Types). High ecological sensitivity (as a result of the patchwork of high quality limestone grassland (mainly linked to grass banks) mature parkland and woodland trees and species rich grass road verges). High landscape and cultural</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>sensitivity (as a result of numerous country houses, historic buildings, historic settlement pattern, mature parkland trees and strong historic character within villages).</p> <p>Local Effects The site is within a quarry which has already had a negative impact on local landscape character, and the proposals are unlikely to result in a significant further change (although it is considered that the new building should be a recessive colour if it is visible beyond the quarry and clarifications regarding the building dimensions would be required at any application stage). There is concern from residents that through the continued and expanded recycling operations at the site might potentially lead to a proposal for a long-term or permanent facility, but this would require an application for planning permission that in determination would take account of the policies and circumstance relevant at the time. However, based on the currently proposed scheme, impacts are considered to be neutral in the short, medium and long term.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site lies in relatively close proximity to the A64.</p> <p>Local Effects The new materials recycling facility may provide limited additional employment opportunities. The allocation of the site would enable value to be added to waste products and may divert some household waste from landfill thereby reducing costs in terms of landfill tax. The site is located in an area where the horse racing industry forms an important part of the local economy. Increased or prolonged traffic and noise associated with the site may could have the potential to have some adverse impact on this neighbouring form of economic activity (the site lies adjacent to an identified exercise route for horses). The effect overall is considered to be negative in the short and medium term and neutral in the long term, with uncertainty noted as it is not known when the proposal would commence.</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> IMD area is Norton West. Not in most deprived 20%. Within 5km of the site lies Malton / Norton on Derwent, Broughton, Swinton, Huttons Ambo, Kennythorpe, Burythorpe, Langton and Settrington. The Ryedale Plan Local Plan Strategy identifies Malton and Norton as a Principal Town which is the primary focus for growth. Swinton is listed as a service village under policy SP1 where limited small scale growth is the ambition. The other settlements within 5km are not specifically listed in the settlement hierarchy however policy SP1 states that in all other villages, hamlets and in the open countryside development will be restricted to that which is necessary to support the economy and communities, can be justified in terms of improvements to the environment or the conservation of heritage assets or is justified through the neighbourhood planning process.</p> <p>Across the Ryedale Plan, 3000 net new homes will be delivered between 2012 and 2027. In Malton / Norton this means 1500 houses mainly in and adjacent to the built up area (via large extension sites). However, policy SP3 allows 100% rural exception sites (for sites with affordable housing). These must be contiguous or well connected with settlements. Local Plan sites are still being evaluated through the potential sites are listed here http://www.ryedaleplan.org.uk/local-plan-sites/78-potential-development-sites-norton. Residential Sites could, if allocated come within 400 metres of this site.</p> <p><u>Local Effects</u> There are a number of growing communities in the surrounding area, though the location of this materials recycling facility within an existing quarry void, limits impacts upon nearby communities (including visual impacts that could possibly impact upon tourism and community vitality). The allocation of the site would provide local infrastructure for the management of waste higher up the waste hierarchy. On balance impacts are considered to be negligible to minor positive. In the long term impacts are neutral as restoration would be to the existing approved scheme for the quarry.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors Yorkshire Wolds National Cycle Network (route 166) runs to the west and north of the site and passes within 250m at the closest point.</p> <p>Local Effects The site is well screened due to its location within a quarry void. Additional visual impacts on surrounding recreation routes / leisure facilities are therefore not anticipated. The quarry is accessed from Whitewall Corner Hill road which the Yorkshire Wolds Cycle Network route also utilises. It is therefore considered that as the new facility would result in 28 to 32 daily two-way HGV movements, a minor negative impact could occur in relation to this objective.</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	-	-	0
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing Norton-on-Derwent lies 950m north. Individual properties - Whitewall Stables 340m north, Welham Wold Farm 810m south-west, Wold House Stables 740m east, Auburn Hill House 850m north-east. School lies 1km north-east. No clinics, hospitals or health centres within 1km.</p> <p>Local Effects The site is well screened due to its location within a quarry void. Additional visual impacts on surrounding communities / receptors are therefore not anticipated. Local roads to the A64 would see recycling facility related traffic movements continue over an extended period of time which could add to noise and pollution levels depending on the route taken (particularly if traffic is not routed to avoid the Malton AQMA, but also where traffic goes through the centre of Norton, in order to access the major road network, such that there is a potential for significant moderate impact on local communities. As the site lies on an identified equestrian exercise route, there may be some concerns regarding the safety of jockeys and horses, due to increased traffic levels as a result of the development. Impacts are considered to be uncertain to moderate negative.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	m-	m-	0
						?	?	

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p><u>Proximity to flood zones</u> The site is not affected by surface water flooding. Site is in Flood Zone 1.</p> <p><u>Local Effects</u> No significant effects are predicted.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local Effects</u> The site would manage waste and provide a source of compost and recycled household materials.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>⁵⁷</p> <p><u>Planning Context</u>: Whitewall Corner is the nearest settlement with Norton the next nearest at around 920m. Malton / Norton is defined as a principal town and is the primary focus of development in Ryedale. The site is located in 'wider open countryside' where development that is necessary to support a sustainable and healthy rural economy will be supported. Across the Ryedale Plan, 3000 net new homes will be delivered between 2012 and 2027. In Malton / Norton this means 1500 houses mainly in and adjacent to the built up area (via large extension sites). Residential Sites could, if allocated come within 470 metres of this site⁵⁸. The site does not overlap or is adjacent to any allocations in the existing Ryedale Local Plan Proposals Map (though is in an Area of High Landscape Value (not a saved policy).</p> <p><u>Other Joint Minerals and Waste Plan Sites</u>: Two discounted sites lie within 2km: MJP13 is 20m west, MJP12 is 250m south. Both are also associated with Whitewall Quarry.</p> <p><u>Historic Minerals and Waste Sites</u>: Whitewall active Jurassic limestone quarry is on-site and Brows active building stone site lies 2.1km north-west. Whitewall Quarry WTS lies 125m north-east.</p> <p><u>Traffic</u>: The site is very close to Malton / Norton and strain on the road network to the A64 is a key consideration (dependent on route taken). If this is additional traffic to that already generated by the local cluster of sites the Local Highway Authority may wish to further scrutinise the impact with a view to limiting traffic impacts given proximity to the nearby settlements.</p> <p><u>Air</u>: There is the potential for cumulative air quality impacts from vehicles emissions with other sites in this grouping, in particular in relation to the Malton AQMA if traffic routes north through Malton.</p>							

⁵⁷ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

⁵⁸ Ryedale District Council, 2015. The Ryedale Plan: Potential Development Sites – Norton [URL: <http://www.ryedaleplan.org.uk/local-plan-sites/78-potential-development-sites-norton>]

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including impact on designated sites (such as the River Derwent SAC), protected species and habitats. • Implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. • Mitigate potential air quality impacts (including to the Malton AQMA). • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise and dust. • Appropriate restoration scheme using opportunities for habitat creation. 								

**Appendix 3h: Assessment of Sites in Scarborough Borough
Joint Minerals and Waste Plan**

Contents

ALLOCATED SITES			
Reference	Site Name	Type of site	Page
WJP15	Seamer Carr, Eastfield, Scarborough	Retention of existing recycling (including treatment, bulking and transfer), open windrow composting, and energy from waste (biomass) facilities beyond end of current planning permissions which are limited to 2020 and new inert waste screening facility	4

EXCLUDED/ DISCOUNTED SITES			
Reference	Site Name	Type of site	Page
MJP49	Metes Lane, Seamer	Extraction of sand and gravel	20

Sustainability Appraisal Score

Score	Description
++	The Site option is predicted to have higher positive effects on the achievement of the SA objective. For example, this may include a highly significant contribution to issues or receptor of regional or wider significance, or to several issues or receptors of local significance.
m+	The Site option is predicted to have moderate positive effects on the achievement of the SA objective. For example, this may include a positive, but not highly positive contribution to issues or receptor of more than local significance, or to several issues or receptors of local significance.
+	The Site option is predicted to have minor positive effects on achievement of the SA objective. For example, this may include a significant contribution to an issue or receptor of more local significance.
0	The Site option will have no effect on the achievement of the SA objective ¹ .
-	The Site option is predicted to have minor negative effects on the achievement of the SA objective. For example, this may include a negative contribution to an issue or receptor of local significance.
m-	The Site option is predicted to have moderate negative effects on the achievement of the SA objective. For example, this may include a negative, but not highly negative contribution to an issue or receptor of more than local significance.
--	The Site option is predicted to have higher negative effects on the achievement of the SA objective. For example, this may include a significant negative contribution to an issue or receptor of more than local significance.
?	The impact of the Site option on the SA objective is uncertain.

¹ This includes where there is no clear link between the site SA objective and the site

WJP15 – Seamer Lane, Eastfield, Scarborough

Site Name	WJP15 Seamer Carr, Eastfield, Scarborough (XY: 503420 483260)
Current Use	Landfill (under restoration), recycling (including treatment, bulking and transfer), open windrow composting, energy from Waste (Biomass and Landfill Gas Utilisation)
Nature of Planning Proposal	Retention of existing recycling (including treatment, bulking and transfer), open windrow composting, and energy from waste (biomass) facilities beyond end of current planning permissions which are limited to 2020 and new inert waste screening facility.
Size	107.8ha
Proposed life of site	15 to 20 years
Notes	Compost to be used in site restoration of landfill site, which is being restored to woodland, shrubs and grassland with original recycling building to be retained for continued use under current planning permission until 2020. Other recycling building not time limited. Energy from Waste (GEM plant currently time limited to 2020). Landfill gas utilisation plant to be removed when no longer required for that function. No restoration specified.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<u>Proximity of international / national and local designations and key features</u> Natura 2000: 13km south-east lies Flamborough Head Special Area of Conservation (SAC); Site of Special Scientific Interest (SSSI): 5 SSSIs within 5km. Closest to site is Cayton, Cornelian and South Bays 3.4km north-east; National Nature Reserve (NNR): Forge Valley Woods 4.5km north-west; Local Nature Reserve (LNR): The Dell 1.7km north-east; Sites of Importance for Nature Conservation (SINC): 7 SINCs (proposed/former/current) within 2km. Closest to the site are Burton Riggs Gravel Pits (ratified, TA08-15) 15m north, Cayton Meadow (ratified, TA08-11) 350m north-east, River Hertford (ratified, TA08-20) 405m south.	✓	✓	✓	✓	-	0	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>UK Priority Habitats: This site has previously been developed and therefore the site currently comprises landfill, recycling facilities, composting and energy from waste. A small area of deciduous woodland lies adjacent to the east and the rest of the site is largely surrounded by coastal and floodplain grazing marsh. An area of lowland meadow lies 15m to the north-east.</p> <p>Site visit: the following habitats noted on site: small ponds, pasture / grassland, woodland /copse, standalone trees; ecological networks- c.15% of the site is covered by mire, fen, bog core EHN, c.15% of the site is covered by coastal and floodplain grazing marsh local network, Green Infrastructure (GI) – Site lies almost entirely within Hertford D38 district GI corridor. Living Landscapes – Site entirely within NY21 Cayton and Flixton Carrs. Key habitats – River Hertford, floodplain. Management issues – ensure that spring flashes not affected by any wetland creation.</p> <p>In terms of species that may be present onsite, great crested newt is known from Burton Riggs SINC. Nesting birds, farmland birds, badger and foraging bats are also likely to be supported. Watercourses have the potential to support water vole.</p> <p>Local effects No significant effects predicted for SAC/SPAs or SSSIs. There is however some functional connectivity between the site and SINC sites close to the River Hertford via Flood Zone 3 and local drains and they may be vulnerable to either pollution or hydrological impacts. However, it is not possible to draw a conclusion on this at the current time without further information on the hydrology of the site and surrounding area. Similarly, there are habitats in the wider area that are ground water dependent but impacts upon these are considered unlikely as no extraction is proposed.</p> <p>In the longer term there are opportunities to create priority habitats that would strengthen local networks (particularly as the site lies in very close proximity to Burton Riggs SINC/Yorkshire Wildlife Trust (YWT) reserve). Further details regarding site restoration are required; however any restoration should consider how it will make links with the wider landscape.</p>					?		

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Some of the above effects could be amplified through cumulative impacts relating to this site combined with the potential mineral site adjacent.</p> <p>To summarise, the construction of the inert waste treatment facility has the potential to have minor negative impacts in the short term (depending on the presence of protected species), while operational effects moving into the medium term are likely to be more neutral. In the longer term, there may be neutral to positive effects depending on what restoration is approved and the extent to which enhancements for biodiversity are provided.</p> <p><u>Plan level / regional / wider effects</u> Impacts are expected to be at a local level.</p>							

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site does not lie within a Nitrate Vulnerable Zone (NVZ). The northern 50% of the site in Source Protection Zone (SPZ) 1 and 2 for groundwater abstractions that supply the Scarborough area with drinking water. The Humber River Basin Management District (RBMD): Derwent Management Catchment. The nearest water body is Eastfield Drain Lower to River Hertford – runs along the southern boundary of site. Current ecological status is moderate. Current overall status is moderate. Status objective is good by 2027. No RBMP lakes. Groundwater: Northern tip of site in Derwent Vale and Pickering Corallian limestone (Current overall status poor, Status objective: good by 2027). CAMS: surface water resources available less than 30% of time. More than 70% of the time new extraction licenses may be more restricted or new licenses may not be available (red assessments recorded for at least 70% of lowest flows).</p> <p>Local effects The ‘Eastfield Drain to Lower River Hertford’ could be a receptor for pollutants (such as fuel or soil / silt particles) during construction of the inert waste screening facility or continued operation of the existing site uses. Appropriate stand off and good site management would help mitigate this. The northern area of the site lies in SPZ 1 and 2. It is considered that the continuation of current site uses would have a neutral impact upon this SPZ, however if the new inert waste screening facility is constructed in SPZ 1 or 2, pollution incidents such as fuel spills, even above the saturated zone, could contaminate the aquifer. It is very important that groundwater underneath this site is protected from pollution or harmful disturbance of flow. Any proposals for changes to the existing development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to</p>		✓	✓		-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>groundwater quality and groundwater resources to an acceptable level.</p> <p>Some uncertainty is also noted due to the possible restrictions on water extraction at the site. This is, however, expected to be dealt with through the water licensing regime if water is needed.</p> <p>Overall risk to the water environment is considered to be low, though some additional mitigation may be needed to deal with any risk to 'Eastfield Drain to Lower River Hertford' and the SPZ. Effects are uncertain following restoration as the restoration scheme is currently unknown.</p> <p>Plan level / regional / wider effects Through the same pathways identified in local effects, there is the potential that pollution or site run-off could pass into the wider water environment. Appropriate mitigation measures should be adopted during construction and operation of the proposal.</p>					?	?	
3. To reduce transport miles and associated emissions from transport and encourage the use of	<p>Proximity of transport receptors The site is very close to the A64 giving it a good access route to waste arisings at the coast, York, Hull, Leeds and Scarborough, though is some way distant from all but Scarborough and coastal settlements. Access: the site is accessed via Dunslow Road with Heavy Goods Vehicles (HGVs) exporting waste required to route to the A64. HGVs: 124 to164 (application details MIN3314 and NY/2007/0294/FUL), light vehicles: 32 (application details MIN3314 and NY/2007/0294/FUL).</p> <p>Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green – <i>'Traffic impacts of site would remain at present levels and are expected to be accommodated on the</i></p>		✓		✓	0	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
sustainable modes of transportation	<p><i>local highway network</i>²</p> <p>Public Rights of Way (PRoW): Footpath 30.20/5/2 passes within 10m of the eastern boundary of the site. Bridleway 30.20/4/1 starts at the northern boundary of the site (See also SA Objective 14).</p> <p>Rail: Rail line borders the east side of site / nearest known railhead 63km SW; Strategic Road: A64 adjacent (this is also a timber route); Canal / Freight waterway: 52km south-west (Ouse).</p> <p>Local effects While this site could generate up to 164 HGV movements, these movements are already in place and are not expected to rise. However, the current site has permission to operate until 2020, so impacts from this submission will continue to be felt beyond 2020, though at the same level as before. The traffic assessment points out that access road leading to the site is newly constructed and designed to cope with traffic volumes.</p> <p>HGV movement is acceptable onto the length of Seamer Carr Road that is proposed to become publicly maintainable. A transport assessment will determine the impact of the proposal on the existing wider highway network and whether any improvements are required. This assessment will also need to review sustainable travel.</p> <p>The site has no direct frontage to a highway maintainable at the public expense. The site has an existing dedicated access³. Some remedial works may be necessary to the network around the business park before it can be accepted as publicly maintained.</p> <p>While this proposed allocation may contribute to additional traffic within the local area post the existing planning permission expiration in 2020, if the current site is not retained, this is likely to result in longer journeys for the waste that currently arrives at this site. Indirectly this would mean this site has a positive effect, notwithstanding the minor works which are needed to improve the network. Therefore, overall the site is considered to have a neutral effect in the short term, with minor indirect positive effects in the</p>							

² Jacobs (2015); Minerals and Waste Joint Plan Traffic Assessment – Final Traffic Assessment.

³ North Yorkshire Highways are currently in negotiations with Scarborough Borough Council and the developer of the business park road network with a view to Highways formally adopting the business park road network. The most southerly section of Seamer Carr Road which forms the access to the site is privately owned (by NYCC) and it is not part of the negotiations to become publicly maintainable highway.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>medium to long term.</p> <p>Plan level / regional / wider effects If the current site is not retained, this is likely to result in longer journeys for the waste that currently arrives at this site into the wider Plan area, with increased transport miles and emissions. The proposed allocation is therefore considered to have a positive effect on the SA objective.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within a Hazardous Substances Consent Consultation Zone or within 2km of an Air Quality Management Area (AQMA).</p> <p>Local effects As this proposed allocation is for the retention of an existing site: no impact on air quality over and above the existing site is predicted. If traffic increases at this site there may be some air quality issues, but there is no suggestion that this is the case, and there are limited recognised receptors. Potential air quality impacts including vehicle emissions (maintained at current levels into the longer term), dust, odour and bio aerosols from composting may occur. The construction of an additional waste screening facility may generate dust/ emissions, however due to the proximity of receptors this is not expected to be an issue.</p> <p>Plan level / regional / wider effects Effects are considered local in nature.</p>		✓	✓		0	0	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors The site is Agricultural Land Classification (ALC) Grade 3 however it has previously been developed for landfill and is currently used for a variety of waste management purposes.</p> <p>Local effects A new waste screening facility would take up a small area of land (assumed to be on the restored landfill). Impacts in terms of land-use are therefore considered to be negligible. The continued operation of the open windrow composting onsite would recover nutrient value from biodegradable waste and could provide opportunities to enhance soil or agricultural land quality onsite (as compost is being used as part of the landfill restoration) and elsewhere. It is therefore considered that a minor positive impact may occur in relation to this objective during the continued operation of the site.</p> <p>Plan level / regional / wider effects Retention of this site may help to avoid the need for a replacement site within the Plan area. Potentially, reducing any land-take and associated loss of soils from undeveloped land that may be required to develop/ expand a new or existing site.</p>		✓		✓	+	+	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p><u>Proximity of factors relevant to exacerbating climate change</u> No spatial factors identified.</p> <p><u>Local effects</u> As climate change is a global issue effects are reported in wider effects below.</p> <p><u>Plan level / regional / wider effects</u> This is an existing site and it is considered that insignificant areas of carbon storage habitat may be lost as a result of the retention of the site and construction of a waste screening facility. Recycling, composting and energy from waste all contribute towards the sub-objective of moving existing waste up the waste hierarchy (thereby reducing emissions). The energy from waste (biomass) function of the site would also continue to provide a source of renewable energy. Overall impacts are considered to be minor positive in relation to this objective.</p> <p>If applicable, an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors should be undertaken⁴.</p>		✓		✓	+	+	+
								?

⁴ Proposals for the treatment, recovery or disposal of more than 75,000 tonnes per annum of waste should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has also been applied also to minerals output for the purposes of Development Management, Policy D11.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁵ of a site Approximately 5% of the site is subject to low risk (1:1000 (0.1%)) to high risk (1:30 (3.33%)) surface water flooding. Low and medium risk areas are to the north of the site while high risk flood risk areas are along the western site boundary.</p> <p>Ecological networks – circa.15% of the site is covered by mire, fen, bog core EHN, circa.15% of the site is covered by coastal and floodplain grazing marsh local network, Green Infrastructure (GI) – the site lies almost entirely within Hertford D38 district GI corridor. Living Landscapes – Site entirely within NY21 Cayton and Flixton Carrs.</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available less than 30% of time. More than 70% of the time new extraction licenses may be more restricted or new licenses may not be available (red assessments recorded for at least 70% of lowest flows).</p> <p>Local effects The site is not particularly prone to flooding although this is likely to increase with climate change⁶. Only a small change (the construction of a waste screening facility) is proposed from the current use and it is considered that the site is unlikely to hinder the landscape connectivity aspects of the Cayton and Flixton Carrs Living Landscape project, though the restoration of the landfill site to woodland, grassland and shrubs (not part of the allocation but aided by the windrow composting facility) may contribute to this. The overall restoration of the allocation site may also make a contribution depending on the scheme that is agreed. On balance, impacts are considered to be neutral during the extended operation of the site within the potential for minor positive impacts in the long term depending on the restoration scheme.</p> <p>Some uncertainty is also noted due to the possible restrictions on water extraction at the site. This is, however, expected to be dealt with through the water licensing regime if water is needed.</p> <p>Plan level / regional / wider effects None noted.</p>	✓			✓	0	0	0

⁵ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

⁶ Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
8. To minimise the use of resources and encourage their re-use and safeguarding	<p><u>Proximity of factors relevant to the resource usage of a site</u> No spatial factors identified.</p> <p><u>Local effects</u> This site would be allocated for several uses that would allow the recycling of waste products and would facilitate the movement of waste up the waste hierarchy. Although the majority of facilities that form part of the planning proposal already exist on site, these only have permission until 2020. Therefore the retention of the site (and construction of the new facility) would allow up to 25,000 tonnes per annum of composting, 47,000 tonnes per annum of kerbside recycling (bulking and transfer in existing Materials Recovery Facility (MRF)) and 75,000 tonnes per annum of commercial and industrial recycling and municipal waste to be processed. The retention of an existing site makes use of existing facilities and prevents the need for a new facility to be developed elsewhere. Therefore a major positive impact is predicted in relation to this objective.</p> <p><u>Plan level / regional / wider effects</u> See local effects above.</p>		✓	✓		++	++	++
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> The site would be allocated for a number of purposes that would move the treatment of waste up the waste hierarchy. It would contribute to the joint authorities ability to manage their own waste arising's and would allow otherwise wasted resources to be utilised (e.g. waste wood as biomass, organic waste products as compost). Therefore a major positive impact is predicted in relation to this objective (in comparison to the baseline situation of the site being restored to an unknown scheme).</p> <p><u>Plan level / regional / wider effects</u> See local effects above.</p>		✓	✓		++	++	++
10. To conserve or enhance the historic environment	<p><u>Proximity of historic environment receptors</u> Conservation Areas: none within 1km; Registered Parks and Gardens: Valley Gardens and South Cliff Gardens (Grade II) is 4.4km north-east. Registered Battlefields: None within 5km; World Heritage Sites: None within 5km.</p> <p>Scheduled Monuments: 3 within 2km- 'Late Iron Age and Roman period dispersed enclosed settlement</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and its setting, cultural heritage and character	<p>230m south east of Quartons Gardens' (ID 1020788) 725m north, 'Star Carr Early Mesolithic settlement site, 960m north-north-west of Woodhouse Farm' (ID 1401425) 480m south, and 'site of medieval manor house' (ID 1015409) 1.58km north-west.</p> <p>Listed Buildings: None within 1km; English Heritage Vale of Pickering Statement of Significance: Site lies within Vale of Pickering Statement of Significance area. Named designed landscapes: None within 2km.</p> <p>Historic Landscape Character (HLC) Broad type – Industrial, HLC Type – Rubbish Tip.</p> <p>Undesignated archaeology in this area includes evidence for a wider landscape of early prehistoric activity focussed around the former Lake Flixton. Further upslope, there are remains of later prehistoric and Romano-British settlement and activity. All of this evidence is known from a combination of previous archaeological survey and fieldwork and is set within a wider landscape context of the Vale of Pickering, which has seen a continuous history of settlement and land use from the prehistoric period through to the present day.</p> <p>Local effects The HLC type of this area is an industrial rubbish tip, with an invisible legibility. As this character is the same as the proposed use, accordingly, the use of the site for the proposed purposes is assumed to have no overall impact. It is anticipated that there will no effect upon HLC.</p> <p>It is anticipated that there will be no impact upon the archaeological resource as the proposed development is a continuation of an existing, permitted use, where it is assumed with a high degree of certainty that any archaeological resource has previously been destroyed.</p> <p>The setting of Starr Carr would need to be considered in relation to the new element of this site. Further clarification regarding the location of the new inert waste screening facility within the site will be required and therefore an element of uncertainty has been recorded in the assessment.</p> <p>Impacts are therefore considered to be neutral to uncertain during the extended operation of the site and uncertain following restoration as a scheme has not yet been proposed.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> National Park / Area of Outstanding Natural Beauty (AONB): North York Moors is approximately 4.25km north; Heritage coast: North Yorkshire and Cleveland Heritage Coast approximately 7.8km north; Inheritance Tax Exempt Land (ITE): None within 5km. Local landscape: No, though site is 2.25km north of Ryedale's 'Wolds' Area of High Landscape Value (Policy SP13 in Local Plan). The site is however within the Vale of Pickering Area of Historic Environment Significance.</p> <p>NCA: Vale of Pickering; NYLCA: Character area 22 Open Carr / Vale Farmland; Local LCA: In Scarborough LCA as Landscape type 'Vale' / Landscape area Star and Flixton Carrs; Intrusion: Disturbed. Urban intrusion: Disturbed. Light intrusion: There are already moderate or higher levels of light pollution – in 2000 this was assessed as 142 on a scale of 1-255, with 1 representing maximum darkness. It is likely to have significantly increased since then with the urban development that has occurred in this area.</p> <p><u>Local effects</u> The site lies on the edge of the rural / urban fringe landscape of Eastfield. It already has a negative impact as the artificial landform and waste facilities are intrusive in the otherwise flat and low-lying countryside. The site is only 2km from the Seamer Conservation Area but separated by the A64, railway, and open countryside. The site is potentially visible in the distance from the Yorkshire Wolds escarpment to the south (Wolds Way is approximately 4km distant) but the significance would be low. The site is already present (and so will have less of a visual impact than establishing a new site elsewhere), and its lifespan would be extended. It is not known what the landscape and visual impact of additional facilities would be, but the landfill site would help to screen them in views from the wider countryside (additional screening is likely to be out of character with the area and may draw attention to the site).</p> <p>Overall impacts are considered to be neutral to minor negative with an element of uncertainty as there is an existing restoration scheme for Seamer Carr Landfill site and the implications of the proposal on this would need to be clarified.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		-	-	-
							?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Site is very close to the A64 giving it good access to waste arisings at the coast, York, Hull and Leeds.</p> <p><u>Local effects</u> It is considered that the extension of the operation of the site would safeguard current jobs at the site for a further 15 to 20 years. There may be limited additional job opportunities as a result of the construction of an inert waste screening facility. It is considered that allocation of the site would allow value to be added to some waste products (waste wood for biomass, organic waste for compost, municipal waste for recycling). The energy from waste facility would contribute towards low carbon development and the continued use of an existing facility is considered to keep the costs of waste management down (in comparison to requiring building new facility/facilities elsewhere). Impacts in relation to this objective are therefore considered to be moderate positive.</p> <p><u>Plan level / regional / wider effects</u> Renewable energy would be potentially supplied to the Grid, meaning it could have wider benefits in contributing to sustainable energy sources.</p>		✓	✓	✓	m+	m+	m+
							?	
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> Index of Multiple Deprivation (IMD) area – Seamer. Not in most deprived 20%. Crossgates is the nearest Settlement approximately 600m north. Eastfield also lies 1.1km north-east and Seamer 1km north-west. An industrial estate lies 300m north-east. Individual properties – Grove Farm 600m east, Herdborough House Farm 900m west.</p> <p><u>Local effects</u> As the majority of the planning proposal would constitute the continuation of existing site uses in an urban fringe location, it is considered that impacts on tourism in the area or the viability / vitality of local communities would be negligible. Allocating the site would retain local infrastructure for the management of waste further up the waste hierarchy. Overall impacts are considered to be negligible.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
							?	
14. To provide opportunities to enable	<p><u>Proximity to recreation, leisure and learning receptors</u> Footpath 30.20/5/2 passes within 10m of the eastern boundary of the site. Bridleway 30.20/4/1 starts at the northern boundary of the site, Footpath 30.20/10/1 passes within 190m of the site. Common land / Village Greens: None within 500m. Nearest</p>		✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
recreation, leisure and learning	<p>draft common land and village green at Seamer approximately 1km north-west.</p> <p>Local effects Although the majority of the planning allocation would constitute an extension to the life of existing facilities, some new construction would be required and the retention of the site would lead to continued amenity impacts (visual, noise, odour, dust) on users of nearby rights of way. Impacts are therefore considered to be minor negative during the extended operation of the site. Impacts following restoration are unknown as a restoration scheme has not yet been put forward. Public access to the site could be a consideration as part of the restoration scheme although the management issues associated with this would need to be considered.</p> <p>Plan level / regional / wider effects None noted.</p>							?
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing No schools or health centres within 1km. Nearest settlement is Crossgates 600m to the north. Eastfield also lies 1.1km north-east and Seamer 1km north-west. An industrial estate lies 300m north-east. Individual properties – Grove Farm 600m east, Herdborough House Farm 900m west.</p> <p>Local effects The extension of the operation of the site and additional waste screening facility would lead to the continuation of any existing wellbeing and health and safety issues. Impacts may include a local increase in traffic (although the site lies in very close proximity to the A64 and at a wider level may decrease the need for journeys), continued dust, noise (although background noise is already likely to be elevated due to the railway line and A64), odour and visual disamenity. Impacts are therefore considered to be minor negative during the extended operation of the site.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		-	-	-
16. To minimise flood risk and reduce the impact of	<p>Proximity to flood zones This site is almost entirely within Flood Zone 1 but a small extent of the site area along the western and southern boundaries are lying in Flood Zones 2 and 3. Risk from surface water flooding exists in small patches across the site covering <5% of the area. This is mainly low risk (1:1000 (0.1%)) but occasionally rising to high risk (1:30 (3.33%)).</p>		✓	✓		--	--	--

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
flooding	<p>Site lies across two 1km squares in the Environment Agency's 'Areas Susceptible to Groundwater Flooding' map. The northern part is susceptible to Clearwater and superficial deposits flooding (>50% to <75% of the km square is susceptible). The southern part is subject to superficial deposits flooding (<25% of the km square is susceptible).</p> <p>The 1:20 (5%) event extent mapping for this SFRA shows that <5% of this site is at flood risk.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test⁷ undertaken for the site concluded that this site is 'not suitable'⁸. A site specific flood risk assessment should further investigate the extent of functional floodplain along with the risk of groundwater flooding and should consider the potential for managing surface water through the use of Sustainable Urban Drainage Systems (SuDS). The management of drainage at the site must not increase flood risk elsewhere.</p> <p>Plan level / regional / wider effects As above.</p>					?	?	?
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a contribution to self-sufficiency in waste management.</p> <p>Plan level / regional / wider effects The provision of a waste management facility that also provides energy security (through the generation of energy from waste is beneficial to the population).</p>		✓	✓		+	+	+
Cumulative / Synergistic effects⁹								
Planning context	Crossgates is 600m north. This merges with Eastfield which is about 1.1km north of the site. Seamer also lies 1km north-west. The Draft Local Plan for Scarborough positions Eastfield and Crossgates as part of the Scarborough Urban Area settlements, and places Seamer							

⁷ The Sequential Test approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (Flood Zones 2 and 3) and other areas affected by other sources of flooding where possible.

⁸ Less vulnerable land uses are not permitted at sites within functional floodplain. Sites WJP08 and WJP19 should be considered before this site followed by WJP16, WJP06. However, this site is preferable to WJP11, WJP05 and WJP18.

⁹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

	amongst the Service Villages. The Scarborough Urban Area is the Principal Town and the main focus of development, while Service Villages will attract development to meet local needs. The Draft Policies Map shows no allocations on site or adjacent, though policy EG3 is proposed to apply at the end of Meads Lane and adjacent to the north-east boundary of this site (Protected Land for Employment Use). This is land reserved for the possible future expansion of Scarborough Business Park.
Other Minerals and Waste Joint Plan Sites	There are no other MWJP sites within 5km.
Historic minerals and waste sites	Seamer Waste Water Treatment Works is 1.4km west.
Air Quality	Cumulative air quality impacts may also arise as a result of dust and emissions from vehicles and onsite processes.
Other Impacts	Health, wellbeing and amenity noise, dust and traffic impacts at this site may combine to become more significant.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on drains linked to the River Hertford SINC and protected species • Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources • Design of development and landscaping of site to mitigate impact on: Starr Carr Scheduled monument and its setting, local landscape features and users of A64 and rights of way • Design to include a site specific flood risk assessment and to further investigate the extent of the functional floodplain; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate • Any proposals for changes to the existing development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level • Design to ensure protection of the aquifer, with particular consideration to the SPZ 1 constraint at the site • Design to include suitable arrangements for access and local roads including the Seamer Carr Road and the A64 • Appropriate arrangements for control of and mitigation of the effects of noise, dust, odour, bio-aerosols. • Appropriate restoration scheme using opportunities for habitat creation 	

MJP49 – Metes Lane, Scarborough

Site Name	MJP49 Metes Lane, Seamer Carr, Scarborough (XY 502582 482029)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of sand and gravel from a new extraction site
Size	128ha
Proposed life of site	20 to 25 years
Notes	Possible restoration: no detailed design yet, but restoration to some form of agriculture.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000: 13km south-east lies Flamborough Head Special Area of Conservation (SAC). Six Sites of Special Scientific Interest (SSSIs) within 5km – closest is Betton Farm Quarries at 3.5km north. National Nature Reserve (NNR): Forge Valley Woods 4.2km north-west. Local Nature Reserve (LNR): The Dell 1.8km north-east. Site of Importance for Nature Conservation (SINC): 10 SINC sites within 2km, nearest is Burton Riggs Gravel Pitts (TA08-15) (also a Yorkshire Wildlife Trust reserve) at 80m. Also within 500m is River Hertford (TA08-20) at 420m south, and Flixton Carr Plantation and Fox Covert (TA08-05) at 470m south.</p> <p>UK Priority Habitats: 30% of site (eastern part) is coastal and floodplain grazing marsh. Site visit summary: the following habitats noted on site: watercourses, pasture / grassland, arable, woodland /copse, hedgerows, standalone trees. Ecological networks: approximately 70% of the site is within NY21 Cayton and Flixton Carrs; Green Infrastructure (GI): Site lies within Derwent regional GI corridor - supported by policy</p>	✓	✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>SP15 in Ryedale Local Plan Strategy.</p> <p>Great crested newts are recorded at the Burton Riggs SINC. Nesting birds, farmland birds, badger and foraging bats are also likely to be supported by habitats present on site. Watercourses have the potential to support water vole. Excavating this site may also impact upon on woodland and trees.</p> <p>Local effects There is potential connectivity between the site and SINC sites close to the River Hertford via Flood Zone 3 and local drains. However, it is not possible to draw a conclusion on this at the current time without further information on hydrology of site and surrounding area. Similarly, there are habitats in the wider area that are ground water dependent but the impact upon them is unknown at the moment.</p> <p>In the longer term there are opportunities to create priority habitats that would strengthen local networks (the restoration scheme should be sympathetic to the nearby Burton Riggs Yorkshire Wildlife Trust (YWT) reserve and it will be important to re-instate any priority habitat onsite. Any restoration should consider how it will make links with the wider landscape.</p> <p>Some of the above effects could be amplified through cumulative impacts relating to this site combined with a waste site adjacent to the north-east.</p> <p>To summarise, neutral to minor negative effects during establishment in the short term, while operational effects moving into the medium term are likely to be more neutral. In the longer term, there may be neutral to positive effects depending on what restoration is approved and the extent to which enhancements for biodiversity are provided.</p> <p>Plan level / regional / wider effects No significant effects predicted for SAC / Special Protection Areas (SPAs) or SSSIs.</p>					?		

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Approximately 1% of the site is in a Nitrate Vulnerable Zone (NVZ) for groundwater (northern tip). Approximately 0.5% of the site (southern tip) is in a NVZ for surface water. The northern 40% of the site is in Source Protection Zone (SPZ) 1, 2 and 3.</p> <p>Humber RBMD: Derwent Management Catchment. Nearest water body is Eastfield drain to Lower River Hertford, runs along southern boundary of site. Current ecological status is moderate (uncertain). Current overall status is moderate. Status objective is good by 2027. No River Basin Management Plan (RBMP) lakes. Groundwater: Northern tip of site in Derwent Vale and Pickering Corallian limestone (Current overall status: poor, Status objective: good by 2027). In Derwent CAMS.</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 70% of time. At very low flows new extraction licenses may be more restricted.</p> <p>Local effects The 'Eastfield drain to Lower River Hertford' could be a receptor for pollutants (such as fuel or soil / silt particles) particularly during construction / removal of overburden phase though appropriate stand off and good site management would help mitigate this. A more significant risk is the presence of the quarry in SPZ 1, 2 and 3 in the northern 40% of the site (this SPZ protects the main water source for Scarborough). Quarrying in SPZ 1 could remove the protection that soils currently offer groundwater from pollution, or physically alter groundwater flow if the site is wet-worked. The Environmental Agency (EA) would generally object in SPZ 1 for development that may disturb an aquifer. Restoration may continue to have hydrological impacts depending on how the site is restored.</p> <p>Plan level / regional / wider effects There is potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>		✓	✓	✓	--	--	--
3. To reduce transport miles and	<p>Proximity of transport receptors The site is very close to the A64 giving it good access to markets at the coast, York, Hull, Leeds and Scarborough, though is distant from all but Scarborough and coastal settlements. Access: existing access at Herdborough Farm onto the A64 approximately 375m north of A64</p>		✓		✓	m-	m-	m-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
associated emissions from transport and encourage the use of sustainable modes of transportation	<p>junction with the B1261.</p> <p>HGVs: 40 daily two way journeys (submitter information); Light vehicles: 8 two-way daily movements (submitter information).</p> <p>Public Right of Way (PRoW): a bridleway would need to be diverted (see SA objective 14) / no impacts at access point.</p> <p>Rail: Rail line borders the west side of site / nearest known railhead 63km south-west; Strategic Road: A64 adjacent (this is also a timber route); Canal / Freight waterway: 52km south-west (Ouse)</p> <p>Local effects This site would generate 40 HGV movements and 8 light vehicle movements daily. The proposed site access is on to the existing A64 which is managed by the Highways Agency. Although vehicle numbers are relatively modest, they will increase traffic on the A64. The distance vehicles may travel may also lead to longer range effects and diffuse pollution, though because of this distance much of the sand and gravel may be utilised more locally in Scarborough / Whitby / Bridlington.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within a Hazardous Substances Consent Zone or within 2km of an Air Quality Management Area (AQMA).</p> <p>Local effects The site is located close to a farm (approximately 70m south of the site), which could be in range of dust impacts (mainly occurring during construction and restoration phases if the site is wet worked, though this site may well be phased given its size). Several other farms lie over 250m to the west. An</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>industrial estate is situated around 320 metres north, which may be at the outer limits of dust impacts.</p> <p>This site would generate 40 HGV movements and 8 light vehicle movements daily, and thus additional dust and particulates from vehicles, though access to the A64 is good, and there are no intervening receptors (other than the on-site Herdborough House Farm).</p> <p>A railway line adjacent may also offer opportunities to take freight off the road. A dust assessment would be required to establish the significance of impacts. There may be temporary cumulative air quality effects with the Seamer Carr waste disposal facility (WJP15) e.g. dust may combine with bio-aerosols on occasion, though residential receptors are distant so the effect is likely to only affect the industrial estate.</p> <p>Plan level / regional / wider effects There are no air quality effects expected to the wider area.</p>							?
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Agricultural Land Classification (ALC): 98% of land is Grade 3 (good to moderate quality), 2% (along south-west boundary) Grade 2 (very good quality). As most of the site is a greenfield site there are no known risk factors in this area for contaminated land. However, further investigation of the area of overlap with historic waste management is necessary to verify that there are no contaminants soils. Not in a coal mining development high risk area.</p> <p>Local effects Potentially 128ha of Grade 2 and 3¹⁰ land would be lost. This would represent a negative impact. Following restoration there would be positive impacts upon soil quality and land use.</p> <p>Plan level / regional / wider effects The loss of very good agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development¹¹ but could have a small scale effect on national food production capacity.</p>		✓	✓		m-	m-	+
						?	?	?

¹⁰ ALC Grade 3 land is sub-divided into Grade 3a and 3b, with the best and most versatile agricultural land ALC Grade 1 to 3a. Without further investigation it is not known whether Grade 3 land at this site is 3a or 3b and best and most versatile. For the purposes of this SA the precautionary principle approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

¹¹ 128ha annualised across the 25 year life of the site would be an annual 5.12ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 5.12ha loss would represent a 0.21% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Approximately 30% of the site (eastern part) is coastal and floodplain grazing marsh. Site visit summary: pasture / grassland, woodland /copse, hedgerows, standalone trees noted.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Only small areas of carbon storage habitat, or low carbon storage habitat would be lost, representing an insignificant effect. However, the traffic from this site would over time be minor negative and would therefore lead to climate change impacts, albeit lessened by this site's excellent proximity to the A64.</p>	✓			✓	-	-	0
								?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹² of a site The eastern edge (circa 2%) of the site is in Flood Zone 3, less than 1% is in Flood Zone 2. The site has small patches of mostly low risk surface water flooding. Very small (less than 1%) patches of medium risk (1 in 100). Derwent Catchment Flood Management Plan (CFMP) / Unit: The Carrs / Policy 1; Derwent CAMS: surface water resources available at least 70% of time. At very low flows new extraction licenses may be more restricted.</p> <p>Ecological Network: circa 70% of site within Cayton and Flixton Carrs Living Landscape.</p> <p>Local effects The site is not particularly prone to flooding. On its own the site is unlikely to hinder the landscape connectivity aspects of the Cayton and Flixton Carrs Living Landscape project, though could contribute through restoration.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative. There are positive benefits if the site is returned to agriculture in the long term.</p>					-	-	+
								?

¹² Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will contribute to the need for sand and gravel. However, it may to a degree offset recycled materials that could potentially replace sand and gravel. Over 2 million tonnes of virgin minerals would be extracted which will be unavailable for future use (unless recycled). This works against the SA objective, so it is scored negatively.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		--	--	--
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects The site would not deal with waste and no details are provided of how waste would be managed on site.</p> <p>Plan level / regional / wider effects The site may have an indirect negative impact on the prioritising the management of waste down the waste hierarchy as a result of providing limestone and reducing the need to recycle limestone from other locations.</p>		✓		✓	-	-	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors Conservation Areas: Seamer Conservation area lies 700m to the north-west; Registered Parks and Gardens: Valley Gardens and South Cliff Gardens (Grade II) is 4.4km north-east. Registered Battlefields: none within 5km; World Heritage Sites: none within 5km.</p> <p>Scheduled Monuments: four Scheduled monuments within 2km. 'Late Iron Age and Roman Period dispersed enclosed settlement 200m south east of Quartons Gardens' circa 490m north, 'Starr Carr Early Mesolithic settlement site, 960m north-north-west of Woodhouse Farm' is 490m south. 1.8km to the south 'Hospital of St Mary, Staxton' and 1.2km to the north 'Site of Medieval Manor House' are towards the edge of the 2km buffer.</p> <p>Listed Buildings: one listed building within 1km (Bridge End Cottage, Grade II) in Seamer; English Heritage Vale of Pickering Statement of Significance: Site lies within Vale of Pickering Statement of Significance area. Named designed landscapes (from pre validated dataset derived from HLC): None within 2km.</p>	✓	✓	✓	✓	--	--	--

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Historic Land Characterisation (HLC) Broad type - Enclosed land / HLC Type – Modern improved fields</p> <p>Undesignated archaeology: the proposed extraction site at Seamer Carr lies within one of the most important and well researched early prehistoric landscapes in Europe. The extraction area straddles the margins of a prehistoric lake, formed at the end of the last Ice Age, which formed the focus for intensive occupation by groups of hunter-gatherers during the Final Palaeolithic (circa 12,000BC to 11,000BC), Terminal Palaeolithic (circa 9600BC) and Mesolithic (circa 9300BC-4000 BC).</p> <p>Local effects The HLC type of this area is modern improved fields. The allocation site forms the greater part of a slightly wider area of similar character type, of which the legibility is partial. The proposed extraction is unlikely to have a major impact upon the HLC of the immediately surrounding area, although it is acknowledged that within the site the HLC will become invisible as development will replace an earlier field system. As nearly 20% of the whole HLC project area has been identified as modern improved fields, this effect is not considered to be significant.</p> <p>There is high archaeological potential for the survival of archaeological remains within the site from the early prehistoric period onwards and, although the site has not been fully archaeologically evaluated, it is assumed that allocating this site would be likely to cause the loss of these archaeological remains if the site is extracted without mitigation. However, it is expected that investigation/ excavation works required by the Joint Plan Policy D08 (Historic Environment) '<i>mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>' would result in an effect of no greater than minor negative.</p> <p>The site could have a knock-on effect on nearby designated sites of national importance (including Starr Carr which is the most important Mesolithic site in the country), in particular if it affects groundwater levels. The site would need a robust archaeological assessment before allocation.</p> <p>Plan level / regional / wider effects None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes	Proximity of landscape / townscape receptors and summary of character National Park / Area of Outstanding Natural Beauty (AONB): North York Moors is circa 3.8km north-west. Heritage coast: North Yorkshire and Cleveland Heritage Coast circa 7.7km north-east. Inheritance Tax Exemption (ITE) Land: none within 5km. Local landscape designation: no, site is 2.2km north of Ryedale's 'Wolds' Area of High Landscape Value (Policy SP13 in Local Plan). The site is also within the Vale of Pickering Area of Historic	✓	✓	✓	✓	m-	m-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>screen - screening is also likely to be out of character in this low lying area), and hedgerows are not characteristic of the low areas drained by ditches. There would be open views from the A64, which is slightly elevated. There is intermittent vegetation along its boundary. Traffic from the site is unlikely to change the character of the area as it already has a fair amount of traffic.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is very close to the A64 giving it good access to markets at the coast, York, Hull and Leeds.</p> <p>Local effects This site would ultimately result in over 2 million tonnes of sand and gravel being made available to the market. This would make a significant contribution to the building sector by helping to boost supply of a key building material (as well as supporting freight driving jobs). Some concerns exist regarding the visual impact of the site from road and rail networks approaching Scarborough and the knock on impact this could have on tourism and the economy. The effect overall is considered to be positive in the short and medium term and neutral in the long term as a result to positive of restoration plans, as restoration to recreation may attract limited numbers of visitors to the area, depending on the type of recreational opportunities provide.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability Index of Multiple Deprivation (IMD) rank- 26,596 – not in most deprived 20%, Seamer Ward. Crossgates is the nearest Settlement 375m north. Seamer also lies 800m north-west.</p> <p>Local effects The site is likely to support a small number of jobs. Whilst the site would provide a source of sand and gravel which could aid future development, it is considered that the immediate settlements are unlikely to directly benefit in any significant way. The location of the site in close proximity to the rail and road network to Scarborough may have a minor negative impact on the impression that visitors get of the area and on tourism.</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects Not applicable to this site.							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A Bridleway 30.20/8/1 crosses the site from north to south. Bridleway 30.20/4/1 follows north eastern boundary of the site (immediately adjacent). Footpath 30.20/5/2 touches eastern boundary of the site then moves away. Footpath 30.20/5/1 is 250m north. Footpath 30.20/3/1 is 60m from north-west corner of site. Common land / Village Greens: None within 500m. Nearest draft common land at Seamer circa 1km north-west.</p> <p>Local effects At least one bridleway would need to be diverted, and two bridleways would, at points be in range of visual, dust and noise impacts. Two other footpaths come quite close to the site and may also suffer impacts. Effects are likely to combine with the adjacent waste site. Upon restoration baseline conditions would return.</p> <p>Plan level / regional / wider effects None noted.</p>	✓	✓	✓		--	--	0
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing No schools or health centres within 1km. Nearest settlement is Seamer 300m to the north.</p> <p>Local effects There are three isolated farms within 500m. These may be affected by dust and noise from this quarry. Seamer lies to the north with numerous properties within 500m. While this may be beyond the range of dust in most cases, further assessment would be needed to completely rule out significant impacts. Noise levels may also still be significant here. Impacts may combine with those at WJP15.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		-	-	0
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones The eastern edge of the site (approximately 2%) is in Flood Zone 3, less than 1% is in Flood Zone 2. The site has small patches of mostly low risk surface water flooding. Very small (less than 1%) patches of medium risk (1 in 100). Derwent CFMP Unit: The Carrs / Policy 1.</p> <p>Local effects The site is not particularly prone to flooding and is water compatible.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score							
		P	T	D	I	S	M	L					
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> The site would make a significant contribution to self-sufficiency in the supply of sand and gravel.</p> <p><u>Plan level / regional / wider effects</u> The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0					
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>¹³</p> <p><u>Planning context:</u> Crossgates is the nearest Settlement 375m north. This merges with Eastfield which is about 600m north of the site. Seamer also lies 800m north-west. The Draft Local Plan for Scarborough positions Eastfield and Crossgates as part of the Scarborough Urban Area settlements, and places Seamer amongst the Service Villages. The Scarborough Urban Area is the Principal Town and the main focus of development, while Service Villages will attract development to meet local needs. The Draft Policies Map shows no allocations on site or adjacent, though policy EG3 is proposed to apply at the end of Meads Lane (Protected Land for Employment Use). This is land reserved for the possible future expansion of Scarborough Business Park.</p> <p><u>Other Joint Minerals and Waste Plan sites:</u> WJP15 is adjacent to the eastern boundary. Historic applications for waste management at Seamer Carr adjacent to the east.</p> <p><u>Historic minerals and waste sites:</u> Seamer Waste Water Treatment Works is 1.4km west.</p> <p>Cumulative effects may occur relating to losses to archaeology in combination with Scarborough District Council allocations (Historic England have stressed that there is a need for a wider archaeological strategy in this area to address cumulative impacts).</p> <p>Although vehicle numbers are modest, there is thought to be a transport issue in this area about accessing the A64 especially at peak times.</p> <p>There may be temporary cumulative air quality effects with the Seamer Carr waste disposal facility (WJP15) (e.g. dust may combine with bio-aerosols on occasion), though residential receptors where this might occur are quite distant so the effect is likely to only affect the industrial estate. If the industrial estate expands in the longer term the effect may become slightly more significant.</p>												

¹³ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including potential impacts to local SINCs, protected species, habitats. • Design to mitigate impact on best and most versatile agricultural land. • Design to mitigate impacts to heritage assets, including the Starr Carr site. • Design to include a site specific flood risk assessment (FRA) and to further investigate the extent of the functional floodplain; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate. • Any proposals for the development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. • Appropriate arrangements for diversion and mitigation of impacts (dust, noise, visual) to rights of way. • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise, dust. • Appropriate restoration scheme using opportunities for habitat creation. 								

**Appendix 3i: Assessment of Sites in Selby District
Minerals and Waste Joint Plan**

Contents

ALLOCATED SITES			
Reference	Site Name	Type of site	Page
MJP45	Land to north of Hemingbrough	Extraction of clay	5
MJP55	Land adjacent to former Escrick brickworks	Extraction of clay	26
MJP28	Barnsdale Bar Quarry, Kirk Smeaton	Extraction of Magnesian limestone	45
MJP29	Went Edge Quarry, Kirk Smeaton	Extraction of Magnesian limestone	60
MJP23	Jackdaw Crag, Stutton	Extraction of Magnesian limestone	76
MJP22	Hensall Quarry	Extraction of sand	97
MJP44	Land between Plasmor Block making plant, Great Heck and Pollington Airfield	Extraction of sand	117
MJP54	Mill Balk Quarry, Great Heck	Extraction of sand	133
MJP09	Barlby Road, Selby	Rail and road freight distribution facility including handling facility for aggregates	150
MJP24	Darrington Quarry processing plant site and haul road	Retention of plant site and haul road for processing of Magnesian limestone	166
MJP27	Darrington Quarry (recycling)	Recycling of inert waste	182
MJP26	Barnsdale Bar, near Kirk Smeaton (recycling)	Recycling of inert waste	196
WJP10	Went Edge Quarry recycling, near Kirk Smeaton	Recycling of construction and demolition waste for secondary aggregate	210
WJP16	Common Lane, Burn	Bulking and transfer of municipal and commercial waste	224
WJP06	Land adjacent to former Escrick brickworks, Escrick	Landfill of inert waste for restoration of extraction site	237
WJP21	Brotherton Quarry, Burton Salmon	Import of inert waste for restoration purposes	252
WJP22	Land on former Pollington airfield	<ul style="list-style-type: none"> • Import of wood for wood pellet production • Modification to biomass plant permission (reduction to throughput and output) Additional infrastructure associated with wood processing	267
WJP03	Southmoor Energy Centre, former Kellingley Colliery	Energy from Waste facility	281

WJP25	Former ARBRE Power Station	Energy Recovery facility with Advanced Thermal Treatment (ATT)	297
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EXCLUDED/DISCOUNTED SITES			
Reference	Site Name	Type of site	Page
MJP23	Jackdaw Crag, Stutton (excluded area)	Extraction of Magnesian limestone	312
MJP31	Old London Road, Stutton	Extraction of Magnesian limestone	329
MJP53	Land to north of Old London Road Quarry, Stutton	Extraction of Magnesian limestone	344
MJP58	Old London Road, Stutton (recycling)	Extraction of Magnesian limestone, secondary aggregate recycling, storage of mineral fines and partial infilling with imported mineral fines material	359
WJP04	Old London Road Quarry, Stutton	Extraction of Magnesian limestone; Temporary storage of mineral fines; and Recycling of construction industry waste and landfill	373

Sustainability Appraisal Score

Score	Description
++	The Site option is predicted to have higher positive effects on the achievement of the SA objective. For example, this may include a highly significant contribution to issues or receptor of regional or wider significance, or to several issues or receptors of local significance.
m+	The Site option is predicted to have moderate positive effects on the achievement of the SA objective. For example, this may include a positive, but not highly positive contribution to issues or receptor of more than local significance, or to several issues or receptors of local significance.
+	The Site option is predicted to have minor positive effects on achievement of the SA objective. For example, this may include a significant contribution to an issue or receptor of more local significance.
0	The Site option will have no effect on the achievement of the SA objective ¹ .
-	The Site option is predicted to have minor negative effects on the achievement of the SA objective. For example, this may include a negative contribution to an issue or receptor of local significance.
m-	The Site option is predicted to have moderate negative effects on the achievement of the SA objective. For example, this may include a negative, but not highly negative contribution to an issue or receptor of more than local significance.
--	The Site option is predicted to have higher negative effects on the achievement of the SA objective. For example, this may include a significant negative contribution to an issue or receptor of more than local significance.
?	The impact of the Site option on the SA objective is uncertain.

¹ This includes where there is no clear link between the site SA objective and the site

MJP45 Land to North of Hemingbrough

Site Name	MJP45 Land to North of Hemingbrough (XY 467732 431543)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of clay as proposed extension to existing quarry
Size	14.31ha
Proposed life of site	2.5 to 3.5 years
Notes	<p>Planning application NY/2015/0058/ENV was granted planning permission in March 2016 (Planning Permission C8/2015/0280/CPO), so the site area has been reduced to reflect that decision</p> <p>The company preference is to extract reserves at MJP55 Escrick. However, if the clay within the MJP55 allocation is not available then the MJP45 reserve would be expected to commence within the Plan period</p> <p>Restoration to a series of ponds with marginal planting, areas of wildflower meadow, neutral and acidic grassland and species rich hedgerow.</p>

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Note that this site has a 2.5 to 3.5 years duration. As with other assessments the timescales for effects start at the time of commencement of the operation, so while this site is not forecast to commence until the period 2026 to 2035, most impacts are reported to occur in the short term, i.e., 5 years from the commencement of the operation, other than those where a permanent or delayed effect endures.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000: River Derwent Special Area of Conservation / Special Protection Area (SAC / SPA) / Ramsar site is 2km east; Skipwith Common SAC 4.8km north, Humber Estuary SAC / SPA / Ramsar 7km south-east; Sites of Special Scientific Interest (SSSI): No Sites of SSSIs within 2km: Brighton Meadows SSSI 2.1km east, River Derwent SSSI 2.2km east. SSSI IRZ: Site within IRZ (for minerals working) for River Derwent SAC/SPA.</p> <p>Site of Importance for Nature Conservation (SINC): 2 SINCS within 2km - Hagg Lane Green (SE63-22 Ratified SINC) 20m east and Haymoors Wood (SE63-02 Deleted SINC) 600m north-east. National Nature Reserve (NNRs): 2 NNRs within 5km (Lower Derwent Valley NNR 2.5km north-west, Skipwith Common NNR 4.8km north-west).</p> <p>Local effect Hagg Lane Green SINC is located 20m from the proposal site. The SINC qualifies for its aquatic flora which includes water violet and narrow-leaved water-dropwort both very uncommon plants in North Yorkshire. Ponds also support great crested newt. It is considered that there is a possibility of minor negative impacts on this SINC arising as a result of construction and operation of the allocation site (e.g. impacts from pollution of ponds from run off etc.). Restoration could potentially enhance the SINC and further clarification on restoration could ensure a positive benefit. A buffer is needed between this site and the SINC to protect it from this minerals site. In addition to great crested newt, other</p>	✓	✓	✓	✓	-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>protected species that could be present at the allocation site include bats (possible roosts in mature trees), nesting birds, water vole and otter (ditch). It is considered that some minor negative effects on these species or their habitats may occur due to construction and operation of the site.</p> <p>In the longer term the effects would be positive (through the creation of priority habitats such as wetlands and meadows) but dependent on the details of the restoration scheme and whether it is phased. Educational opportunities could also be explored through restoration. Hagg Lane Conservation Group would need to be consulted.</p> <p><u>Plan level / regional / wider effects</u> This site is unlikely to have a significant effect on Natura 2000 sites as a result of the proximity and type of development (in particular, extraction of clay is unlikely to have significant impact on hydrology affecting SAC due to the site being located in an unproductive aquifers).</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is not in a groundwater source protection zone (SPZ). It is however within a Nitrate Vulnerable Zone (NVZ) (surface water).</p> <p>River Basin Management Plan (RBMP): This site would fall within the Humber River Basin District. It lies within the Lowmoor Drain Catchment (tributary of Derwent) water body, which currently has a current status of 'moderate' and a target of 'good by 2027'. The site lies within Sherwood Sandstone groundwater Principal Aquifer (quantitative status objective – good by 2027).</p> <p>Catchment Abstraction Management Strategy (CAMS): Hull and East Riding CAMS: surface water resources not assessed. No groundwater available.</p> <p>Local effects Because this site is in a NVZ, surface water may be vulnerable during restoration phases of the project if fertilizers are used (considered unlikely as site may possibly be restored to wetland). Some nitrogen enrichment may come through traffic from site depositing nitrogen close to roads, though this is likely to be at insignificant levels for this type of site. As with all minerals sites there is a risk of water pollution from fuel spills though occurrences should be readily avoidable through good site management. However, prior to mitigation being known a small scale risk to water quality cannot be ruled out.</p> <p>Overall the effect is predicted to be minor negative in the short and medium term, through with significant uncertainty due to insufficient information on on-site processes, such as whether there would be a need to carry out dewatering (though impacts from this are likely to be manageable). In the long term it is possible that restoration to a range of wetland habitats could have impacts in relation to water quality (for example, if habitats such as reed beds develop that can improve water quality).</p> <p>Groundwater water would be significantly restricted in terms of availability for extraction, while surface water availability is not known.</p> <p>Plan level / regional / wider effects There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by good site management.</p>		✓		✓	-	-	0
						?	?	

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of	<p>Proximity of transport receptors Site is relatively proximal to a number of major settlements (e.g. Selby 5km, Goole 10km, Castleford 20km, Leeds 30km). Access: Confirmed that new access onto A63 to west of Garth House, Hull Road (A63) approximately midway along the southern boundary of the west extension (in approved application NY/2015/0058/ENV) would be used by HGVs once constructed², but until then the existing Northfield Road access onto Hull Road (A63) opposite the north end of Main Street (U1480) at Hemingbrough would be used in accordance with the existing permission. Once the new access is constructed the existing access would be used by site staff and visitors only to the site offices.</p> <p>Light vehicles: 16 two-way movements (application details NY/2015/0058/ENV); Heavy Goods Vehicles (HGVs): 100 HGV two-way movements (application details NY/2015/0058/ENV).</p>		✓		✓	-	-	0

² Once this new access is constructed the existing Northfield Road access would be used by site staff and visitors only to get to the site offices.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
transportation	<p>Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0; Traffic assessment rating: Yellow <i>'it is likely that the traffic impacts of the site will remain at present levels and will represent improvement on the present situation.'</i>³</p> <p>Public Rights of Way (PRoW): the site is affected by a registered PRoW which must be kept clear of any obstruction until such time as an alternative route has been provided and confirmed by order (if a diversion is needed).</p> <p>Rail: Immediately adjacent to site / nearest railhead 4.5km west; Strategic Road: A63 immediately 260m south along Hagg Lane; Canal / Freight waterway: River Ouse is navigable 1km south.</p> <p>Local effects The site would generate 116 two way vehicle movements and is very close to Hemingbrough. However, this level of traffic is the same as the levels associated with the Hemingbrough Clay Quarry, so in overall terms should be viewed as an extension in time of existing impacts (though without this extension these impacts would be expected to cease, so an effect is observed).</p> <p>According to the traffic assessment <i>"All HGV traffic from the site would travel to and from the Plasmor Brickworks at Heck approximately 25km from the site by road. The planning application outlines that the applicant would continue to follow the HGV routing agreement whereby HGVs turn right out of the site onto the A63 and use the A63 Selby Bypass and A19 via Eggborough to reach the Plasmor Brickworks"</i>.</p> <p>Access in the short term (until new access is created) would continue to bring vehicles close to the fringes of Hemingbrough (though not into it), potentially causing very minor congestion at the junction. This situation would improve once access is moved, though traffic from the site on the A63 would still continue for an extended period. The traffic assessment puts this into context by stating that "Data provided by the applicant indicates that traffic flows along the A63 are typically in the region of 9,000</p>					?	?	
	<p>³ Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>vehicles a day, with HGVs accounting for around 11% of traffic. Subject to achieving a satisfactory point of access for HGVs, the traffic generations from the site would remain at present levels and the routing agreement would ensure HGV impacts are minimised. It is thus likely that the traffic impacts of the site would remain as at present or potentially improve on the present situation with the revised point of access removing traffic from Hemingbrough"). Additionally, the Highway Assessment concludes HGV movement is acceptable onto the road (though notes that the site has no direct connection / frontage to a highway maintainable at the public expense).</p> <p>The Highway Assessment also concludes that sustainable modes of transport are not likely to contribute to access to site (though proximity to the rail network could suggest that installation of a rail head might be an option, though may well be too expensive in relation to the size of this site or not acceptable on the line).</p> <p>Overall it is considered that minor negative traffic effects would continue for the duration of this extension, though improvements to access would also lead to some improvement.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within a Hazardous Substances Consultation Zone or an Air Quality Management Area (AQMA). The village of Hemingbrough is located approximately 150m away.</p> <p>Local effects As the site is located within 200m of the village of Hemingbrough and adjacent to a small number of isolated properties, there is potential for minor negative impacts in relation to dust during the construction and operational phase of the development. It is however acknowledged that mitigation may reduce any impacts significantly (however this is currently unknown until a dust / air quality assessment is undertaken and any required mitigation is outlined).</p> <p>Air pollution resulting from site traffic (as it routes towards Plasmor Brickworks along the A19 and A63 passing a number of villages) and onsite processes may also contribute towards a minor negative impact in relation to air quality during the construction and operational phases, though as the access to the site will move this impact will be reduced (it should also be noted that air pollution from vehicles will not get any worse as traffic is already generated from this site (though it will endure for longer). In the longer term, impacts will depend upon the restoration scheme that is implemented and therefore there is an element of uncertainty. However, it is considered that if restoration to a number of wetland habitats is pursued, no significant impacts would occur in relation to this objective in the long term.</p> <p>Plan level / regional / wider effects None noted</p>		✓	✓		-	-	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Agricultural Land Classification (ALC): Site is Grade 2 Agricultural Land which is classified as very good and constitutes 'best and most versatile land'. The site is a greenfield site and is of a moderate size (14.31ha). In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area. The potential for land contamination is not known, though is thought to be low due to the green field location.</p> <p>Local effects Due to the nature of clay extraction and the possible restoration to wetland, the loss of this</p>	✓		✓		m-	m-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>area of best and most versatile agricultural land would, at least in part, most likely be permanent. For these reasons, it is considered that the site would result in a moderate negative impact in the short, medium and long term in relation to safeguarding and enhancing the quality of land and soil. It is recognised that the effect could also be cumulative as an active clay pit lies adjacent to the site.</p> <p>Plan level / regional / wider effects If best and most versatile agricultural land is lost at the site, it would add cumulatively to the loss of agricultural land to development land in England. However, the loss is considered to be a small in relation (0.4%) to the overall agricultural land lost in England per annum to development⁴ but could have a small scale effect on national food production capacity.</p>							?
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change The closest area of priority habitat woodland lies 40m south-east of the site. Parts of the site are bounded by 'gappy' hedgerows and a small number of standalone trees are present along the site boundary / in fields. The main land use is arable. Carbon in soils: Low (49.67 tC/ha); Carbon in vegetation: Low (1.34 tC/ha).</p> <p>Local effects As climate change is a global issue effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Carbon in soils and vegetation are likely to be low. Woodland would not be lost to this site although small patches of hedgerows and a number of mature trees would be lost in the in order for clay extraction to take place (relatively insignificant). Clay from the site would be likely to be transported to Plasmor block-making site at Great Heck circa 12.3km south-west. The site</p>	✓		✓	✓	-	-	-

⁴ 14.31ha (assuming all land is best and most versatile) annualised across the 3.5 year life of the site would be an annual 4.1ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 4.1ha loss would represent a 0.2% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>is therefore located in relatively close proximity to market and represents the nearest source of clay to the block-making plant (area immediately surrounding the plant consists of sand rather than clay deposits). The site has relatively good transport links and there may be some potential to consider utilising the nearby rail or canal network for removing freight from roads, though given the small distance from source to market, this may not be viable.</p> <p>Overall minor negative impacts are recorded due to the number of vehicles and the loss of mature trees and possibly areas of hedgerow. An assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors must be undertaken⁵.</p>							?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁶ of a site Site lies in Flood Zone 1. <5% of the site is at risk of surface water flooding. This is mostly low risk (1:1000 (0.1%)) with one small area of high risk (1:30 (3.33%)) in the south west corner of the site. These areas are likely to alter in location as levels change across the site. No ecological networks present onsite however Ouse regional Green Infrastructure network lies adjacent to the western parcel of the site to the south.</p> <p>Catchment Abstraction Management Strategy (CAMS): Hull and East Riding CAMS: surface water resources not assessed. No groundwater available.</p>	✓		✓		m-	m-	-

⁵ Proposals for new mineral extraction at a rate in excess of 75,000 tonnes per annum should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has been applied also to minerals output for the purposes of Development Management, Policy D11.

⁶ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Site is Grade 2 ALC.</p> <p>Local effects It is considered unlikely that the site would block nearby ecological networks. Flooding risk is seen as negligible at this site which is classified as 'less vulnerable' in terms of its flood risk vulnerability classification. During the restoration phase, it is considered that the development of a number of wetland habitats may contribute towards climate adaptation⁷ in terms of water storage and the possible creation of priority habitats. There is some uncertainty in this assessment as finalised restoration plans are not currently known.</p> <p>Although surface water may be significantly restricted in terms of availability for extraction, the assessment notes only uncertainty here as it will be for the water licensing regime to decide the significance of impacts.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>					?	?	?
8. To minimise the use of resources and	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will extract virgin clay which will be unavailable for future use (unless recycled).</p>	✓	✓	✓	✓	--	--	--

⁷ Climate change to river flood risk is unlikely to not affect the site in the latter part of the Plan period. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
encourage their re-use and safeguarding	<p>This is considered to have a high negative effect on the SA objective.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>							?
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects Overburden and fines are likely to be generated by this site and given the nature of clay extraction and possible restoration to wetland habitats it is possible that this will need to be taken offsite. However it may well be used as a resource somewhere else, or used in restoration. Neutral to uncertain.</p> <p>Plan level / regional / wider effects The site may have an indirect negative impact on the prioritising the management of waste down the waste hierarchy as a result of providing virgin sand and gravel and reducing the need to recycle sand and gravel from other locations.</p>	✓		✓	✓	-	-	-
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors Conservation Areas: one Conservation Area within 1km - Hemingbrough 290m south; 11 Listed Buildings within 1km (mostly in conservation area, including the Grade I Church of St Mary the Virgin).</p> <p>Woodhall Park Named Designed Landscape (ornamental parkland) lies 1.6km east. No scheduled monuments within 2km and no listed buildings within 1km.</p> <p>There are no currently recorded archaeological sites within the allocation area. However, from evidence for the surrounding area, archaeological potential can be inferred, given the identification from archaeological recording and aerial photographs of activity likely to date from the later Iron Age/Romano-British periods. The full extent of significance of Romano-British settlement remains is not known and</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>may extend into the allocation area.</p> <p>Historic Landscape Characterisation (HLC): The North Yorkshire HLC broad type is 'enclosed land' and HLC type is 'modern improved fields'. The North Yorkshire HLC Project database record number HNY5305 identifies the allocation site as an area of large irregular fields defined by erratic drainage ditches. This represents the creation of large prairie fields due to the removal of internal field boundaries. This area has fragmentary legibility due to the high degree loss. This area was previously mainly planned enclosure dating to the period between 1750 and 1850. The legibility attribute value is classed as fragmentary, a term which is employed where the previous historic character is only slightly visible within the landscape.</p> <p>Local effects In terms of impacts on designated assets effects are considered unlikely, as listed building are largely screened by other buildings. There is, therefore a need to avoid the most sensitive areas of the site, including parts of the site that affect the setting of the conservation area (particularly the southern boundary).</p> <p>The archaeological impact will occur throughout the duration of extraction. It is assumed that excavation would result in the total destruction of any potential archaeological remains. However, it is likely that investigation works required by the Joint Plan Policy D08 (Historic Environment) – '<i>mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>' would result in an overall minor negative effect.</p> <p>It is assumed that extraction will be completed and the site will be restored (though the loss of archaeology will endure). There is some uncertainty regarding the extent of restoration impacts as details are currently unknown.</p> <p>An informed assessment of the archaeological potential of the site has been made as a result of previous archaeological evaluation. Therefore, the likely effects can be stated with certainty.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>In terms of HLC, as this allocation site is a small part at the edge of a much larger area of similar character type, the proposed extraction is considered unlikely to have a major impact upon the HLC of the immediately surrounding area.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> Locally designated landscape: East Riding Important Landscape Area lies 2.3km east. National Character Area (NCA): Site is in the Humberhead Levels NCA. The North Yorkshire Landscape Character Assessment (NYLCA) places this site in Landscape Character Type 23: Levels Farmland (broad type: farmed, lowland valley landscapes). This character type has: high visual sensitivity, low ecological sensitivity, and moderate landscape and cultural sensitivity. The site is also in the Selby LCA ('East Selby Farmlands' and 'Wharfe Ouse River Corridor'). In terms of intrusion the area is classified as 'disturbed'.</p> <p><u>Local effects</u> The site is close to the village of Hemingbrough and there is potential for adverse visual impact on roads approaching from the north west (A63 Hull Road) and from the north (Hagg Lane). However clay extraction has been taking place for many years, and because the land is flat and the extraction of clay would largely take place below current ground level it should be possible for workings to be largely screened. Additional screening could however change the semi-enclosed but relatively open character of the landscape and affect long distance views. It is considered very unlikely that that there would be any impact on the Hemingbrough Conservation Area.</p> <p>The scale of effects depends on the operations at any one time. In the short term locally significant negative effects are anticipated in the early stages of development where soil is being stripped, vegetation, trees and hedgerows lost, and there is noticeable disturbance. There will be permanent loss of Grade 2 agricultural land. Some of the proposed areas are currently in Environmental Stewardship and any related benefits would be lost (although there may well be longer term benefits following restoration). Later in the short term, earlier effects may continue, and rolling restoration should limit visual intrusion. However the changes from arable farmland are likely to be irreversible if water bodies are created.</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>In the longer term the restored landscape could be of recreational and nature conservation interest, and should be capable of satisfactory visual integration with the surrounding landscape, particularly if some valuable Grade 2 agricultural land can also be restored. However, there is concern over the area next to Hull Road, which may act as a visual receptor throughout the lifetime of this development. The site is also open to views from the railway in this area of quite pleasant countryside.</p> <p>The area between Cliffe and Hemingbrough is becoming continually disturbed by development / more urbanised. This disturbance is likely to increase over time, in part due to this site. In particular there may be a cumulative impact on the experience of railway users.</p> <p>Plan level / regional / wider effects None noted.</p>							?
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth The site is relatively proximal to a number of major settlements (e.g. Selby 5km, Goole 10km, Castleford 20km, Leeds 30km).</p> <p>Local effects The allocation would enable Hemingbrough clay pit to continue to supply clay to Plasmor block-making site at Great Heck circa 12.3km south-west. It is therefore considered that the site would create, or more likely sustain, a small number of jobs at the allocation site and Plasmor block making site in the short term.</p> <p>The site would also make a contribution to the supply of a valuable building product and ultimately this may help keep the construction sector competitive. While the site does not represent 'low carbon development' the proximity of this site to an established market is not likely to significantly increase the carbon footprint of construction projects that ultimately use this clay. Overall the contribution is minor positive in the short term. It is also considered that there is some potential for positive effects in terms of economic growth in the long term should the possible creation of wetland or biodiversity interest create a</p>		✓	✓	✓	+	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>recreational / tourism opportunity.</p> <p>Plan level / regional / wider effects There are possible wider benefits to areas outside of the Plan area through the supply of building materials from Plasmor.</p>							?
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability Index of Multiple Deprivation (IMD) Area is Hemingbrough: This is not in most deprived 20%. Site lies between Hemingbrough, Cliffe and South Duffield and the northern edge of Hemingbrough lies adjacent to the site. Hemingbrough is listed as a 'Designated Service Village' where limited further growth is considered appropriate in the Selby Core Strategy and Cliffe and South Duffield are 'Secondary Villages with defined Development Limits'.</p> <p>Local effects The site is likely to support small numbers of jobs onsite and in the associated block-making plant leading to minor positive impacts in the short and medium term. Whilst the site would provide a source of clay which could aid future development, it is considered that the immediate settlements are unlikely to directly benefit in any significant way. In the long term it is considered that possible restoration to a number of wetland habitats has the potential to boost tourism in the area.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>		✓	✓	✓	+	+	0
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors Public Rights of Way (PRoW): A local footpath runs along the southern boundary of the site and a further footpath joins the eastern boundary. A further footpath lies about 150m south east, and the Trans Pennine Trail is 300m south-west of the site. Two village greens are listed in Hemingbrough, which lies 160m south of the site at the closest point (exact locations of village greens unknown).</p> <p>Local effects The site may diminish the experience of walking on the local footpaths in close proximity</p>		✓	✓		-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>to the site as it may have a visual impact, may generate dust and noise and also increase traffic on the road on the nationally important the Trans-Pennine Trail. However, the experience of being on this route is already likely to be disturbed by proximity to the A63 and the existing quarry adjacent to the allocation site. In addition, this is not one of the more widely used parts of the Trail. However, the Tran Pennine Trail still needs to be screened⁸.</p> <p>In the long term possible restoration to wetland may enable opportunities for recreation or learning (e.g. wetland nature reserve).</p> <p>Plan level / regional / wider effects The Trans Pennine Trail, although not a national trail, is of national interest, so effects on this are significant.</p>							?
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing There are no hospitals or clinics within 1km. Site lies between Hemingbrough, Cliffe and South Duffield, and the northern edge of Hemingbrough lies adjacent to the site; Cliffe lies 300m west of the site and South Duffield lies 1.2km north of the site. A small number of residential properties are located close to the site boundary, including in close proximity to the proposed new HGV access to site. Two primary schools are located within 1km of the site: Cliffe Primary School 670m west and Hemingbrough Primary School 730m south.</p> <p>Local effects Without mitigation it is possible that noise and dust could increase, including noise, vibration and pollution from traffic travelling along the A63. This may affect a number of individual properties and settlements (particularly Hemingbrough and Cliffe) and may heighten traffic levels affecting an area used by walkers and cyclists. As these impacts are localised and essentially no worse than current levels in the case of traffic pollution they are considered to be minor negative in the short term with some uncertainty depending on agreed restoration plans (as without this extension impacts</p>		✓	✓	✓	-	-	?

⁸ Trans Pennine Trail Office supports the Preferred Site and notes the screening of the Trans Pennine Trail and the National Cycle Network from any proposed works.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>from the site would otherwise have ceased). The short term impact is more significant due to the access point being at the north end of Main Street, Hemingbrough. Due to the possible restoration of the site to a range of wetlands, impacts on the safety of nearby airfield operations (the site lies within the 13km consultation zone of 4 airfields) in relation to bird strike would need to be taken in to consideration.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones The site lies in Flood Zone 1. Less than 5% of the site is at risk of surface water flooding. This is mostly low risk (1:1000 (0.1%)) with one small area of high risk (1:30 (3.33%)) in the south west corner of the site. These areas are likely to alter in location as levels change across the site.</p> <p>Strategic groundwater flooding maps show that the site is not within an area at risk from groundwater flooding.</p> <p>As a clay site the site is likely to extract below the perched water table (though groundwater flow on clay sites in Clearwater areas is likely to be negligible)⁹. Therefore groundwater flooding is unlikely to cause any significant problems. Perched water tables are an inherent property of clay extraction.</p> <p>This site is not at risk from the 1:20 (5%) flood event. The site also lies behind an area shown as benefitting from existing flood defences.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test¹⁰ undertaken for the site concluded that this site would 'Pass'. Flood risk is seen as negligible at this site which is classified as 'less vulnerable' in terms of its flood risk vulnerability classification.</p>					0	0	0

⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/290396/sp2-173-tr-2-e-e.pdf

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>A site specific flood risk assessment will be required. If a hydrological assessment reveals specific characteristics such as a risk of an underlying aquifer being breached or causing basal heave this should be taken into account. A suitable SuDS scheme will be required to drain or store water from the site that does not increase flooding on any receiving water body.</p> <p>Plan level / regional / wider effects None noted.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a contribution to self-sufficiency in the supply of clay (and therefore blocks as the allocation would support the Plasmor block-making plant) in the Plan area and provide an extension for jobs.</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	+	0	0
Cumulative / Synergistic effects ¹¹								
Planning context	<p>Site lies between Hemingbrough, Cliffe and South Duffield (the northern edge of Hemingbrough lies adjacent to the site, Cliffe lies 900m west of the site and South Duffield lies 1.2km north of the site). In the Selby Core Strategy Hemingbrough is listed as a 'Designated Service Village' where limited further growth is considered appropriate, while Cliffe and South Duffield are 'Secondary Villages with defined Development Limits'. These are covered by Policy SP2 in the Selby Core Strategy: "<i>Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities...</i>" No allocations in the 2005 Local Plan conflict with this site, however the site is in a 'strategic countryside gap' where proposals '<i>will not be permitted where there would be an adverse effect on the open character of the countryside or where the gap between settlement would be compromised</i>'.¹²</p>							

¹⁰ The Sequential Test approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (Flood Zones 2 and 3) and other areas affected by other sources of flooding where possible.

¹¹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

¹² Selby District Council, 2005. Selby District Local Plan 2005 [URL: <http://www.selby.gov.uk/selby-district-local-plan-sdlp-2005>].

Other Minerals and Waste Joint Plan Sites	Other MWJP sites within 5km: MJP09 Potter Group Rail Freight 4.5km west.
Historic minerals and waste sites	Site lies within a cluster of historic permissions for extraction and landfill associated with Hemingbrough clay pit. There is also a metal recycling plant adjacent. 1.2km north extraction was granted in the 1970s, and a borehole in the 1990s.
Landscape Impacts	The area between Cliffe and Hemingbrough is becoming continually disturbed by development / more urbanised. This disturbance is likely to increase over time, in part due to this site. In particular there may be a cumulative impact on the experience of railway users.
Soils	In terms of land loss, all development is cumulative so this development is best considered within the context of the whole Plan area. This development would represent a permanent loss of a moderately large area of best and most versatile land and combined with other development in the area such as the adjacent active clay pit, this may result in a minor negative cumulative impact.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on Hagg Lane Green SINC and protected species. • Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources • Design of development and landscaping of site to mitigate impact on heritage assets including any impacts on Hemingbrough Conservation Area and Listed Building) and local landscape features and their respective settings and the Trans Pennine Trail leisure route. • Design to include a site specific flood risk assessment which should confirm the impact of climate change on river flooding at this site. The flood risk assessment should also address the issues of draining surface water using SuDS, without causing additional flood risk. • Design to ensure protection of the aquifer. • Maintenance of access to the A63 and local roads, including an appropriate traffic management plan • Appropriate arrangements for control of and mitigation of the effects of noise and dust. • Appropriate restoration scheme (using opportunities for habitat creation), noting that any proposal for restoration to agriculture should be tested for viability – e.g. relative to the depth of extraction and requirement for inert material. 	

MJP55 Land Adjacent to Former Escrick Brickworks

Site Name	MJP55 Land adjacent to former Escrick Brickworks (XY 461919 440761)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of clay as extensions to a former quarry
Size	112ha
Proposed life of site	37 years extraction upon commencement with 31.5 years for completion of landfill (WJP06) based on infilling commencing 2 years after extraction commences and on development of the whole area
Notes	<p>WJP06 proposes landfill of the MJP55 site.</p> <p>MJP55 is proposed to enable a continuation of clay resource to the existing Heck block manufacturing facility operated by the submitter, once the reserves at Hemingbrough Quarry permitted via Planning Permission C8/2015/0280/CPO have been extracted.</p> <p>No detailed design for restoration available yet, but would be back to agriculture at or near original ground levels</p>

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and	<p>Proximity of international / national and local designations and key features Natura 2000 Sites: 3.5km south-east Skipwith Common Special Area of Conservation (SAC), 7km east- Lower Derwent Valley SAC / Special Protection Area (SPA) / Ramsar. Site of Special Scientific Interest (SSSI): None within 2km; Acaster South Ings is 3km north-west; Church Ings is 4.8km north-west. Skipwith Common is 2.9km south-east. Skipwith Common is also a National Nature Reserve. SSSI Impact Risk Zones (IRZs) show that the</p>	✓	✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
improve habitat connectivity	<p>northern part of the site is highlighted as having the potential to affect Acaster South Ings SSSI, while the southern end of the site has the potential to affect Skipwith Common.</p> <p>Site of Importance to Nature Conservation (SINC): 11 SINC / potential SINC lie within 2km. Of these the following lie within 500m: SE64-10 (York and Selby Cycle Track (ratified SINC) which runs between and immediately adjacent to the east and west sections of this site and the western boundary of the southern plot; SE64-06 (Heron Wood - Stillingfleet - potential SINC) is immediately adjacent to the northern edge of the western site; SE64-04 (Hollicars Wood, Ratified SINC) is 250m east of southern tip of access track and SE63-12 (Riccall Dam, Potential SINC).</p> <p>Priority Habitats: several patches of deciduous woodland immediately north and south of the site with more patches close by. The Woodland Trust confirmed the presence of ancient woodland along the site boundary. A lowland fen patch is circa 10m to south of site (co-incident with Trans Pennine Trail).</p> <p>Southern part of the site is within a Bee Line buffer. Site visit confirmed ponds, grasslands, arable, woodland, hedgerows and standalone trees were present on site.</p> <p>Local effects Although invasive species are not noted in this location, the presence of a ditch next to the site could act as a pathway for invasive species that might be brought in during any restoration. This, however, is not scored in this assessment. It is also not known whether Heron Wood SINC, which has several shallow pools and water starwort, is groundwater or surface water dependent, but its proximity means that it may be vulnerable to both surface water flooding transporting polluted water across both sites or local depletion of the water table (though the latter is less likely due to poor groundwater conductivity of clay).</p> <p>There are opportunities to bring long term benefits through restoration, such as through long term management of the nearby SINC and ecological networks / inclusion of features for biodiversity.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>On site habitats (ponds, hedges, grassland and trees) and associated species (e.g. possible great crested newts) may also be lost during construction, while continued disturbance from the site (e.g. from dust or hydrological impacts) will continue through the medium and long term. Completion of restoration should see the baseline return to the norm (i.e. it is important that restoration should replace what is already there, such as existing habitats), though much depends on how it is implemented. If wetland habitat were to be proposed, there would be a need to consider the appropriateness of habitats alongside, for example, the nearby surrounding ecology and biodiversity action plan objectives.</p> <p>Although the site falls within a number of private aerodrome buffers it only falls within the outer area of two Ministry of Defence (MoD) 13km buffers, so consultation will be needed ahead of any restoration to nature conservation.</p> <p>Plan level / regional / wider effects Impacts upon the Natura 2000 site at Skipwith Common will need further investigation at the planning application stage if dewatering is required, however an initial assessment of likely significant effects considers that the distance of this site (likely to be beyond any modified water table 'cone of depression') and the fact that clay extraction is generally a low risk to groundwater as clay is a non-aquifer with limited groundwater inflow dependent on permeability¹³, makes any risk to Skipwith Common unlikely.</p> <p>At least in terms of surface water there seems to be little 'connectivity' between this site and Acaster South Ings SSSI, while the river is likely to act as a significant hydrological barrier between this site and that SSSI.</p>							
	<p>¹³ See Stuart, A. and Davies, J, 2002. <i>An assessment of relative environmental sustainability of sub-water table quarries</i>. Environment Agency, Bristol [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/290396/sp2-173-tr-2-e-e.pdf]</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Site is in a Nitrate Vulnerable Zone (NVZ). Not in a Source Protection Zone (SPZ).</p> <p>River Basin Management Plan (RBMP): The site is In the Humber RBMP in the 'Riccall Dam Catchment (tributary of Ouse)' waterbody. This has an overall status of moderate and the status objective is 'good by 2027'. There are no local RBMP lakes. RBMP Groundwater waterbody is 'Sherwood Sandstone': quantitative status objective: good by 2021.</p> <p>Catchment Abstraction Management Strategies (CAMS): surface water resources available at least 70% of the time. Groundwater is restricted.</p> <p>Local effects Removal and storage of overburden and fuel spills on site could release pollutants which could make their way into the 'Riccall Dam Catchment' water body. Compaction by vehicles may also be an issue on site which may create pathways for on-site run off. These impacts could occur throughout the operation, and may also depend on the restoration pursued. They would require mitigation. Groundwater impacts would need further investigation, but clay is an 'aquitar' which acts as a low permeability block between an aquifer and the surface so impacts are most likely to be fairly low.</p> <p>Plan level / regional / wider effects There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by the good site management during operation.</p>		✓		✓	-	-	-
3. To reduce transport miles and associated	<p>Proximity of transport receptors Site is close to A19 with good access to key housing markets in York and Selby, though clay may go via another facility such as the Great Heck Block Making site (c20km away). Access: existing access via the former Escrick Brickworks and U722 unclassified road by Escrick Business</p>		✓		✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
emissions from transport and encourage the use of sustainable modes of transportation	<p>Park onto the A19. Within the site there is a bridge over the Trans Pennine Trail.</p> <p>Light Vehicles: 10 two-way movements (submitter information); Heavy Goods Vehicles (HGV): 100 two-way movements (submitter information).</p> <p>Net change in daily trip generations: Light vehicles: 10; HGVs: 100.</p> <p>Public Right of Way (PRoW): Immediate access to the site is not affected by PRoW.</p> <p>Rail: 7.25km west / nearest railhead: 7.8km south; Strategic Road: A19 borders eastern edge of site; Canal / Freight waterway: River Ouse is 3.5km west.</p> <p>Selby are undertaking a highways study that could contribute further information to these sites.</p> <p>Local effects Site would generate 100 two way HGV movements a day and 10 light vehicle movements. According to the Joint Plan traffic assessment “<i>the MJP55 site would be accessed via the U722 unclassified road which also serves Escrick Business Park and leads directly onto the A19. The U722 passes in close proximity to the Escrick Business Park and mitigation measures are likely to be required to limit impacts from passing HGV traffic such as noise and dust and removing conflicts with pedestrians and road users at the business park. The extraction site is also bisected by the Trans Pennine Trail and mitigation measures are also likely to be required to remove conflict between path users and plant vehicles on site</i>”.</p> <p>The traffic assessment also notes that material from the site is likely to go to the Plasmor brickworks via the A19 and then join the route taken by MJP45 traffic at the junction with the A63. However, “<i>as the MJP55 site would only be reopened following the closure of the workings at the Hemingbrough MJP45 submission site (which is already operational), the only net increase in HGV movements from the MJP55 site would be along the A19 from the south of the site to the junction with the A63 where existing route from the MJP45 site would be met</i>”. As 14,000 vehicles a day currently use the A19 congestion impacts on the A19 are unlikely to be significant.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Although the site has no direct connection / frontage to a highway maintainable at the public expense, HGV movements on the receiving road are deemed acceptable. Sustainable modes of transport are unlikely to contribute to the site.</p> <p>As the site would be likely to have dust /noise impacts on the nearby Escrick Business Park and bisects the Trans Pennine Trail mitigation would be required.</p> <p>Plan level / regional / wider effects There may be cumulative traffic effects with site allocations further south, e.g. at the junction of the A19 and A63.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors No Air Quality Management Areas (AQMAS) within 5km. Not within a Hazardous substances consultation zone. It is noted that the A19 in York forms part of an AQMA for Nitrogen Oxides (NO_x) pollution.</p> <p>Park Farm Business Park lies adjacent to the southern boundary of the site and several isolated farms and a children's nursery lie within 1km. There are 6 residential properties adjacent to the business park. To the north of the site (around 2km north) is the village of Escrick and around 2km south is Riccall. Further out Stillingfleet lies to the west and Skipwith is to the south-east and Kelfield to the south-west (all Selby). Nearest school is in Escrick. No hospitals, health centres or clinics within 2km.</p> <p>Local effects Presumably waste will arrive at the site via the A19, and clay / bricks will leave the site via a similar route with the destination of Plasmor brickworks. HGV traffic may generate dust in dry conditions (though to a lesser extent than other minerals sites). Local negative effects from dust and air pollution may affect the adjacent industrial estate and users of the Trans Pennine Trail. As several settlements lie close to the A19 and en-route to the brickworks these receptors may see slightly raised air pollution levels, though not at a significant level. Mitigation for local receptors may however be necessary.</p> <p>Plan level / regional / wider effects There may be cumulative air quality effects with site allocations further south, e.g. at the junction of the A19 and A63.</p> <p>Mitigation (e.g. screening, damping down) is required to deal with dust impacts.</p>		✓		✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Site is largely Grade 3 Agricultural Land Classification (ALC) (good to moderate quality) with a small corner marked as possible Grade 2. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area. Soilscape: general description is naturally wet very acid sandy and loamy soils with low fertility, medium carbon and low fertility – however locally soil is likely to have high clay content.</p> <p>Local effects Potentially 112ha of possible best and most versatile land will be lost¹⁴. Moderate negative until restoration. It will be important to retain soils for later restoration or otherwise utilise them. The long-term impact depends on future restoration. Any proposal for restoration to agriculture should be tested for viability – e.g. relative to the depth of extraction and requirement for inert material. Due to likely high water table restoration to agricultural use may not be possible.</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development¹⁵ but could have a small scale effect on national food production capacity.</p>		✓	✓		m-	m-	-
								?

¹⁴ The best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping the site is located within ALC Grade 3 land, without further investigation it is not known whether it is Grade 3a or 3b. For the purposes of this SA a worst case scenario approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

¹⁵ 112ha (assuming all land is best and most versatile) annualised across the 37 year life of the site would be an annual 3.02ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 3.02ha loss would represent a 0.13% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Priority woodlands lie adjacent to the site. Hedges and trees exist on site. Soil carbon: Low (49.67 tC/ha); Carbon in vegetation: Low (4.04 tC/ha)</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Small areas of habitat would be lost, and neighbouring priority woodland may be deleteriously affected by changes to hydrology (e.g. a changed surface water regime). These are, however, relatively small scale impacts (and carbon in soil and vegetation in this area is generally thought to be low). However, this site would eventually shift significant clay off site using 100 HGVs per day and also ship in significant waste for landfill (see WJP06). Overall, effects on this objective are minor negative in the short and medium term and minor negative if the site / WJP06 continues to operate in the longer term. An assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors must be undertaken¹⁶.</p>	✓			✓	-	-	-
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹⁷ of a site Isolated patches of the England Habitat Network (EHN) to north of site. About 60% of this site lies in Flood Zone 2 with about 35% being in Flood Zone 1 and <5% being in Flood Zone 3, but benefiting from existing defences.</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 70% of</p>		✓	✓		-	-	-

¹⁶ Proposals for new mineral extraction at a rate in excess of 75,000 tonnes per annum should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has been applied also to minerals output for the purposes of Development Management, Policy D11.

¹⁷ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>the time. Groundwater is restricted.</p> <p>Site is largely Grade 3 ALC (good to moderate quality) with a small corner marked as possible Grade 2.</p> <p>Local effects Flooding will be an issue for this 'less vulnerable' site with a moderate risk from future river flooding and a low risk from surface flooding (but with patches of high risk). This will require an appropriate FRA and emergency planning procedure to be put in place and suitable application of an on-site sequential approach. In terms of habitat connectivity there will be no direct effects, though it is suggested that buffering the isolated patches of habitat adjacent to the site may increase their resilience.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>							?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects The extended site will extract virgin clay which will be unavailable for future use (unless recycled). While clay is not a scarce resource, it is a land intensive resource. This is considered to have a high negative effect on the SA objective.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		-	-	-
								?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> Indirectly this site is creating a space for the landfilling of inert waste (WJP06) which will work against this objective.</p> <p><u>Plan level / regional / wider effects</u> The site may have an indirect negative impact on the prioritising the management of waste up the waste hierarchy as a result of providing virgin clay and reducing the need to recycle clay from other locations.</p>		✓		✓	-	-	-
10. To conserve or enhance the historic environment and its setting, cultural heritage and	<p><u>Proximity of historic environment receptors</u> Escrick Conservation Area approx. 1km north-east. Moreby Hall and Nun Appleton Hall (Grade II Registered Park and Garden) are 2.3km north-west and 4.9km west. There are a number of Listed Buildings within Escrick Conservation Area including Grade II* Escrick Park and Coach House 550m to north-east. Stillingfleet Conservation Area and associated listed buildings are about 1.6km west. Scheduled Monument York prebendary manor moated site, 300m north west of Hawthorn Farm.</p> <p>Site visit confirmed the site is screened by topography and woodland so is not visible. No other contribution</p>	✓		✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
character	<p>to asset significance was observed,</p> <p>Named designed landscapes: Escrick Hall (designed landscape - ornamental parkland) is 400m east. Moreby Hall (designed landscape -ornamental parkland) is 2.04km north-west (i.e. just outside 2km).</p> <p>An Iron Age or Roman enclosure with field system and track ways has been identified as crop marks on air photographs and transcribed as part of the Vale of York National Mapping Programme project commissioned by English Heritage. There are various other smaller elements within the system which are assumed to be related although perhaps of a different phase.</p> <p>The North Yorkshire Historic Landscape Character (HLC) project (database records HNY 5413 & 5581) records parts of this allocation area as parts of wider areas of late modern improved fields which consists of large irregular fields defined by erratic hedgerows. This area has fragmentary legibility due to the high degree of boundary loss and was previously planned enclosure which had been enclosed by agreement. The HLC project (database records HNY 6327 & 23913) also records parts of this allocation area as parts of a wider areas of piecemeal enclosure which consists of medium sized irregular fields defined by regular hedges in some areas and medium sized fields which are irregular in form and are defined by erratic external and regular internal hedgerows in others.</p> <p>Local effects The site visit / assessment confirmed no effect of significance on the designated heritage assets or areas.</p> <p>There is high archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards and, although the site has not been archaeologically evaluated, it is assumed that allocating this site would be likely to cause the loss of these archaeological remains if the site is extracted without mitigation. The archaeological impact will occur throughout the duration of extraction. It is assumed that excavation will result in the total destruction of the archaeological remains. As archaeology is a finite, irreplaceable resource, the impact would be significant. However, it is expected that investigation works required by the Joint Plan Policy D08 (Historic Environment) – <i>‘mitigation of damage will be ensured</i></p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>' would result in an overall minor negative effect.</p> <p>As this allocation site covers four separate areas of HLC which each extend beyond the allocation site into larger areas of similar character type, of which the legibility is partial, the proposed extraction is unlikely to have a major impact upon the historic landscape character of the immediately surrounding area. However, it is acknowledged that within the site, the HLC will become invisible as development will replace earlier field systems.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> No National Parks, Areas of Outstanding Natural Beauty (AONBs) or Heritage Coast within 10km. No ITE land within 5km.</p> <p>National Character Landscape (NCA): Southern 50% in Humberhead Levels. Northern 50% in Vale of York. NYCC Landscape Character Assessment (LCA) places this site within 'vale farmland with plantation woodland and heathland'. This has moderate visual sensitivity (a strong sense of openness and patches of plantation woodland disrupt views to adjacent Landscape Character Types in places); moderate ecological sensitivity overall (much of this Landscape Character Type comprises improved agricultural fields. There are, however, large areas of lowland heathland and a network of remnant lowland heaths outside these major areas). Moderate landscape and cultural sensitivity overall. (In places, historic landscape patterns are compromised by modern developments. There are, however, numerous historic landscape features present, including parkland landscapes, historic villages and prehistoric earthworks). Selby LCA places site in 'Skipwith Lowland LCA Area' (Flat wooded farmland LCA Type) and Wharfe Ouse River Corridor LCA Area (LCA type: Semi-enclosed farmland).</p>	✓		✓		m-	m-	m-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>York Green Belt in Selby is 600m north. In terms of tranquillity 70% of site disturbed. Western 30% is undisturbed.</p> <p>Local effects Site is not within a locally protected landscape, but it would be visible from the Trans Pennine Trail. The site is about 1.5 to 2km from Escrick and is visible from the A19 on the approach from the south. This area may be sensitive to change due to the proximity to Escrick Park. The site is 2km north of Riccall and would not affect its immediate setting.</p> <p>The site is currently countryside degraded by large scale hedgerow and hedgerow tree loss. It is in intensive agricultural use, but it is relatively unspoilt by development and within a landscape influenced by the Escrick Estate. Larger scale mineral extraction would represent a significant change. The existing brickworks site is isolated from other similar development and is not currently conspicuous from the A19 although it would be from the Trans Pennine Trail. Although hedgerows and hedgerow trees within the site that are shown on old maps have been largely lost, mature trees around an artificial water body, named Mount Pond, adjacent to a mount, remain (reflecting the former parkland status of this area), and their loss would be significant. They are shown on the 1st edition OS map.</p> <p>The site is not currently fully screened. Partial screening may be provided by hedgerows in some views but the countryside is relatively flat and open. There are blocks of woodland to the north west which would provide screening in views from that direction. There could be some mitigation through screen planting but this would interfere with current open views.</p> <p>Lighting may be visible from local receptors.</p> <p>In the short-term effects depend on the extent of operational area at any one time. Mitigation screen planting would change the character of the local area as it is presently open. A historic artificial pond and associated mature trees would be lost. The land is in Entry Level Stewardship and any benefits from this would be lost. In the medium term effects continue, depending on phasing and restoration proposals. In the long term effects are dependent on restoration. Restoration at original ground levels would have benefits.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Wet restoration might have benefits for landscape – e.g. the site could be a country park linked to the Trans Pennine Trail. There may also be some potential to enhance biodiversity along the Trans Pennine Trail.</p> <p>An evaluation of the impact on Escrick Conservation Area and the designed landscape of Escrick Park would be required.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to A19 with good access to key housing markets in York and Selby, though clay may go via another facility such as the Great Heck Block Making site (circa 20km away).</p> <p>Local effects The estimated mineral reserve at the site is 7.35 million tonnes of clay which would help support the housing and employment market and would also provide a limited number jobs in minerals extraction and indirectly in freight. Site does not, however, particularly support a low carbon economy. Overall, the extraction of minerals is not considered a sustainable industry as the economic boost and jobs provided at the site is limited to the lifetime of mineral extraction. Overall the allocation is considered to have a minor positive effect in the short and medium term with a neutral effect in the long term following closure of the site.</p> <p>There may be potential negative effects on the business park in terms of dust and setting, which may influence the locational choices of businesses (which may affect local jobs).</p> <p>Overall the allocation is considered to have a minor positive effect in the short and medium term with a neutral effect in the long term following closure of the site</p> <p>Plan level / regional / wider effects This site is likely to support markets outside of the Plan area in addition to local markets.</p>		✓		✓	+	+	0
13. Maintain and enhance	<p>Proximity of factors relevant to community vitality / viability Index of Multiple Deprivation (IMD) area is Riccall with Escrick. Not in most deprived 20%. Nearest significant communities: To the north of the site</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
the viability and vitality of local communities	<p>(around 2km north) is the village of Escrick and around 2km south is Riccall. Further out (all >2km) Stillingfleet lies to the west and Skipwith is to the South east and Kelfield to the south west (all Selby).</p> <p>Escrick and Riccall are designated Service Villages in the Selby Local Plan Core Strategy. Stillingfleet, Skipwith and Kelfield are all Secondary Villages. Secondary Villages are covered by Policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10". Service Villages 'have some scope for additional residential and small scale employment growth', albeit within development limits.</p> <p>Local effects This site will potentially provide some local jobs. Few tourism receptors other than Escrick Park Estate and the Trans Pennine Trail which may be affected by views of this site. There may be some negative effects on the business park in terms of dust and setting, which may influence the locational choices of businesses (which may affect local jobs).</p> <p>Plan level / regional / wider effects The Trans Pennine Trail is a nationally significant constraint. However, while views and experience may be affected in this area, use of this section of the Trail as a whole is unlikely to be affected.</p> <p>The will provide building materials that would directly support the housing market (bricks), with benefits for communities.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors The Trans Pennine trail goes between the two halves of this site within 10m of each half. It also runs immediately adjacent to the western side of the southern block of this site. A bridleway crosses the western part of the site and then follows the boundary. It turns into a footpath as it moves away from the site in the south-west corner.</p> <p>Local effects Users of the bridleway that crosses the site could experience major visual intrusion, as well as noise and dust and safety impacts and it is likely that this route would need to be diverted.</p> <p>Plan level / regional / wider effects Users of the Trans Pennine Trail could experience major visual</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>intrusion, as well as noise and dust impacts (including from any movement that might take place on the bridge across the Trans Pennine Trail). Although not a National Trail this is a nationally significant trans-regional route. Recreational tourists at Escrick Park Estate may also experience glimpses of this site without mitigation. Usage figures would be needed to more accurately predict effects on the Trans Pennine Trail.</p> <p>Mitigation could include screening as well as improvements and enhancements of the Trans Pennine Trail.</p>							
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> Several farm properties and a business park lie within 1km.</p> <p><u>Local effects</u> The main health risk from this site is expected to come from traffic which will increase next to the business park and the Trans Pennine Trail. Receptors along the A19 would experience 110 more vehicles per day. In addition dust, noise and odour may affect the business park and nearby residential receptors.</p> <p>Local users of the Trans Pennine Trail may find their section of this walking / cycling route changes significantly in terms of character and noise. However, at a regional scale, this effect is reduced as the trail traverses several industrial sites, which are a notable part of the character of the trail. Overall moderate negative until restoration takes effect.</p> <p><u>Plan level / regional / wider effects</u> The site may contribute to a cumulative effect further south around the A63 / A19 roundabout.</p>		✓		✓	m-	m-	0
16. To minimise flood risk and reduce the impact of	<p><u>Proximity to flood zones</u> About 60% of this site lies in Flood Zone 2 with about 35% being in Flood Zone 1 and less than 5% being in Flood Zone 3, but benefiting from existing defences. About 15% of the site is at risk from surface water flooding. This is mainly low risk (1:1000 (0.1%)) with small areas of medium risk (1:100 (1%)) and high risk (1:30 (3.33%)).</p>		✓	✓		-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
flooding	<p>The southern part of this site lies within a series of three 1km squares where >75% of their area has conditions which support Clearwater flooding. Although this is a higher risk area, flooding occurs mainly from consolidated aquifers (rather than superficial deposits like clay). The northern part of the site lies within two 1km squares where the proportion of the area which may support 'clear water' flooding is <25%.</p> <p>As a clay site the site is likely to extract below the perched water table (though groundwater flow on clay sites in Clearwater areas is likely to be negligible). Therefore groundwater flooding is unlikely to cause any significant problems. Perched water tables are an inherent characteristic of clay deposits.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'. Site is 'less vulnerable' (though landfill is more vulnerable, though this landfill would be inert (considered as WJP06)) so effects are considered to be minor. Present day Flood Zone 3 in the vicinity of the site is shown as being within an area benefiting from a flood defence with a design standard of 1:25 (4%). The level of protection is expected to reduce with climate change. A site specific flood risk assessment will be required which should confirm the impact of climate change on river flooding at this site. The flood risk assessment should also address the issues of draining surface water using SuDS, without causing additional flood risk. An emergency plan should be prepared in case of a flood event as this site is in Flood Zones 2 and 3. It should be noted that this site is being identified as a preferred area within which a site (WJP06) could be developed – any proposals should consider flood risk sequentially within the site.</p> <p>Plan level / regional / wider effects None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> This site would provide a large amount of brick building materials, which would support a changing population's desires to own or rent a range of housing types.</p> <p><u>Plan level / regional / wider effects</u> This effect could apply to a wider area than the Plan area.</p>		✓		✓	+	0	0
Cumulative / Synergistic effects¹⁸								
Planning context	<p>To the north of the site (around 2km north) is the village of Escrick and around 2km south is Riccall.</p> <p>Escrick and Riccall are designated Service Villages in the Selby Local Plan Core Strategy. Service Villages 'have some scope for additional residential and small scale employment growth', albeit within development limits. A review of the 2005 Proposals Map shows that no allocations or policies appear to conflict with this site.</p>							
Other Minerals and Waste Joint Plan Sites	This site also forms the boundary of WJP06 Escrick Brickworks.							
Historic minerals and waste sites	<p>Within 1km west is an onshore hydrocarbon field (PEDL) Licensed area. This includes a coal mine methane vent. WJP02 lies to the north.</p> <p>There is a non-hazardous landfill site immediately adjacent on the southern boundary of the site. Within 2km there are no historic landfill sites apart from the still active site adjacent (nearest are between 4 and 5km away). Housing and employment related development is recorded at objective 13.</p>							
Traffic / Air quality	There may be cumulative traffic / air quality effects with site allocations further south, e.g. at the junction of the A19 and A63.							

¹⁸ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Limitations / data gaps

No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on Heron Wood SINC and ancient woodland and protected species and any potential hydrological impacts on the Skipwith Common SAC site and SSSI.
- Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources
- Design of development and landscaping of site to mitigate impact on heritage assets ((including Escrick Park and Coach House, Escrick Conservation Area and the Escrick Park unregistered designed landscape) and local landscape features and their respective settings and the Trans Pennine Trail leisure route .
- Design to include a site specific flood risk assessment which should confirm the impact of climate change on river flooding at this site. The flood risk assessment should also address the issues of draining surface water using SuDS, without causing additional flood risk. An emergency plan should be prepared in case of a flood event as this site is in Flood Zones 2 and 3.
- Design to ensure protection of the aquifer.
- Maintenance of access to the A19 and appropriate arrangements for the crossing of the Trans Pennine Trail (TPT and Sustrans should be consulted.
- Appropriate arrangements for control of and mitigation of the effects of noise and dust.
- Appropriate restoration scheme (using opportunities for habitat creation, with well-informed justification for any wetland creation), noting that any proposal for restoration to agriculture should be tested for viability – e.g. relative to the depth of extraction and requirement for inert material.

MJP28 – Barnsdale Bar Quarry, Kirk Smeaton

Site Name	Site MJP28 (Barnsdale Bar Quarry, Kirk Smeaton, Selby) (XY:461919 440761)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of Magnesian limestone
Size	9.3ha
Proposed life of site	6 to 8 years for north-west area. Commencement in 2015 for north area and as being dependent on extraction of north area for north-west area
Notes	Proposed extension to existing quarry. A planning application (NY/2014/0393/ENV) to extract from MJP28 north area as an extension to the existing quarry was granted planning permission in June 2016. No planning application has yet been submitted for the MJP28 north-west area. No detailed design yet available for the north-west area..

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p><u>Proximity of international / national and local designations and key features</u> No Natura 2000 sites within 15km. 4 Sites of Special Scientific Interest (SSSIs) within 5km. 1.76km north - Brockadale SSSI; 3.79km north-east - Forlorn Hope Meadow; 4.35km north-west - Wentbridge Ings; 3.92km south-west - South Elmsall Quarry; just outside of search area 5.25km south-east - Owston Hay Meadows. No Sites of Interest for Nature Conservation (SINCs) within 2km within the Plan area, however Barnsdale Wood Local Wildlife Site lies circa 1.1km south-east of the site in the Doncaster Metropolitan Borough Council area. A Wakefield Local Wildlife Site (LWS) is also located 740m south at the A1 / A6201 Junction.</p> <p>A small patch of priority habitat deciduous woodland lies within MJP28 in the south east corner. 100m north</p>	✓	✓	✓		-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>there is a long strip of deciduous woodland with two additional patches 200m north-east and 233m north-west.</p> <p>Local effects Development of the site would result in the loss of broadleaved woodland priority habitat. Overall, some minor negative impacts are anticipated, beginning in the short term.</p> <p>In the medium and long term permanent impacts continue (e.g. loss of woodland). If low level restoration to agriculture is considered this will largely neutralise other impacts. There is some potential for minor positive impacts should the restoration to agriculture incorporate agri-environmental features (e.g. Magnesian limestone grassland). Planning application (NY/2014/0393/ENV) for 3.5ha in the northern area of the site proposes restoration to agriculture and nature conservation¹⁹.</p> <p>Plan level / regional / wider effects This site is considered unlikely to have a significant effect on Natura 2000 sites, SSSIs or SINCs/LWS as a result of the proximity to designated sites and type of development.</p>							?
2. To enhance or maintain water quality and improve efficiency of	<p>Proximity of water quality / quantity receptors The site is in a Nitrate Vulnerable Zone (groundwater and surface water). Site does not lie within or adjacent to a groundwater Source Protection Zone.</p> <p>This site falls within the Humber River Basin District and more or less midway between two River Basin Management Plan (RBMP) rivers. 'Went from Hoyle Mill Stream to Blowell Drain' lies 1.75km north has a</p>		✓		✓	-	-	0

¹⁹ Darrington Quarries Limited, 2014. Barnsdale Bar Quarry: planning application for a 3.5ha extension to existing limestone quarry including use of existing processing plant with restoration to a mixture of agriculture, nature conservation and woodland.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
water use	<p>current ecological quality of 'poor potential' and chemical quality of 'does not require assessment' (no clear visible connectivity). 'The Skell from Source to Ea Beck' lies 2km south and has a current ecological quality of 'moderate potential' and chemical quality of 'does not require assessment' (no clear visible surface connectivity). No RBMP lakes are present. The site lies within the Aire and Don Magnesian Limestone groundwater water body which has good quantitative quality / poor chemical quality. The current overall status is poor and the overall status objective is 'good by 2027'.</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 95% of the time.</p> <p>Local effects As this site lies in a NVZ, surface water and groundwater may be vulnerable during restoration phases of the project if fertilisers are used. Some nitrogen enrichment may come through traffic from site depositing nitrogen close to roads, though this is likely to be at insignificant levels for this type of site. As with all minerals sites there is a risk of water pollution from fuel spills however, such occurrences should be readily avoidable through good site management, however prior to mitigation being known a small scale risk to water quality cannot be ruled out.</p> <p>Overall the effect is predicted to be minor negative in the short to early medium term due to the size of the site, though with significant uncertainty due to insufficient information regarding on-site processes. In the medium to long term impacts are considered to be neutral as restoration is likely to revert back to agricultural use combined with nature conservation (as in the current application).</p> <p>In relation to this site, during the site assessment panels, the Environment Agency noted no showstoppers.</p> <p>Plan level / regional / wider effects There is the potential that pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by good site management.</p>					?	?	
3. To reduce transport miles and	<p>Proximity of transport receptors Site is close to the A1 and M62 giving it good access to key markets such as those in West Yorkshire and to the south of the Plan area (e.g. Wakefield, Leeds, Barnsley); Access: Confirmed as being existing Barnsdale Bar Quarry access along Long Lane onto Woodfield Road</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
associated emissions from transport and encourage the use of sustainable modes of transportation	<p>(approximately 115m east of Barnsdale Bar junction of A1 with A639/A6201).</p> <p>Light Vehicles: 18 two-way movements (as sourced from Application details NY/2014/0393/ENV); HGV Vehicles: 56 two-way movements (as sourced from Application details NY/2014/0393/ENV).</p> <p>Net change in daily trip generations: Light vehicles: 0; HGVs: 0. Traffic Assessment rating: yellow. Some potential minor to moderate adverse impacts are expected and mitigation measures may be required. Summary <i>“Unlikely to result in any significant traffic impacts but it is recommended that mitigation measures currently in place are continued if the planning application currently being considered is approved”.</i>²⁰</p> <p>Public Right of Way (PRoW): Immediate access to the site is not affected by a PROW although the Doncaster stretch of access is along a bridleway.</p> <p>Rail: 3.8km south. Nearest railhead: 10.6km north-east; Strategic Road: A1 junction with A6201 is circa 500m south; Canal / Freight waterway: River Don / River Don Navigation circa 10.2km south-east.</p> <p>Local effects The site has no direct connection / frontage to a public highway. However, the site would generate circa 74 two way vehicle movements per day. According to Highways Assessment the site is acceptable in terms of impact on the existing transport network. Sustainable transport is not likely to contribute to access to the site.</p> <p>As this site is an extension traffic levels are predicted to remain at present levels (though this SA recognises that without this extension traffic levels would drop). Currently vehicles turn right from Long Lane onto Woodfield Road and then the A1 slip road. The traffic assessment notes that: <i>“The A1 in this area is identified in the Highways England London to Leeds (East) routing strategy as presently suffering from capacity constraints and being of poor design standard. There is however a committed scheme for improvements between Redhouse and Darrington which should alleviate congestion issues in this area. Given the relatively low traffic generations of the site and that these are presently on the network, it is</i></p>							

²⁰ Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>unlikely that there will be any traffic impacts associated with the MJP28 proposal. It is however recommended that the existing routing agreement is continued should planning consent be granted for the current submission”.</i></p> <p>In our assessment a minor negative effect recognises that extending the traffic is not insignificant and that, to avoid impacts on the wider road network, mitigation will be needed in the form of continuing the existing traffic routing agreement. In addition, appropriate mitigation for the bridleway would be required, such as separation of traffic or diverting the bridleway (see also objective 14).</p> <p>Plan level / regional / wider effects The development of the site would result in an increase in traffic to and from the site, however this is expected to be relatively minor in relation to the wider Plan area.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within an Air Quality Management Area (AQMA), however Wakefield Council M1 AQMA for NO₂ lies 350m to the west. No hazardous substances consent sites nearby. Nearest dwelling appears to be 400m west at Glebe Farm although a hotel and motorway service station lie 250m west. A caravan site is also evident on aerial mapping circa 650m to the west.</p> <p>Local effects Traffic would be generated by this extension, which would extract and move approximately 175,000 tonnes of Magnesian limestone per annum during its operational period. Possible air pollution impacts from this could result from traffic fumes and the generation and deposition of dust (although dust suppression measures can effectively mitigate this impact), with a few possible receptors within possible range of minor impacts from the quarry and access. There are deciduous woodland priority habitats near to the site. However dust effects on these habitats are considered to be negligible.</p> <p>Plan level / regional / wider effects The site lies in close proximity to the A1 AQMA and local air pollution levels have clearly already been raised by vehicle emissions in the vicinity of the allocation site. It is likely that HGV's from site will utilise the A1 and will therefore contribute towards NO₂ levels in this AQMA. Close proximity to the strategic transport network makes it possible for site traffic to avoid larger areas of development. Overall impacts are considered to be minor to moderate negative in the short term to early medium term and neutral in the medium and long term following restoration.</p>		✓	✓	✓	m -	m -	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Land is Agriculture Land Classification (ALC) Grade 2 (very good) and constitutes 'best and most versatile land'. In terms of land stability, the development does not lie within or adjacent to a Coal Authority development high risk area</p> <p>Local effects A potential 9.3ha of best and most versatile land will be lost. Assuming soil would be retained (and correctly stored / looked after) for restoration, ultimately this land could be restored to its previous quality after a relatively short period of time. Minor negative impacts are therefore anticipated in the short to early medium term and neutral impacts are considered likely in the and long term with uncertainty depending on the restoration plan.</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development²¹ but could have a small scale effect on national food production capacity.</p>		✓	✓		-	-	0
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change An area of deciduous woodland priority habitat lies onsite. Various standalone trees and hedgerows lie along the site boundaries.</p> <p>Local effects An area of onsite woodland would be lost and further hedgerows and trees may be lost or degraded by access roads, etc. This would result in a loss of onsite carbon storage, an impact that is likely to be permanent unless an area of plantation is incorporated into the restoration plans.</p> <p>The site has good access to the strategic road network and the site is moderately proximal to key settlements. The use of existing infrastructure and facilities at an existing quarry is likely to help to reduce the carbon footprint of Magnesian limestone extraction in comparison to extraction from a new location. On</p>	✓		✓	✓	-	-	-

²¹ 9.3ha (assuming all land is BMV) annualised across the 8 year life of the site would be an annual 1.2ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 1.2ha loss would represent a 0.05% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>balance, minor negative effects are predicted to arise in the short to early medium term, and endure to the long term (as carbon can last in the atmosphere for several hundred years).</p> <p>Plan level / regional / wider effects The proposal for this site to be used for extraction of limestone is unlikely to significantly contribute to climate change. However there will be some negative effects as a result of carbon emissions from increased vehicle movements to and from site and the operation of machinery involved in extraction activities.</p>							
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity²² of a site Site is in Flood Zone 1. No habitat networks onsite or adjacent.</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 95% of the time.</p> <p>Local effects Although a block of priority habitat woodland would be lost as a result of this site, it is relatively isolated from other woodland patches so it is not considered that this site is likely to block ecological networks. Flooding risk is seen as negligible at this site which is classified as 'less vulnerable' in terms of its flood risk vulnerability classification.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
8. To minimise the use of resources and encourage their re-use and	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects See wider effects.</p> <p>Plan level / regional / wider effects This site will contribute to the need for limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted it may to a degree</p>	✓		✓	✓	-	-	-

²² Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
safeguarding	offset recycled materials that could potentially replace them. This impact can only be considered at the plan level rather than in relation to an individual site. All that can be said here is that 175,000 tonnes of virgin minerals per annum (up to 1.96 million tonnes total) would be extracted during the operational period, which will be unavailable for future use (unless recycled) (so permanently lost). This works against the SA objective, so it is scored negatively during the assumed quarry operational period.							
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> Although overburden and fines are likely to be generated by this site they are also likely to be useful in restoration so are unlikely to be taken off site. While indirectly the site may allow for continued extraction of primary resources, thus decreasing the opportunity for recycled and secondary aggregates to replace them (and reduce waste) there is still likely to be demand for primary aggregates and stone that can only be produced from virgin limestone (so this effect can only be considered by considering all limestone extraction together and cannot be attributed to a single site).</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> No conservation areas or listed buildings within 1km though Kirk Smeaton Conservation Area lies just outside the search area at 1.4km north-north-east. (Plan boundary is 380m away 546m east, and 590m to south – there may be conservation areas outside of the boundary). No scheduled monuments within 2km however 'Multivallate enclosure 550 yards (500m) west of Norton Mills' (ID1,004042) 2.25km north-east (just outside of search area).</p> <p>Named Designed Landscapes- Stapleton Park (HNY598) (Designed landscape - ornamental parkland) lies 2.475km north, Womersley Park HNY613) (Designed landscape - ornamental parkland) lies 3.525km north-east. Additionally Campsmount Park, Campsall Park and Garden of Special or Local Historic Interest lies c. 2.3km south-east and Owston Park lies c. 5km south-east in Doncaster Metropolitan Borough Council Area.</p> <p>Archaeological investigations within the eastern portion of this allocation site have revealed evidence for two phases of activity, an enclosure complex of late Iron Age date and field systems/ settlement of the Romano-</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>British period. Crop marks in the wider area, transcribed as part of the Crop marks of the Magnesian limestone national mapping programme commissioned by English Heritage, comprise an Iron Age or Roman trackway, boundary ditches and double-ditched rectilinear enclosure which suggest a Late Iron Age/Romano British agricultural landscape.</p> <p>In terms of Historic Landscape Character, the HLC Broad Type is 'enclosed land' and HLC Type is 'strip fields'. The North Yorkshire HLC project (database record HNY 652) records this allocation area as part of a much wider area characterised by fields defined by 's'-shaped, curved boundaries, mainly comprising hedgerows. There is quite a lot of variation in shape and size but the area is unified in being derived from the medieval strip open field systems. These fields have been enclosed from the strips worked in middle field and west edge field. There is quite a high degree of boundary loss but it still is a coherent medieval derived landscape. The legibility attribute value is classed as Significant. There are many elements of the previous historic character within the landscape forming prominent landscape features.</p> <p>Local effects There is high archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards, therefore the site would be likely to cause the loss of these archaeological remains if the site is extracted without mitigation. The archaeological impact will occur throughout the duration of extraction and excavation and will result in the total destruction of the archaeological remains. However, it is expected that investigation works required by the Joint Plan Policy D08 (Historic Environment) – <i>'mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.'</i> would result in an overall minor negative effect . An archaeological mitigation strategy should be put in place.</p> <p>In terms of historic landscape character, as this allocation site is a smaller part of a larger area of similar character type, the proposed extraction is unlikely to have a major impact upon the historic landscape character of the immediately surrounding area, although it is acknowledged that within the site the historic landscape character will become invisible as development will replace an earlier field system.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, Areas of Outstanding Natural Beauty (AONBs) or Heritage Coast within 10km. Site is within Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by policy SP18: <i>'The high quality and local distinctiveness of the natural and man-made environment will be sustained by....identifying, protecting and enhancing locally distinctive landscapes...'</i> Para 7.72 of supporting text states: <i>'designations of specific areas such aslandscape character assessments will be considered in future local plan documents and shown on the proposals map. Until such time, sites identified in the adopted SD Local Plan will continue to be afforded protection'</i>. The Site is in Green Belt for West Yorkshire. In terms of tranquillity the site is 'disturbed'.</p> <p>The relevant National Character Area (NCA) is Southern Magnesian Limestone. NY&Y LCA lists site as Magnesian Limestone Ridge: Moderate to high visual sensitivity (as a result of the prominent nature of the ridge and inter-visibility with adjacent Landscape Character Types'); High ecological sensitivity (as a result of the presence of nationally important, habitats scattered along the ridge, and SSSIs which encompass habitats sensitive to changes in land management) and High landscape and cultural sensitivity as a result of the nationally significant Neolithic and Bronze Age monuments, in addition to the predominantly intact landscape pattern which is sensitive to changes in land management. Site lies in the West Selby Ridge (Rolling Wooded Farmland) landscape type in the Selby Landscape Character Assessment.</p> <p>Local effects Although the site is in the Green Belt it would be likely to be compatible with the purposes of this designation provided restoration was relevant. However, the landscape in this area is in need of enhancement so extending the duration of impacts will not help. There is potential for increased visual intrusion as although the site is not very high at around 60 m Above Ordnance Datum (AOD) and is below the highest parts of the Magnesian Limestone Ridge, the Magnesian Limestone Ridge is relatively high compared with the adjacent Humberhead Levels which are not far above sea level. It is also close to the A1 which greatly increases the number of people who may potentially see the site. The visibility of the site from Middlefield Lane would be reduced due to landform.</p>	✓	✓	✓		m -	m -	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>In the short to early medium term impacts are considered to be moderate negative as soil stripping and storage, and plant movement, are likely to be most visible as they are at existing ground level, whilst restoration of the wider quarry may not be far advanced, and mitigation has not yet become as effective as it might be, moving to minor negative as mitigation becomes more effective and operations are at a lower level. Following restoration it is considered that although part of a larger quarry, the likely low level restoration scheme may not be easy to integrate into the adjoining countryside due to steep sides and rectangular outline, and there is likely to be a loss of productive farmland.</p> <p>There should be a presumption in favour of the restoration benefitting the local landscape.</p> <p>Plan level / regional / wider effects There is a cumulative landscape impact with other limestone quarries in the locality. There is some concern that the perception of this part of Selby District from the A1 might be affected.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is reasonably proximal to a number of major settlements / markets (e.g. Pontefract 8km, Doncaster 12km, York 12km, Castleford 12km, Wakefield 17km).</p> <p>Local effects The site is reasonably proximal to possible markets so will help support growth there. Limited numbers of jobs will be created, which may support a few workers in nearby areas (most likely existing workers at the parent site), while Magnesian limestone will supply the economy with an important building material The site does not represent low carbon development, however the use of an existing site with existing infrastructure and facilities is likely to reduce costs in comparison with developing a new site.</p> <p>Plan level / regional / wider effects Magnesian limestone extraction may indirectly contribute to future economic growth in the wider area.</p>		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of	<p>Proximity of factors relevant to community vitality / viability IMD Area is Whitley. Not within lowest 20%. Kirk Smeaton is the nearest village 1.4km north. This is a '<i>Secondary Village with defined Development Limits</i>'. These are covered by policy SP2 in the Selby Core Strategy: "<i>Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will</i></p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
local communities	<p><i>enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10'. Nearest dwelling appears to be 400m west at Glebe Farm although a hotel and motorway service station lies 250m west. A caravan site is also evident on aerial mapping circa 650m west.</i></p> <p>Local effects The site may support small numbers of jobs in nearby communities. Whilst the site would provide a source of Magnesian limestone which could aid future development, it is considered that the immediate settlements are unlikely to directly benefit in any significant way. Overall the effect in relation to this objective is considered to be neutral.</p> <p>Plan level / regional / wider effects None noted.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A short section of bridleway lies circa 110m west of the site. This links up to Crab Tree Lane which runs along the northern boundary of the site (this lane may therefore also be used as a bridleway). There is also a bridleway 500m to the south of the site. No national/regional routes lie within 500m.</p> <p>Local effects The site may diminish the experience of users of the bridleway in close proximity to the site as it will have a visual impact and may generate dust and noise and increased traffic levels in the local area. However, the experience of being on this bridleway is already likely to be disturbed by proximity to the A1 and the existing quarry adjacent to the allocation site. In the short to early medium term it is considered that impacts would be negligible to minor negative and in the medium and long term, it is considered that restoration to agriculture will result in a neutral effect.</p> <p>There is also a bridleway to the south of the site. However, there is currently a break in the bridleway network along Long Lane (route exists at south and north ends but is not a designated route in the middle section). A possible future bridleway along Long Lane could be instated as part of site mitigation.</p> <p>Plan level / regional / wider effects None noted</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> Kirk Smeaton is the nearest village 1.4km north. Nearest dwelling appears to be 400m west at Glebe Farm although a hotel and motorway service station lies 250m west. A caravan site is also evident on aerial mapping circa 650m west. Warren House Farm lies 960m south in close proximity to the quarry access track.</p> <p><u>Local effects</u> Traffic on roads is likely to continue to be experienced beyond the current quarry as a result of these extensions. However, the current quarry access route is less than 200m from the A1 and lies in excess of 200m from any residential buildings. The intervening distance between the site and the nearest settlements/individual properties means that noise and dust are unlikely to be of major significance though the site may play a minor role in preventing air quality objectives being achieved on the A1 AQMA. Effects are predicted to be minor to moderate negative in the short and early medium term and neutral following site restoration.</p> <p><u>Plan level / regional / wider effects</u> None noted</p>		✓	✓	✓	-	-	0
16. To minimise flood risk and reduce the impact of flooding	<p><u>Proximity to flood zones</u> Site is in Flood Zone 1.</p> <p>Strategic Flood Risk Assessment (SFRA) sequential test result – this site is suitable.</p> <p><u>Local effects</u> Flooding risk is seen as negligible at this site which is classified as ‘less vulnerable’ in terms of its flood risk vulnerability classification. A Flood Risk Assessment will be required as part of a planning application.</p> <p><u>Plan level / regional / wider effects</u> None noted</p>					0	0	0
17. To address the needs of a changing population in a	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> The site would make a small contribution to self-sufficiency in the supply of Magnesians</p>		✓	✓		+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
sustainable and inclusive manner	limestone and may also support markets outside of the Plan area. Plan level / regional / wider effects As above, the supply of Magnesian limestone may support markets outside of the Plan area.							
Cumulative / Synergistic effects²³								
Planning context	Kirk Smeaton is the nearest village 1.4km north. This is a 'Secondary Village with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: " <i>Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10</i> ". Upton in Wakefield is 1.7 km west. Upton is defined as a Local Service Centre in the Wakefield Core Strategy (" <i>in local service centres the scale of development will be appropriate to the size of the settlement....</i> ") ²⁴ . Site does not conflict with any allocations. Some very limited housing development at Kirk Smeaton and Upton / Elmsall may slightly raise future traffic levels. Planning permission will only be given for development appropriate to the Green Belt or the open countryside, the design of the site would need to ensure that the purposes of the Green Belt designation are not compromised and maintain high environmental standards.							
Other Minerals and Waste Joint Plan Sites	Within 5km lie another 3 MWJP sites: MJP26 adjacent to south and MJP29 2km north-west. WJP10 is 2.2km north-west. There is 1 current site marked on the Doncaster Minerals map in the Doncaster Core Strategy, circa 500m south of the site.							
Historic minerals and waste sites	There is a group of historic landfill sites about 1.6 to 2km south west in Wakefield District, while there is a historic landfill about 2km south in Doncaster. Waste has also been handled at Barnsdale Bar (and the site is still listed as authorised). To the north Smeaton Limeworks (part of WJP10) has also seen historic landfilling.							
Air Quality	In terms of air pollution impacts on receptors and the nearby AQMA, there is the potential for cumulative impacts if other quarries and developments use the same route however it is not considered that the cumulative impact would be raised above minor to moderate negative in the short to early medium term.							

²³ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

²⁴ Wakefield Council. Local Development Framework Core Strategy [URL: wakefield.gov.uk/Documents/planning/planning-policy/local-plan/core-strategy/core-strategy.pdf]

Limitations / data gaps

No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues
- Design to mitigate impact on best and most versatile agricultural land
- Design of development and landscaping of site to mitigate impact on: heritage assets (archaeological remains and Conservation Area), Green Belt and their respective settings and local landscape features,
- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate
- Design to ensure protection of the aquifer
- Design to include suitable arrangements for public rights of way and associated mitigation, as appropriate
- Maintenance of appropriate standard of access
- Appropriate arrangements for control of and mitigation of the effects of noise and dust, etc.
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt and a Locally Important Landscape Area

MJP29 – Went Edge Quarry, Kirk Smeaton

Site Name	MJP29 Went Edge Quarry, Kirk Smeaton, WF8 3JS, Selby (XY: 449955 416992)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of limestone
Size	5.6 ha
Proposed life of site	15 Years
Notes	Possible restoration: Industrial estate relocated into base of quarry (subject to obtaining planning permission). This is a proposed extension to area of extraction in existing quarry.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features No Natura 2000 sites within 15km. In terms of Site of Special Scientific Interest (SSSIs) Brockadale is circa 40m to north. Wentbridge Ings 2.3km north-west. Forlorn Hope Meadow 4.14km east.</p> <p>Sites of Interest for Nature Conservation (SINC) sites: SE51-01 Brockadale, Wentbridge (potential SINC) is about 45m north west at its nearest point (though the SINC is divided across 3 distinct parts, with additional areas 250m north-west and circa 300m north. Downward slope to site may suggest some functional connectivity. In terms of priority habitats northern and western boundaries of site are adjacent to upland</p>		✓	✓		-	-	-

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>mixed woodlands.</p> <p>In terms of ecological networks the Site is outside of the EHN (though edge of core woodland comes within circa 20m of northwest corner of site. All of site in WY12 River Went Corridor (Living Landscape) of which the Yorkshire Wildlife Trust managed Brockadale SSSI is a core part. All of Site is in GI Network (SO34 Went Sub-regional).</p> <p>Local effects There are unlikely to be any impacts on Natura 2000 sites due to distance. However, opening up new areas adjacent to an existing site may affect local hydrology with an impact on water levels (if extraction takes place below the saturated zone) or pollutant loads (e.g. from spills on site) in Brockadale if there is a hydrological relationship²⁵. However a recent application for a smaller sub area of this site suggests that groundwater is recharged in lower lying land to the west of Wentbridge and that extraction at that site would be above the saturated zone²⁶. However, dust deposition may also have an impact on the SSSI, smothering leaves of trees or ground flora affecting the productivity of the site. There may also be impacts on protected species, due to favourable features in and around the site. There may also be tree / hedgerows lost as part of the proposal. There may be some benefits to parts of Brockadale later in the assessment period as the focus of quarrying shifts southwards (but this will to a degree be lessened as new areas of Brockadale come within range of possible impacts).</p>					?	?	?

²⁵ Natural England's OLD (Operations Likely to Damage) cites 'the changing of water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes)' as a possible source of impacts in Brockadale (see sssi.naturalengland.org.uk/Special/sssi/old/OLD1001489.pdf - URL is no longer available).

²⁶ Went Edge Quarry, 2014. Environmental Statement Non-Technical Summary.

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>In the longer term there exists the potential to restore or enhance some key habitat features (for the existing Went Edge Quarry calcareous grassland restoration has been mooted in the past), though the proposal for a possible industrial estate may indirectly bring its own problems, (see also WJP10). Integrating the restoration into the existing SSSI would be easier if the existing industrial estate were not relocated. Mitigation is likely to be possible however.</p> <p><u>Plan level / regional / wider effects</u> The Site is unlikely to have a significant effect on designated nature conservation sites and biodiversity in the wider Plan area.</p>							

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is in a Nitrate Vulnerable Zone (groundwater and surface water). Site does not lie within or adjacent to a groundwater Source Protection Zone.</p> <p>Site is in Humber River Basin Management District. 160m north is 'heavily modified' River Basin Management Plan (RBMP) river 'Went from Hoyle Mill Stream to Blowell Drain'. Current ecological quality: poor potential / Chemical quality: 'does not require assessment'. The current overall potential is 'poor' but the overall status objective is 'good by 2027'. Possible connectivity due to severe downhill slope between site and river. No RBMP lakes in vicinity. Groundwater: Aire and Don Magnesian Limestone waterbody (Principal Aquifer) - good quantitative quality / poor chemical quality, current overall status = poor, overall status objective 'good by 2027'.</p> <p>Site is in Don and Rother Catchment Abstraction Management Strategy (CAMS) in an area where water is available at low flows (at least 95% of the time). For groundwater, site is in North Magnesian Limestone which has restricted groundwater availability.</p> <p>Local effects The site is physically separated from the River Went and pollution ingress across the surface is considered insignificant. However, the groundwater relationship between the site and the River Went is unknown (though this is thought not to be significant given the findings of recent environmental investigations on part of the site as functional linkages between the river and groundwater recharge bypass this site. In the longer term restoration might also have impacts if an industrial estate changes the hydrology or promotes run off into the SSSI, though this seems less likely than its current more elevated position so the impact is uncertain / positive. Environmental permits will be required for any discharges.</p> <p>Plan level / regional / wider effects There is the potential that run-off or leachate pollution from the site could pass into the wider water environment via surface and groundwater pathways, however as with local effects, it is considered these risks would be adequately controlled.</p>	✓	✓		✓	-	-	+
							?	?

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is close to the A1 giving it good access to key markets such as those in West Yorkshire and to the south of the Plan area (e.g. Wakefield, Leeds). Access: Confirmed as being the existing Went Edge Quarry access onto Went Edge Road (C344) approximately 290m east of the A1(M) south-bound junction at Wentbridge; Light vehicles: an estimate of 6 two-way movements; HGV Vehicles: 100 two-way movements (based on past output).</p> <p>Net change in daily vehicle trip generations: Light vehicles: 0; HGVs: 0; Transport assessment rating: yellow. <i>Some potential minor to moderate adverse impacts are expected and mitigation measures may be required. Summary "Unlikely to result in any significant traffic impacts but mitigation measures required regarding highway maintenance and signage from comments by NYCC on current planning application".</i></p> <p>Public Right of Way (PRoW): Immediate access to the site not affected by PRoW. The site is not likely to generate significant transport demand.</p> <p>Rail: 4km east; Nearest known railhead is 10.5km east; Strategic Road: A1 is 290m west; Canal / Freight waterway: 6.4km north (Aire and Calder Navigation).</p> <p>Local effects Site would generate 100 two way HGV movements per day. However, as this site is an extension to an existing site the trip generations of the overall site would remain at similar levels to present (though this assessment recognises that the period of time that vehicles are on the road will also be prolonged and without this extension those trip generations would cease).</p> <p>According to the Joint Plan traffic assessment "<i>The A1 in this area is identified in the Highways England London to Leeds (East) routing strategy as presently suffering from capacity constraints and being of poor design standard. There is however a committed scheme for improvements between Redhouse and Darrington which should alleviate congestion issues in this area. Given that the trip generations of the overall site would remain at similar levels to present with the development in place, it is unlikely that there will be any traffic impacts associated with the MJP28 proposal although..... minor mitigation measures relating to highway maintenance and signage are likely to be required</i>".</p> <p>According to the Highways Assessment this site is acceptable in terms of impact on the existing highway</p>		✓		✓	-	-	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>network. However, the site does not include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway (so improvements will be needed). Sustainable travel modes are not likely to contribute to the site.</p> <p>Overall minor negative impacts are predicted as a limited number of probably relatively short, though not insignificant, distance journeys are likely to continue to be made via non-sustainable modes while mitigation measures will also be required. A Traffic Assessment is required.</p> <p>Plan level / regional / wider effects The development of the site would result in an increase in traffic to and from the site, however this is expected to be relatively minor in relation to the wider Plan area.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors Site is not within a Hazardous Substances Consultation Zone. Not within Air Quality Management Area (AQMA), however Wakefield Council has an AQMA along the A1 (circa 450m to west) for NO₂. Cridling Stubbs lies 975m east, Knottingley lies 1.2km north. To the south lies Scombeck Farm (850m south), Keepers Lodge (assumed residential 820m south), Beech House Farm (950m south) and 2 unidentified buildings (900m south).</p> <p>Local effects Dust might be an issue at the site in dry conditions, which may affect receptors such as Brockadale SSSI, though human receptors are likely to be out of range. Dust may play a role in smothering vegetation, though rain will help wash dust off to some extent. In the longer term impacts to air are dependent on users if the site becomes an industrial estate.</p> <p>Plan level / regional / wider effects The continuation of traffic associated with minerals extraction is likely to generate traffic on local roads. This is unlikely to affect local human receptors away from the strategic road network given the proximity of the A1. However the site's traffic would make a moderate continued contribution to the AQMA (when considered in combination with traffic from the A1) which affects a number of human receptors along its route. This contribution could be mitigated to some extent (e.g. through good vehicle management / efficiency).</p>		✓		✓	-	-	-
								?

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Site is on Grade 2 Agricultural land (Very good quality). In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local Effects A small amount of best and most versatile land will be lost, potentially 5.6ha. If the site is restored to an industrial estate this will be lost forever.</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development²⁷ but could have a small scale effect on national food production capacity.</p>	✓		✓		-	-	-
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Woodland lies adjacent to the site (Brockadale) which is part of a wider living landscapes area.</p> <p>Local effects Some trees / hedgerows may be lost, and it is possible that dust would reduce productivity in a small area of Brockadale. While the latter 2 impacts are very small scale, and at the very low end of the significance scale, a minerals output of 600,000 tonnes per year would generate not insignificant tonne-km freight journeys (it is presumed that this level is for the Went Edge Quarry as a whole). The impact is thus seen as permanent minor to moderate negative with an uncertain long term impact dependent on restoration.</p> <p>Plan level / regional / wider effects Traffic from the site would generate carbon, though the site is well placed in relation to the strategic road network and access to markets in the south of the Plan area and beyond.</p>	✓		✓		m-	m-	-
								?

²⁷ 5.6ha (assuming all land is BMV) annualised across the 15 year life of the site would be an annual 0.4ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.4ha loss would represent a 0.01% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p><u>Proximity of factors relevant to the adaptive capacity²⁸ of a site</u> Site is in Flood Zone 1. Only very small areas of surface water flooding affect the site (less than 5%). Brockadale is part of a wider living landscapes area.</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 95% of the time.</p> <p><u>Local effects</u> Although dust deposition may occur and uncertain effects on the hydrology may affect Brockadale, this is unlikely to be a significant enough effect to disrupt the wider ecological network (Living Landscape / England Habitat Network). Flooding is not a particular issue for this site.</p> <p><u>Plan level / regional / wider effects</u> As above, dust deposition is unlikely to be significant enough to disrupt the wider ecological network.</p>					0	0	0
8. To minimise the use of resources and encourage their re-use and safeguarding	<p><u>Proximity of factors relevant to the resource usage of a site</u> No spatial factors identified.</p> <p><u>Local effects</u> 600,000 tonnes of virgin minerals would be extracted each year, which will be unavailable for future use (unless recycled). This works against the SA objective, so it is scored negatively overall. The permanent impact would cease in the long term.</p> <p><u>Plan level / regional / wider effects</u> This site will contribute to the need for limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted it may to a degree offset recycled materials that could potentially replace them. However, this impact can only be considered at the plan level rather than in relation to an individual site.</p>	✓		✓		--	--	--

²⁸ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> The site would not deal with waste and no details are provided of how waste would be managed on site.</p> <p><u>Plan level / regional / wider effects</u> The site may have an indirect negative impact on the prioritising the management of waste up the waste hierarchy as a result of providing virgin sand and gravel and reducing the need to recycle sand and gravel from other locations.</p>		✓		✓	0	0	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and	<p><u>Proximity of historic environment receptors</u> No conservation areas lie within 1km but Kirk Smeaton Conservation Area, just outside of search area, is 1.4km east. Wentbridge in Wakefield District also contains a conservation area. 3 listed buildings are located within 1km. These are: 1 listed building 450m to west (Wentbridge viaduct carrying bypass over valley of river Went) Grade II. 1 listed building 750m north-west (Church of St. John the Evangelist) Grade II. 1 listed building 950m west (Went Bridge) Grade II.</p> <p>The area has recently been subject to archaeological evaluation by geophysical survey and trial trenching which has identified evidence of archaeological remains in the form of boundary ditches of a possible coaxial or brickwork field system that existed on the site of late Iron Age and Romano-British date. The site</p>	✓		✓		-	-	-

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
character	<p>also has potential for surviving evidence of settlement of this period. The certainty of this is high due to the results of the archaeological evaluation and the results of geophysical survey and aerial photographic transcription in the immediately adjacent areas.</p> <p>The North Yorkshire HLC project (database record HNY 652) records this as part of a much larger area characterised by fields defined by 's-curved', mainly hedgerow, boundaries. There is quite a lot of variation in shape and size but the area is unified in being derived from the medieval strips. These fields have been enclosed from the strips worked in middle field and west edge field. However, as this allocation site is a small part at the northern edge of a much larger area of similar character type, the proposed extraction is considered unlikely to have a major impact upon the historic landscape character of the immediately surrounding area although it is acknowledged that within the site the historic landscape character will become invisible as development will replace an earlier field system.</p> <p>Local effects From a heritage perspective there are no likely impacts on the Wentbridge Conservation Area. The archaeological impact will occur throughout the duration of extraction. It is assumed that excavation will result in the total destruction of the archaeological remains. As archaeology is a finite, irreplaceable resource, the impact will therefore be significant. However, this is a small site so impacts are minor. It is expected that investigation works required by the Joint Plan Policy D08 (Historic Environment) – <i>'mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.'</i> would result in an overall minor negative effect. An archaeological mitigation strategy should be put in place. Some uncertainty until an archaeological assessment is carried out.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?
11. To protect and enhance the quality and character of landscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, Areas of Outstanding Natural Beauty (AONBs) or Heritage Coast within 10km; No Inheritance Tax Exemption land within 5km.</p> <p>Site is in Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by Policy SP18:</p>	✓	✓	✓	✓	-	-	-

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
and townscapes	<p><i>'The high quality and local distinctiveness of the natural and man-made environment will be sustained by:....identifying, protecting and enhancing locally distinctive landscapes...'</i>. Wakefield MDC does not have local landscape designations but the Went Valley (Brockadale within NYCC) is designated as a Wildlife Habitat Network.</p> <p>Site is in NYCC Landscape Character Assessment as Magnesian Limestone Ridge: Moderate to high visual sensitivity (as a result of the prominent nature of the ridge and inter-visibility with adjacent Landscape Character Types'); High ecological sensitivity (as a result of the presence of nationally important habitats scattered along the ridge , and SSSIs which encompass habitats sensitive to changes in land management). High landscape and cultural sensitivity as a result of the nationally significant Neolithic and Bronze Age monuments, in addition to the predominantly intact landscape pattern which are sensitive to changes in land management. Site is defined as West Selby Ridge (rolling wooded farmland) in the Selby LCA.</p> <p>In terms of tranquillity landscape is 'disturbed'. Site is in West Yorkshire Green Belt.</p> <p>Local effects The landscape in this area is in need of enhancement so extending impact will not help. There is some concern that the site will work against the purposes of the Green Belt if the existing industrial estate is re-located within the quarry. Although the site itself is relatively high (in comparison with the nearby Humberhead Levels), it is below the highest parts of the Magnesian Limestone Ridge, and will not appear on the skyline.</p> <p>Vehicle movements could affect tranquillity as although there are already vehicle movements, the extension could significantly increase the timescale over which the disturbance will be experienced.</p> <p>In the short term impacts will be small scale and of local significance. In the medium term. The quarry will be at its maximum extent but mitigation should also be effective. A large void will be present within the LILA. It will have a low level restoration scheme which will not be easily integrated into the local countryside due to its depth and poor relationship with the adjoining incised river valley. Productive farmland will have been permanently lost. Significance depends on whether the industrial estate proposal remains.</p>							

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>There may be some screening lost if the existing industrial estate is moved or as a result of further quarrying. Further vegetation / bunding may be required, but ultimately it is difficult mitigate the impact left through quarrying.</p> <p>There is a cumulative impact on landscape arising from the range of uses on site / ad hoc development taking place over a long period of time. A possible cumulative risk also comes from quarrying and other uses nearby.</p> <p>Plan level / regional / wider effects The site is screened in the wider landscape by woodland, and by topography. There could be some views from the A1.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to the A1 giving it good access to key markets such as those in West Yorkshire and to the south of the Plan Area (e.g. Wakefield, Leeds).</p> <p>Local effects This site extraction would ultimately result in 1,999,000 tonnes of limestone being made available to the market. This would make a significant contribution to the building sector by helping to boost supply of a key building material. It would also directly support jobs in extraction and freight. Locating an industrial estate in the base of the quarry in the long term may create additional jobs and would ensure some businesses have good access to the A1 (though these may be the same businesses as currently exist within the Smeaton Industrial Park).</p> <p>Plan level / regional / wider effects Creation of jobs would support the wider economy.</p>		✓	✓	✓	m +	m +	+
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD rank- 16,354 - Not in most deprived 20%,Whitley Ward. To the north and east of the site is Selby District with Kirk Smeaton the nearest settlement around 1.5km to the East, and Womersley about 3.5km away to the north east (both are Secondary Villages in the Selby Local Plan).</p> <p>To the west of the Site lies Wakefield District. Only Wentbridge lies within 2km in Wakefield. Kirk Smeaton is a secondary village (allow limited development within Development Limits), Wentbridge is not in the</p>		✓	✓		+	+	+

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>Wakefield Settlement Hierarchy though is constrained by Green Belt policy.</p> <p>Local effects Most communities are too distant to experience significant amenity impacts that may impact on tourism etc. and the sites proximity to the A1 generally avoids community receptors. The site will continue to provide some job opportunities for local communities. In the longer term the industrial estate will continue to provide jobs, though these may be the same as the existing industrial estate.</p> <p>Plan level / regional / wider effects None noted.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A public right of way (Footpath: 35.43/2/1) adjoins a possible access road 130m west of site. This intersects a further footpath (35.43/9/1) running north south 40m to the west. A further footpath running through Brockadale SSSI (Footpath 35.43/1/2) lies, shielded by trees, 182m north.</p> <p>Local effects Users of the footpath to the west may experience an increase in dust and noise and effects on visual amenity (until the site is screened) and will experience continued heavy goods vehicles on the intersecting road. These users will already be used to noise and fumes coming from the A1 so the footpaths are already highly disturbed. Nonetheless, the quarry is close to a popular route through Brockadale SSSI, though this would be shielded from view (and probably noise) by trees. There is possibly a negative visual / noise impact on the route across the field to the west until the site is screened. They will experience continued heavy goods vehicles on the intersecting road as a result of this proposal. These users will already be used to noise and fumes coming from the A1 so the footpaths are already highly disturbed. Nonetheless, impacts are rated minor negative.</p> <p>Plan level / regional / wider effects Using this site for extraction and subsequent industrial use is unlikely to have significant effects on opportunities for recreation, leisure and learning for the wider area.</p>		✓	✓	✓	-	-	-
15. To protect and improve the wellbeing,	<p>Proximity to population / community receptors / factors relevant to health and wellbeing No schools or health centres within 1km. Nearest property is Rectory Farm and nearest settlement is Kirk Smeaton</p>		✓		✓	-	-	-

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
health and safety of local communities	<p>1.5km away to the east).</p> <p>Local effects No direct effects predicted. However, continued traffic from this site may help work against air quality objectives associated with the nearby A1 AQMA, which has the potential to adversely affect properties close to the A1. Although the problem is associated with far greater volumes of traffic, so the actual effect of this quarry is small, it should not be discounted. The effect of traffic from the industrial estate is likely to be less.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1. Only very small areas of surface water flooding affect the site (<5%).</p> <p>Strategic Flood Risk Assessment (SFRA) sequential test result – this site is suitable.</p> <p>Local effect Flooding is not a particular issue for this site. The effects of locating the industrial estate in the base of the quarry would need to be assessed as part of any subsequent planning application so there is some uncertainty related to the impact of this. A Flood Risk Assessment would be required which should include consideration of surface water attenuation from the industrial estate (e.g. through SUDS).</p> <p>Plan level / regional / wider effects None noted</p>					0	0	0
17. To address the needs of a changing population in a sustainable and inclusive	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a significant contribution to self-sufficiency in the supply of Magnesian limestone and may also support markets outside of the Plan area. The industrial estate would also support jobs.</p> <p>Plan level / regional / wider effects As above, the extraction of Magnesian limestone may also support</p>		✓	✓		m +	m +	+

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
manner	markets outside of the Plan area.							

Cumulative / Synergistic effects ²⁹	
Planning context	To the north and east of the site is Selby District with Kirk Smeaton the nearest settlement around 1.5km to the east. To the west of the Site lies Wakefield District. Only Wentbridge lies within 2km in Wakefield. Kirk Smeaton is a secondary village (allow limited development within Development Limits), Wentbridge is not in the Wakefield Settlement Hierarchy though is constrained by Green Belt policy. No site allocations in other plans conflict with this site (though site is in the Green Belt marked in these plans)
Other Minerals and Waste Joint Plan Sites	Other Joint Minerals and Waste Plan Sites: WJP10 is adjacent and MJP 28 is 2km south, MJP26 is 2.8km south-west, MJP27 is 4.4km north-west.
Historic minerals and waste sites	To the immediate north Smeaton Limeworks (part of WJP10) has seen historic landfilling. Stapleton landfill site lies 2km north-east (1960s). Kellingley Colliery extraction area is 1.3km north-east at its nearest point.
Air quality	A cumulative effect is associated with the pollution from this site and pollution from the A1 AQMA. The site is predicted to make a small but perhaps not insignificant contribution.
Landscape	There is a cumulative impact on landscape arising from the range of uses on site / ad hoc development taking place over a long period of time. A possible cumulative risk also comes from quarrying and other uses nearby.

²⁹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Limitations / data gaps

No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues
- Design to mitigate impact on best and most versatile agricultural land
- Design of development and landscaping of site to mitigate impact on: heritage assets (archaeological remains) and Green Belt and their respective settings, a Locally Important Landscape Area and local landscape features and users of the A1
- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate
- Design to ensure protection of the aquifer
- Improvements to access
- Appropriate arrangements for control of and mitigation of the effects of noise and dust, etc.
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt and a Locally Important Landscape Area

MJP23 – Jackdaw Crag, Stutton

Site Name	Site MJP23 Jackdaw Crag Quarry, Moor Lane, Stutton, Tadcaster (XY: 446326 441400)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of Magnesian limestone as proposed extension to existing quarry
Size	6ha
Proposed life of site	10 years
Notes	Possible restoration: No detailed design yet, but would be low level restoration to agriculture similar to the existing quarry approved scheme

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	Proximity of international / national and local designations and key features 11km north-west lies Kirk Deighton Special Area of Conservation (SAC). At its nearest point this cluster of 3 locations is 1.37km away from Stutton Ings Site of Special Scientific Interest (SSSI) (south-east of site). In terms of SINC sites 1 SINC – SE44-15 Crag Wood – is 160m north of the site. This SINC is currently un-surveyed. There are also further SINC Sites within 2km including Lords Quarry (SE44-14) 1.1km north and a deleted SINC – Wood near Wingate Hill Farm (SE44-16) 630m east. Further east (all over 1 km) lie 7 further SINC Sites (SE44-07, SE44-17, SE44-09, SE44-21, SE44-05, SE44-11 and SE44-18) while to the south lie SE43-22, SE44-19 and	✓	✓	✓	✓	-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>potential SINC SE43-27 each over 1km away. A patch of the priority habitat deciduous woodland (i.e. Crag Wood) is immediately adjacent to easternmost location (possible overlap - may be mapping anomaly). 120m east, 190m north, 600m east, 400m west there are more deciduous woodland patches. The site is within regional GI corridor S19 'Limestone Ridge', which is supported by policy SP12 in the Selby Core Strategy.</p> <p>4 private airfield consultation zones affect this site as well as one Ministry of Defence (MoD) 13km consultation buffer (although this site is at the outer edge of that buffer).</p> <p>Local effects Natural England's SSSI Impact Risk Zones show that quarry sites have the potential to cause impacts in the vicinity of MJP23. The western part of the site is in a zone where quarries and liquid discharges >5m³/day could potentially cause impacts. However, Stutton Ings is not connected to this site by any water courses or floodplain and the undulating terrain between the site and the SSSI is likely to prevent impacts such as dust and noise to a large degree. Crag Wood SINC on the other hand will become totally isolated from surrounding habitats if the eastern extension goes ahead as it has been left elevated with sheer cliffs on 3 sides that make connectivity for species very difficult. From an ecological point of view the value of the site as an isolated unit is questionable. There will also be the loss of hedgerows and features of importance to farmland birds, foraging bats and badger from the excavation of these plots.</p> <p>Impacts from this quarry site could be cumulative with the existing Jackdaw Quarry site, particularly on Crag Wood (though through co-ordinated restoration there could be long term benefits). In the short term impacts would be most associated with the loss of on-site habitats, while in the medium term impacts upon Crag Wood SINC are expected. The longer term is uncertain as much will depend on restoration, however biodiversity led restoration has been favoured in the past and there is significant opportunity for this in the future (though there would be a need to consult the MoD over this).</p>							+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>There may be some potential to create a 'bridge' across quarried areas to Crag Wood to leave it less isolated ecologically. Elsewhere, restoration to calcareous grassland with thin soils would be preferable to more difficult restoration to arable.</p> <p>Plan level / regional / wider effects The site is within a regional GI corridor, so it is possible that restoration to green infrastructure might help consolidate a strategic network. A core woodland patch of the England Habitat Network has been identified as overlaying the north-west corner of the eastern area of the site (next to Crag Wood), which could indicate that further woodland development through restoration may be beneficial.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Site is in a Nitrate Vulnerable Zone (groundwater and surface water). About 3 quarters of the site (including all of the southern part) lies in Source Protection Zone (SPZ) 1, with the remainder in SPZ 2.</p> <p>According to the Humber River Basin Management Plan (RBMP), the nearest section of river is Cock Beck Catchment (tributary of River Wharfe). This has moderate ecological status. However, there is no visible connectivity between the site and this watercourse. In terms of groundwater the site lies in a groundwater unit called 'Wharfe Magnesian Limestone' which has an overall status of poor. The RBMP Groundwater Status Objective is good by 2027. The site is also in the Wharfe and Lower Ouse Catchment Abstraction Management Strategy (CAMS). Here water is available at low flows (at least 70% of the time), with Cock Beck having 'water available for licensing'. The site is not in an area of restricted or no groundwater availability.</p> <p>Local effects Although it is possible that quarrying could disrupt groundwater flow there is no restriction on groundwater availability. However, the location of parts of the site within Groundwater SPZ 1 and 2 means that there is the potential for the aquifer to disrupt water flow to a water source. According to Environment Agency GP3 guidance the Agency would object to quarries in SPZ 1, and object if there is an unacceptable risk in SPZ 2. Quarrying can deplete the aquifer, for instance by discharging groundwater to the surface during dewatering (though the fact that quarrying is likely to be above the saturated zone makes this unlikely) or depriving the aquifer of its protective layer. Of particular risk will be fuel spills at these sites, which are potentially manageable through mitigation, monitoring and permitting. There may also be issues with materials used to restore the site. Limitations and mitigation requirements will be greatest in SPZ 1 which may require that extraction only be allowed above the saturated zone.</p> <p>In summary, without mitigation impacts are major negative in the short and medium term and unknown in the longer term. Mitigation would be required so that any pathways for migration of pollutants might be reduced.</p> <p>Plan level / regional / wider effects Traditionally there have been some reservations about</p>		✓	✓	✓	--	--	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>quarrying in this area due to potential contamination of groundwater which may affect the brewing industry, though the fact that quarrying is likely to be above the saturated zone mitigates this issue to a degree.</p> <p>There is the potential that pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by the environmental permitting system during operation.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of	<p>Proximity of transport receptors Site is reasonably proximal to a number of major settlements / markets (e.g. Tadcaster 1km, York 12km, Wetherby 8km, Leeds 10km). Access: Confirmed as being the existing Jackdaw Crag quarry access onto Moor Lane (C305), approximately 35m south of the bridge over A64 which leads to the A659 & the A64; Light vehicles: Confirmed that 6 two-way movements (as sourced from Application details NY/2014/0046/73); HGV Vehicles: Confirmed that 90-334 two-way movements (as sourced from Application details NY/2009/0523/ENV).</p> <p>Net change in daily vehicle trip generation: Light vehicles: 0; HGVs: 0. Transport assessment</p>		✓		✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
transportation	<p>rating: yellow. Summary “<i>Pending any further comments by NYCC Highways on the current planning application, it is understood that there are concerns relating to visibility at the site entrance and HGV parking with appropriate mitigation measures required. Traffic heading east from the site does need to pass through the centre of Tadcaster however the volume of HGVs making this movement is not expected to change and thus the traffic impacts as the site are expected to remain similar</i>”.</p> <p>Public Right of Way (PRoW): Access is not affected by a PRoW.</p> <p>Rail: Nearest rail line 5.6km east (Ulleskelf station) / nearest railhead is 11.3km south; Strategic Road: A64 adjacent / A64 is agreed timber route; Canal / Freight Waterway: Selby Canal is 17km south-east.</p> <p>Local effects The site would generate up to 340 vehicle movements per day, albeit that HGV movement is acceptable onto highway and markets are reasonably accessible via the nearby A64. According to the Joint Plan traffic assessment “<i>as part of the current planning application for the site an updated Transport EIA chapter was submitted in 2014. The chapter outlines that approximately 50% of traffic from the site is expected to travel westbound on the A659 and onto the A64 and A1 with 50% travelling eastbound through Tadcaster. According to traffic data provided in the updated EIA, HGV traffic related to the quarry accounts for 6.2-12.7% of all traffic on the A659 at York Road and Leeds Road respectively. The impacts of site traffic heading west is expected to be negligible although HGVs heading east do need to pass through Tadcaster town centre with the route including residences, employment and retail premises fronting onto the highway. The traffic impact is however not expected to increase from current levels as part of submission MJP23 and traffic impacts are thus expected to remain similar</i>”. This assessment, however, recognises that while traffic may be at the same level as previously, the effect of this traffic would be extended into the future.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>The site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway. Concerns have been highlighted over visibility at the site entrance. There is no identified local sustainable transport option for this site</p> <p>Plan level / regional / wider effects A transport assessment would be required. As traffic would continue to head into Tadcaster for a longer period of time, and there are current concerns with visibility at the site entrance, effects have been scored as minor negative for the duration of works at this site.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within an Air Quality Management Area (AQMA), however Wakefield Council M62 AQMA for NO₂ lies 7.2km West. No hazardous substances consent sites nearby. Some farm properties adjacent to possible access roads.</p> <p>Local effects Traffic (HGVs) would be generated by these extensions, which would prolong the life of the existing quarry to extract and move another 250,000 – 300,000 tonnes per annum of limestone over an unspecified period. Possible air pollution impacts from this could result from traffic fumes and the generation and deposition of dust. It is assumed that as dust suppression is currently used at the existing site this management would remain in place, which would significantly reduce dust from traffic. There are priority habitats near to the site, which are deciduous woodland (and previous investigations into potential quarrying in the vicinity have suggested no significant effect on the adjacent Crag Wood from dust³⁰). So such effects are considered to be negligible.</p> <p>Air pollution from transport, although not at AQMA levels, may in places already be raised by the major road (A64) in the vicinity to the site. 50% of the traffic from this site may also travel through Tadcaster. The existing quarry already sees transport movement by HGV and these extensions will likely extend that impact through extending the life of the quarry. However, previous environmental statements have not seen this as a significant issue. Effects are rated as minor negative as they are continuity effects rather than new effects.</p> <p>Plan level / regional / wider effects The Joint Plan traffic assessment states there is a “routing restriction which requires all HGVs to approach and depart from the site by turning left out of the site, left on Garnet Lane and existing onto the A659 at the crossroads junction opposite the grounds of Tadcaster Grammar School. Once on the A659 westbound traffic can continue to join the A64 and subsequently Junction 44 of the A1M” while “eastbound traffic would need to pass through the centre of Tadcaster and onto the A64”. There are some farms, and a school lies</p>		✓	✓	✓	m-	m-	?

³⁰ Darrington Quarries Ltd, 2009. Southern extension to Jackdaw Crag Quarry Environmental Statement

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	around 500m from route along the A659, though pollution levels will have dropped off significantly at this distance ³¹ . Meanwhile there are a number of receptors in Tadcaster (as noted above).							
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Land is Agricultural Land Classification (ALC) Grade 2 (Very good quality). In terms of land stability, the development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects Potentially 6ha of best and most versatile land will be lost. Assuming soil would be retained (and correctly stored / looked after) for restoration, ultimately this land could be restored to its previous quality (at an unspecified, and thus uncertain date).</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development³² but could have a small scale effect on national food production capacity.</p>		✓	✓		m-	m-	0
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Woodland lies adjacent to site. Hedgerows on site.</p> <p>Local effects Woodland would not be lost though this quarry is expected to continue where previous phases left off and continue to generate HGV traffic (336 two way movements per day).</p>		✓		✓	m-	m-	0

³¹ Design Manual For Roads and Bridges Citation needed (DMRB has 200m threshold)

³² 6ha (assuming all land is BMV) annualised across the 10 year life of the site would be an annual 0.6ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.6ha loss would represent a 0.03% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>This has relatively good access to the strategic road network and the site is moderately proximal to key settlements. Minor to moderate permanent effects predicted, with uncertainty about when they will end.</p> <p>Plan level / regional / wider effects The proposal for this site to be used for extraction of Magnesian limestone is unlikely to significantly contribute to climate change. However there will be some negative effects as a result of carbon emissions from continued vehicle movements to and from site and the operation of machinery involved in extraction activities.</p>							?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity³³ of a site Site is in Flood Zone 1. A small area on the northern fringe of the southern site (circa 2%) is prone to surface water flooding at a 1 in 1000 year rate. Core woodland area of England Habitat Network overlays the north-west corner of site and also lies adjacent to it.</p> <p>CAMS: Here water is available at low flows (at least 70% of the time), with Cock Beck having 'water available for licensing'. Site is not in an area of restricted or no groundwater availability.</p> <p>Site is Grade 2 Agricultural Land which is classified as very good and constitutes 'best and most versatile land'.</p> <p>Local effects Although a part of the EHN overlays this site, the woodland it surrounds is already isolated from other woodland patches so this site will not particularly block ecological networks. Flooding risk is seen as negligible at this site which is classified as 'less vulnerable' in terms of its flood risk vulnerability classification.</p> <p>Plan level / regional / wider effects Agriculture contributes to climate change through the release of greenhouse gases and can also contribute to climate change mitigation by reducing</p>					0	0	0

³³ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	greenhouse gas emissions / sequestering carbon / providing ecosystem services, while maintaining food production. Loss of high grade agricultural land will have a minor negative impact over the short and medium term.							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p><u>Proximity of factors relevant to the resource usage of a site</u> No spatial factors identified.</p> <p><u>Local effects</u> This site will contribute to the need for limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted it may to a degree offset recycled materials that could potentially replace them. This works against the SA objective, so it is scored negatively.</p> <p><u>Plan level / regional / wider effects</u> This impact can only be considered at the plan level rather than in relation to an individual site. As 250,000 – 300,000 tonnes per annum of virgin minerals would be extracted each year, this results in them being unavailable for future use (unless recycled).</p>	✓			✓	--	--	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Summary of effects on the waste hierarchy</u> Although overburden and fines are likely to be generated by this site they are also likely to be useful in restoration so are unlikely to be taken off site.</p> <p><u>Plan level / regional / wider effects</u> While indirectly the site may allow for continued extraction of primary resources, thus decreasing the opportunity for recycled and secondary aggregates to replace them (and reduce waste) there is still likely to be demand for primary aggregates and stone (so this effect can only be considered by considering all limestone extraction together and cannot be attributed to a single site).</p>					-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors No conservation areas within 1km; Bramham Park Registered Parks and Garden is 3.37km west; Battle of Towton Registered Battlefield is 1.14km south-east; Although there are no scheduled monuments within 2km, Roman Road near Hazelwood Castle (ID1,003,685) is just over 2km south-west; 2 listed buildings within 1km. One north-east of Headley Bar (Grade II), one south-west of Tadcaster (Grade II). Just outside of this area (1.1km) there are 2 Grade II listed buildings at Stutton. There are several Listed Buildings around Hazelwood Castle (1.6km to the south-west) including the Grade I Hazelwood Castle and Roman Catholic Chapel of St Leonard.</p> <p>Archaeological remains within the allocation site revealed by evaluation include features dating from the later Iron Age and early-mid Roman period, suggestive of an agricultural landscape with settlement/activity foci. This included a burial, trackway, enclosures and field system. To the north the course of the Roman Road between York and Tadcaster passes close to or through the western most allocation area.</p> <p>The North Yorkshire Historic Landscape Characterisation (HLC) project (database record HNY 5154) records the western segment of this allocation site as being within a much larger area of modern improved fields. It consists of large irregular fields defined by erratic hedgerow boundaries. Previous HLC types in this larger area include some areas of strip fields, piecemeal and planned enclosure. As this allocation site is a smaller part of a larger area of similar character type, the proposed extraction is unlikely therefore to have a major impact upon the historic landscape character of the immediately surrounding area, although it is acknowledged that within the site the historic landscape character will become invisible as development will</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>replace an earlier field system.</p> <p>The HLC project (database record HNY 5396) also records the central segment of this allocation site as being within a wider area of planned enclosure which consists of medium-sized semi-irregular fields defined by straight hedgerows. This has partial legibility with some boundary loss but is probably part of the Stutton or Hazelwood enclosure awards. Here, the proposed extraction is unlikely to have a major impact upon the historic landscape character of the immediately surrounding area, although it is acknowledged that within the site the historic landscape character will become invisible as development will replace an earlier field system.</p> <p>Database record HNY 5479 records the eastern segment of this allocation site as being part of a much larger area of planned enclosure which consists of irregular medium sized fields defined by regular external and straight internal hedgerows. As this allocation site is a smaller part of a larger area of similar character type, of which the legibility is partial, the proposed extraction is unlikely to have a major impact upon the historic landscape character of the immediately surrounding area, although it is acknowledged that within the site the historic landscape character will become invisible as development will replace an earlier field system.</p> <p>Local effects The impact upon historic landscape character is not felt to be significant. However, the registered battlefield (Battle of Towton) is just over 1km away and a potentially significant receptor to impacts from this quarry. It is anticipated that Warren House Farm is visible from the battlefield (the designated extent of which is being extended and lies to the south of Cock Beck). It is possible this quarry site may have been the location of skirmishes etc.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>associated with this significant battle.</p> <p>There is, however, certain high archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards, therefore allocating this site would be likely to cause the loss of these archaeological remains if the site is excavated without mitigation. It is expected that investigation works required by the Joint Plan Policy D08 (Historic Environment) – <i>'mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.'</i> would result in an overall minor negative effect. Some uncertainty until an archaeological assessment is carried out.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> No National Parks, Areas of Outstanding Natural Beauty (AONBs) or Heritage Coast within 10km. No Inheritance Tax Exemption land within 5km. Site is within Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by policy SP18: <i>'The high quality and local distinctiveness of the natural and man-made environment will be sustained by:....identifying, protecting and enhancing locally distinctive landscapes...'</i>. Para 7.72 of supporting text states: <i>'designations of specific areas such aslandscape character assessments will be considered in future local plan documents and shown on the proposals map. Until such time, sites identified in the adopted Selby District Local Plan will continue to afforded protection'</i>. The Site is in Green Belt for West Yorkshire. In terms of tranquillity the site is 'disturbed'.</p> <p>The relevant National Character Area (NCA) is Southern Magnesian Limestone. NY&Y LCA lists site as Magnesian Limestone Ridge: Moderate to high visual sensitivity (as a result of the prominent nature of the ridge and inter-visibility with adjacent Vale Farmland with Dispersed Settlements and Vale Farmland with Plantation Woodland Landscape Character Types'); High ecological sensitivity (as a result of the presence of nationally important, species rich limestone grassland, several pockets of semi-natural ancient woodland scattered along the ridge , and SSSIs which encompass habitats sensitive to changes in land management) and High landscape and cultural sensitivity as a result of the nationally significant Neolithic and Bronze Age monuments, in addition to the predominantly intact landscape pattern which is sensitive to changes in land management.</p> <p><u>Local effects</u> Although the site is in the Green Belt it would be likely remain compatible with the purposes of the Green Belt provided restoration was relevant. The site is also close to the A64, although other parts of the existing quarry are already visible (The southern extension of this site is subject to a planning permission but is getting near to the skyline / horizon which would make it visible from the A659 road). The visibility from the A64 will lead to a negative assessment, particularly as this may affect tourist impressions of the local area.</p> <p>The area to the east of Crag Wood is a nice landscape and there are some concerns over the</p>	✓		✓		--	--	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>effect that a quarry would have. The site is in the 'limestone ridge' local landscape designation.</p> <p>The elevated position of this site may make it more visible, particularly from the A659. Lighting disturbance is also an issue (particularly from the A64). While the northern / western parts of the site are already compromised by the A64 (though would add to the impact on the A64 as a visual receptor), the southern part of the site is less disturbed, so there is potential for a more significant impact.</p> <p>Mitigation for this site should include a buffer between it and the A64. However, it is difficult to mitigate because of its location. In terms of restoration options may be limited to low level agricultural restoration or nature conservation. As this is a deeper quarry the steep sides would continue to be a concern. However, there may be some potential to terrace the sides of the quarry to reduce their steepness.</p> <p>Plan level / regional / wider effects There may be cumulative effects on the landscape from this and other quarries in the vicinity.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is reasonably proximal to a number of major settlements / markets (e.g. Tadcaster 1km, York 12km, Wetherby 8km, Leeds 10km).</p> <p>Local effects The site is reasonably proximal to possible markets so will help support growth there. Limited numbers of jobs will be supported, which may support a few workers in nearby areas (most likely existing workers at the parent site). The site does not represent low carbon development however as possible markets are relatively spread out, which could increase the carbon footprint. The effect overall is however positive in the short and medium term.</p> <p>Plan level / regional / wider effects Creation of jobs would support the wider economy.</p>		✓	✓	✓	+	+	0
								?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD Area is Tadcaster West. Not within lowest 20%. Nearest significant communities: The site is around 1km from the south-western edge of Tadcaster. Both Towton (2.2km away) and Stutton (900m away) are 'Secondary Villages with defined Development Limits'. These are covered by Policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10'.</p> <p>Local effects As traffic from these sites is likely to avoid settlements there is likely to be little effect. Similarly, at around 900m from Stutton the site is likely to be towards the outer limit of dust or noise impacts which would also be likely to be negated by intervening topography. Although the site might support small numbers of jobs in nearby communities the overall effect is considered to be negligible.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A public right of way (Bridleway, no. 35.24/4/1) runs from the road 320m to the south of this site but does not enter the site. Claimed route R7/63B runs along a track that passes Warren House Farm and at its nearest point is circa 90m south.</p> <p>Local effects In terms of access, a bridleway passes the site to the south (along Chantry Lane). There may be a potential noise issue in terms of this receptor, so screening may be required (though at the nearest point the site is still 320m away from the path). There may be also some minor disturbance to users of this route who at certain points may be more likely to see these extensions than the existing site. However, the fact that topography from the footpath slopes downward means the site would be less visible. Negligible to minor negative.</p> <p>There may be some potential to, in the future, make the track past Warren House Farm a bridleway (there is an existing claim for this).</p>		✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Plan level / regional / wider effects Using this site for extraction and subsequent industrial use is unlikely to have significant effects on opportunities for recreation, leisure and learning for the wider area.</p>							
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing 2 farms circa 350m east. 1 Farm 360m north. High Moor and Manor Farm are both around 800m of the site, while Brick House Farm is circa 300m north. A school lies just outside the 1km search area to the north (though possibly only 500m west of a possible access route). The village of Stutton (residential) lies 980m east. Warren House Farm is immediately adjacent to the south while White Quarry Farm is 750m south. High Moor Grange Farm is 900m to north-west.</p> <p>An overhead power line lies to the 200m west of the site and High Pressure Gas Pipeline Feeder 7 crosses the site. A Gas Site (Towton) lies 420m west.</p> <p>Local effects Traffic on roads is likely to continue to be experienced beyond the current quarry as a result of these extensions. However, the western access route does not go near settlements or footpaths and the very small number of farm houses near this road suggests few pedestrian users (though there may also be cyclists on the route). The eastbound route would go through Tadcaster bringing it within range of a number of receptors (see objective 3). However, these are extended / continuity effects so wellbeing effects won't perceptibly be worse, though it will be extended for longer into the future. Nonetheless, longer term effect can be significant and issues like risk to pedestrians and the effects of air pollution can accumulate over time. There is some uncertainty over the impacts of noise and dust on nearby Stutton (downwind of site when prevailing westerly winds are accounted for), though intervening topography would lessen the likelihood of any effect.</p> <p>The presence of energy infrastructure across the site is noted and arrangements to mitigate for this (e.g. by liaising with energy distributors) will be a prime consideration.</p>		✓	✓	✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Any blasting at the site may be an issue for the nearby Warren House Farm (noise and vibration) and other more distant properties (noise) and possibly the Towton Gas Site so this would need to be investigated.</p> <p>Minor to moderate negative.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1. <5% of the site is at low risk (1:1000 (0.1%)) of surface water flooding at the north western site boundary. As such for the present day this site can be considered as not being at risk from surface water flooding.</p> <p>Strategic Flood Risk Assessment (SFRA) sequential test result – this site is suitable.</p> <p>Local effects Flooding risk is seen as negligible at this site which is classified as ‘less vulnerable’ in terms of its flood risk vulnerability classification.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a small contribution to self-sufficiency in the supply of Magnesian limestone and may also support markets outside of the Plan area.</p> <p>Plan level / regional / wider effects As above, the extraction of Magnesian limestone may also support markets outside of the Plan area.</p>		✓	✓		+	+	0

Cumulative / Synergistic effects³⁴	
Planning Context:	The site is around 1km from the south-western edge of Tadcaster. Tadcaster is a Local Service Centre. Both Towton (2.2km away) and Stutton (900m away) are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10'. Site does not conflict with any allocations.
Other Joint Minerals and Waste Plan Sites:	None within 5km.
Historic Minerals and Waste Sites:	There are historic granted applications (extraction) associated with the Jackdaw Crag quarry site adjacent. High Moor active building stone site is 1.3km north-west, Hargreaves Tip (historic landfill) is 1.8km north. To the south there are a number of historic granted applications associated with Old London Road (extraction and landfill). There are 3 further historic landfill applications to the east within 2km.
Traffic:	In terms of cumulative effects it is possible that freight traffic from the other developments could combine to increase traffic on access roads to the A64 or through Tadcaster. This might amplify effects, but would not lift them above minor negative, particularly as they are an extension of existing effects.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues including potential isolation of the SINC • Design to include suitable arrangements for retention or diversion of gas pipeline (as appropriate) • Design to mitigate impact on best and most versatile agricultural land • Design of development and landscaping of site to mitigate impact on: heritage assets (archaeological remains, Listed Buildings and Registered Battlefield), Green Belt and their respective settings, local landscape features and on rights of way • Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate • Design to ensure protection of the aquifer 	

³⁴ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

- Improvements to access
- Appropriate arrangements for control of and mitigation of the effects of noise and dust, etc.
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt

MJP22 Hensall Quarry

Site Name	MJP22 Hensall Quarry (XY:458951 422547)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of sand as proposed extension to existing quarry
Size	14.41ha
Proposed life of site	24 years
Notes	Low level agriculture, similar to the scheme for adjacent existing quarry. Proposed 30m stand-off from railway

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000: 10km north-east is River Derwent SAC; 12km south-east is Thorne Moor SAC/SPA, 14.5km east is Humber Estuary Ramsar/SAC/SPA. The site does not lie in a SSSI Impact Risk Zone (IRZ).</p> <p>SINC: 2 SINCS within 2km. SE52-21 (Disused Pit (part in Eggborough (deleted SINC))) is 0.95km west. SE52-02 (Disused Railway line - deleted SINC) is 1.5km south. SE52-21 is connected by A645 road.</p> <p>Closest areas of priority habitat are small patches of deciduous woodland 270 to 300m away. Possibly some connectivity as patch to west of site is in Flood Zone 3 (refer to SA objective 16 for further details). Site close but not adjacent to Humberhead Levels Futurescape (circa 460m east).</p> <p>Local effects The site appears to be largely bounded by hedgerows; the main land use is arable. The site has the potential to support foraging bat, badger and farmland birds so some minor negative effects on these habitats may occur due to construction and operation of site. In the longer term the effect would be dependent on whether these features would be re-instated or new habitats created through</p>	✓	✓	✓		-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>restoration.</p> <p>Natural England notes the modifications to the allocation and has no further comments on this site.</p> <p>Although the site is proposed to be restored to agriculture, biodiversity features should be incorporated into any restoration scheme and may include species rich hedgerows, field margins (if arable), species rich grassland (if pasture), bare sand slopes and trees.</p> <p>Better restoration would come through a more heathland type habitat (as high walls of site make restoration to agriculture difficult).</p> <p>Plan level / regional / wider effects This site is unlikely to have a significant effect on Natura 2000 sites as a result of the proximity and type of development. The site does not lie within any SSSI IRZ, so would not affect SSSIs.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity The site is within Nitrate Vulnerable Zone (groundwater and surface water) and falls within the Humber River Basin District. The site is in Source Protection Zone 3. There is a nearby section of river Aire (2.1km north, visibly connected by stream). The site is in a River Basin Management Plan waterbody catchment called 'Aire from River Calder to River Ouse'. It has a current overall potential of moderate and a status objective of good by 2027. 1.5km south lies a river called 'New Fleet Dain' which lies in the River Basin Management Plan waterbody catchment called 'New Fleet Drain from Source to River Went'. This has a current overall status of moderate and an overall status objective of good by 2027.</p>		✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>The Site is in the Lower Aire area of the Aire and Calder CAMS. Here water is available at low flows (at least 70% of time). For groundwater abstraction, the site is in an area of Sherwood Sandstone Aquifer where no new groundwater licenses will be granted.</p> <p>Local effects Because this site is in a NVZ, surface and groundwater water may be vulnerable during restoration phases of project if fertilizers are used. As with all minerals sites there is a risk of water pollution from fuel spills. In theory the site would be extracted above the water table. However, the area is subsiding due to mining subsidence so the level of the water table may be more difficult to predict. The site is also in Flood Zone 3, which could potentially lead to occasional pollution episodes if floods wash pollution from the site. However, such occurrences, if they occur, are likely to be short lived and readily avoidable through good site management, however prior to mitigation being known a small scale risk to water quality cannot be ruled out.</p> <p>In relation to water availability, as it is not known what process will take place on site uncertainty is recorded, however dewatering operations could, if discharged to surface water, exacerbate water availability issues locally.</p> <p>Some effects on hydrology could be cumulative with other sites, for instance as a result of as yet unknown processes on site.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Plan level / regional / wider effects The site is in Source Protection Zone 3, this zone represents the total catchment for an abstraction rather than a more sensitive zone. However, as this site is thought to be extracted above the water table, risks will be lower than in other zones. Particular care will need to be taken to ensure fuel spills do not occur and if the site is to be restored with waste materials, GP3 guidance requires that 'a risk assessment must be conducted based on the nature and quantity of the wastes and the natural setting and properties of the location'³⁵.</p> <p>Overall the predicted effects are unlikely to rise above minor negative, with some uncertainty, with neutral to minor negative effects in the longer term due in part to continued operation of this site into the longer term, and in part due to restoration being to agriculture, which could require some backfilling of the site with a theoretical risk to groundwater. Uncertainty is also noted due to the effects of subsidence.</p>							
	<p>³⁵ Environment Agency, 2013. Groundwater Protection: Principles and Practice (GP3) [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297347/LIT_7660_9a3742.pdf]</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is proximal to a number of major settlements (e.g. Selby circa 8.3km north, Castleford circa 13km west, Leeds circa 22km west). Access: Confirmed as being the existing Hensall Quarry access onto unclassified New Road (U1077), approximately 75m from A645. Light vehicles: No change to 2-4 two-way movements (as sourced from application details NY/2012/0317/73); HGV Vehicles: 20 to 30 two-way movements estimate³⁶.</p> <p>Net change in daily trip generations: light vehicles: 0; HGVs: 0. Traffic Assessment rating: 'green'.</p> <p>PRoW: does not affect access to the site.</p> <p>Rail: Site adjacent to rail line (though a 30m stand-off is applied) and c140m from Hensall Station. Plasmor railhead lies 1km south; Strategic Road: A19 is 2.2km west / A645 is immediately adjacent to south, J34 of M62 is 4km west by road. Canal / Freight waterway: Aire and Calder Navigation 1.5km south.</p> <p>Local effects Site is unlikely to generate significant passenger travel demand. Site would generate between 20 and 30 two way HGV movements per day which according to Highways Assessment is acceptable in terms of impact on the adjoining road, from which it is only a very short journey to the A645.</p> <p>According to the traffic assessment "<i>Information provided by the applicant in the Transport Statement for the 2012 planning application shows there to be around 4,000 vehicles a day using the A645, of which approximately 850 were HGVs. Assuming the directional splits of HGVs remain as per the Transport Statement, the western route would be utilised by around 25 HGVs a day, with the route bypassing the</i></p>		✓	✓		-	-	0

³⁶ Submitter information

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>majority of settlements and as HGVs associated with the site are already on the network it is unlikely this will result in any additional traffic impacts. The eastern route does pass through the settlement of West Cowick although usage of this route is expected to be only around 5 HGVs a day and forms a relatively small proportion of overall HGV traffic on this route". There is a chance that traffic could combine with other sites, most notably the Southmoor site, but also other sites to the north at the A19 / Weeland Road Roundabout, particularly as that site has reported minor negative effects on Weeland Road to the west of the A19. However, the proportion of traffic arising from this site is negligible and broadly a continuation of existing impacts (all be they for longer).</p> <p>The site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway. Sustainable travel modes are not likely to contribute to the site. Minor negative / uncertain impact as a limited number of probably relatively short distance journeys are likely to be made on routes largely avoiding settlements. However, it should be noted that as this is an extension to a site it is expected that these impacts are a continuation of already extant impacts into the future, rather than a completely new impact. There may also be some minor cumulative effect with other nearby minerals and waste sites.</p> <p>A transport assessment is required.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	
4. To protect and improve air quality	<p>Proximity of air quality receptors This is not within a Hazardous Substances Consultation Zone or an Air Quality Management Area. Applying the 1km buffer around a site for possible impacts advised by MPS2 shows that it is possible Hensall, Hensall Station, Little Heck Farm and a school are in range of dust, though all but the closest receptors are a sufficient distance for dust pollution to be considered insignificant. The exception is Hensall Station, which is around 170m away at its nearest point, though it</p>		✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>is to the west of the site, and thus presumed to be mostly upwind from the site.</p> <p>Local effects As with objective 3 it is likely that the western route out of this site would be taken by the vast majority of vehicles. This would bypass most settlements though would still bring pollution from lorries within range of a number of buildings. It is likely that pollution levels are already relatively high close to the M62 (although this stretch of M62 is outside of the M62 AQMA) which may make some receptors more vulnerable, though the low number of lorries from this site is likely to have an insignificant effect on its own. However, there are possible impacts on receptors from quarry dust that cannot be resolved until a dust / air quality assessment is undertaken, with a risk of possible cumulative impacts which could raise levels (see cumulative effects assessment below). These impacts might rise to minor negative when working the site comes closest to Hensall Station. Mitigation may however reduce any impacts significantly. In the longer term, although there may be some initial dust impact from restoration, any impact is likely to be short lived and will quickly become insignificant.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?
5. To use soil and land efficiently and	Proximity of soil and land receptors Site is Grade 3 Agricultural Land (Good to moderate quality). It is not known if this is Grade 3a (best and most versatile) or 3b. The site is however a greenfield site so inevitably some land will be lost until restoration is put in place. Nutrient recovery is not applicable to this		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
safeguard or enhance their quality	<p>site. Site does not lie within or adjacent to a development high risk area. Soilscape: freely draining slightly acid soils with low fertility and low carbon which with good management may be capable of restoration to arable use.</p> <p>Local effects There is a potential loss of 14.41ha of the best and most versatile agricultural land³⁷. Restoration would be to agriculture (if above water table) so there would be no / insignificant longer term effect once restoration is in place.</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development³⁸ but could have a small scale effect on national food production capacity.</p>						?	?
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Closest areas of priority habitat woodland are small patches of deciduous woodland 270 to 300m away. The site itself appears to be bounded by hedgerows; the main land use is arable. Site is relatively close to Junction 34 of the M62 (c4km by road) and numerous large settlements are relatively close (e.g. Selby, Castleford, Leeds).</p>	✓		✓		-	-	-

³⁷ The best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping the site is located within ALC Grade 3 land, without further investigation it is not known whether it is Grade 3a or 3b. For the purposes of this SA a worst case scenario approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

³⁸ 14.41ha (assuming all land is BMV) annualised across the 24 year life of the site would be an annual 0.6ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.6ha loss would represent a 0.03% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Carbon in vegetation: low (4.32 tC/ha) / Carbon in soils: low (49.67 tC/ha).</p> <p>Local Effects See wider effects below.</p> <p>Plan level / regional / wider effects The land lost to this development would not significantly affect climate change while access to markets is relatively good. Overall effects on climate change are considered minor negative as relatively few road freight journeys, although probably short, would arise, leading to a permanent impact on climate change. An assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors must be undertaken³⁹.</p>							?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁴⁰ of a site Most of site, apart from a small central area (c5%) is in Flood Zone 3..</p> <p>Site is Grade 3 Agricultural Land. It is not known if this is Grade 3a (best and most versatile) or 3b.</p> <p>The Site is in the Lower Aire area of the Aire and Calder CAMS. Here water is available at low flows (at</p>	✓	✓	✓	✓	m-	m-	-

³⁹ Proposals for new mineral extraction at a rate in excess of 75,000 tonnes per annum should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has been applied also to minerals output for the purposes of Development Management, Policy D11.

⁴⁰ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>least 70% of time).</p> <p>Local effects Although much of site is in Flood Zone 3, the site represents a water compatible use. The site is unlikely to form a barrier to future species movement and other opportunities to significantly contribute to climate adaption are considered unlikely.</p> <p>Agriculture contributes to climate change through the release of greenhouse gases and can also contribute to climate change mitigation by reducing greenhouse gas emissions / sequestering carbon / providing ecosystem services, while maintaining food production. Loss of high grade agricultural land will have a minor negative impact over the short and medium term.</p> <p>Plan level / regional / wider effects If dewatering (or groundwater extraction) is necessary at this site, discharge to a surface water body may continue to deplete the under pressure Sherwood Sandstone aquifer, adding some uncertainty to this assessment. If this site contains best and most Versatile land, ultimately there could be an effect on food security as land is taken out of production. On its own 27.1ha is not likely to be a significant effect, though at a plan level effects could also be cumulative.</p>					?	?	?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects Site is small, so on its own it is not possible to identify if this site is necessary or unnecessary. The extraction of sand is, however, the extraction of a primary resource. Depending on the end use there may be alternatives available, such as locally available colliery spoil, so indirectly this site may be helping to prevent a shift to less resource intensive materials.</p> <p>Plan level / regional / wider effects None noted.</p>	✓		✓	✓	m-	m-	m- ?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified</p> <p><u>Local effects</u> Although overburden and fines are likely to be generated by this site they are also likely to be useful in restoration so are unlikely to be taken off site.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
10. To conserve or enhance the historic environment and its setting, cultural	<p><u>Proximity of historic environment receptors</u> Listed Buildings within 1km: A group of 3 Grade II Listed Buildings - Church of St Paul (1295734), Hensall Primary School (1148400) and the Red House (1148401) at 400m west of the site, Grade II “Hensall House” 580m northeast and “Hensall Signal Box” 200m west. Crop marks within this allocation area comprise an Iron Age or Roman track way, boundary ditches and rectilinear enclosures which suggest a Late Iron Age/Romano British agricultural landscape. The North Yorkshire HLC Project identified that this is an extensive and excellent example of the 20th Century change in agriculture which has seen a high degree of boundary loss and the creation of</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
heritage and character	<p>monoculture prairie fields, in this case covering 30ha and created from planned enclosure. Legibility of this HLC type is partial which means that evidence relating to previous character types is visible within the present environment but is on the whole discontinuous.</p> <p>Hensall lies within the bed of the post-Glacial Lake Humber. Archaeological investigations in advance of extraction on land to the immediate west revealed an enclosure complex of the late Iron Age and early Roman period. In addition, artefacts of early prehistoric date indicate activity in this area in the late Neolithic or early Bronze Age period.</p> <p>Local effects Site is part of wider area of post – medieval and modern agricultural land context and is partially visible in long distance views of the church steeple. Generally well screened by vegetation, buildings and topography. Given the small area of this site coupled with the low numbers of receptors, impacts from traffic leaving on historic assets such as listed buildings would be of a lower order and are considered to be insignificant on their own. Moving haulage routes would reduce effects on the group buildings to a negligible level. However, this would be likely to increase impacts on listed buildings in Snaith. Allocating this site would, however, result in the permanent loss of 14.41ha of land which has a high potential for significant archaeology. Moderate loss of post-medieval agricultural context, and increase of modern industrial context. Change is likely to be small scale, but context has already experienced change due to existing quarrying and works traffic. This is considered to be a minor negative effect.</p> <p>Overall the effects of this site are considered to be minor negative, primarily because of the risks to archaeology, but with significant uncertainty noted. Although heritage impacts are considered slight in this area, this site would, however, require an archaeological assessment and an archaeological mitigation strategy will be required.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character Site is in Humberhead Levels National Character Area. The North Yorkshire Landscape Character Assessment (LCA) places this site in Landscape Character Type 23: Levels Farmland (broad type: farmed, lowland valley landscapes). This character type has: high visual sensitivity (as a result of the predominantly open character and flat landform, which facilitates long distance open views across the landscape and promotes strong inter-visibility with adjacent Landscape Character Types); low ecological sensitivity (resulting from the fact that much of this landscape character type encompasses improved agricultural land); and moderate landscape and cultural sensitivity as a result of the presence of a patchwork of historic drainage features (ditches and dykes), moated sites and grange sites. The site is also in the Selby LCA, categorised as 'River Aire Corridor'; LCA type: 'semi-enclosed farmland' but the site is within a sub-area defined by its dry acid sandy soils (historically with lowland heath habitats) and high level of disturbance from past quarrying. Small area on southern fringe is also in River Aire Corridor but LCA type: 'open fringe farmland'. In terms of 'intrusion' the area is classified as disturbed.</p> <p>Local effects There is a general trend towards landscape degradation in this area. This area is a bit different from the wider NCA description and very often the landscape character of this area is overlooked. As a result, this site will further negatively alter the quality of the countryside around Hensall which has already been extensively disturbed by sand quarries and other development and now has a definite 'rural-urban fringe' character. The local landscape cannot continue to accommodate this level of exploitation without wider efforts to counteract the cumulative degradation of this locally sandy 'island' within Selby's Levels Farmland⁴¹ and existing extraction site landforms in the area are poor. This sub-</p>	✓	✓	✓		-	-	-

⁴¹Chris Blandford Associates, 2011. North Yorkshire and York Landscape Characterisation Project [URL: northyorks.gov.uk/media/22473/North-Yorkshire-and-York-landscape-character-assessment-report/pdf/North_Yorkshire_and_York_landscape_character_assessment_report.pdf - URL is no longer available.]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>area has lost most of its original habitats, and is being intensively farmed. There are few forces for change in this vulnerable area which are counteracting the adverse effects or leading to positive enhancement, other than the now ended Environmental Stewardship Scheme (the site was previously included in an ELS agreement). In the short and medium term a major negative effect is predicted, though this could be lessened through mitigation. In the longer term low level restoration will add to visible extent of disturbed land in this sub-area. However restoration could be neutral or better if it is coordinated with adjoining land that is also being quarried, and measures are taken to manage land sustainably and restore lost habitats. The sunken landform of this site is not satisfactory (a shallow depression might be better than an abrupt depression).</p> <p>The site would benefit from a wider landscape regeneration strategy (which could include consideration of landscape and biodiversity) – but this is difficult given the scale of the site. Agricultural restoration would be good, but other potential schemes would be more in tune with landscape character.</p> <p>Plan level / regional / wider effects None noted.</p>							?
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is proximal to a number of major settlements (e.g. Selby 8.5km north, Castleford 13.5km west, Leeds 25km north-west).</p> <p>Local effects Although a site of this scale would only offer very limited job opportunities (in quarrying and freight) it would make a contribution to the supply of a valuable building product: sand. Ultimately this may help keep the construction sector competitive. There are no obvious proximal neighbours that would have their prospects for growth diminished, and while the site does not represent 'low carbon development' the proximity of this site to major markets is not likely to significantly increase the carbon footprint of construction projects that ultimately use this sand. Overall the contribution is minor positive.</p> <p>Plan level / regional / wider effects This site may export beyond the Plan area.</p>		✓	✓		+	+	+
								?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD Area is Whitley. This is not in worst 20%. Nearest significant communities: 500m north lies Hensall, while Hensall Station is c140m west. The tiny Heck is also around 200m east. Further afield (but within 2km) is Great Heck. Both Hensall and Great Heck are 'Secondary Villages with defined Development Limits'. These are covered by Policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities...".</p> <p>Local effects Job opportunities arising from this site are likely to be limited, and while the site would provide a source of sand which could aid future development the immediate settlements are unlikely to directly benefit in any significant way. The site is unlikely to either hinder or boost local tourism. Overall any effect is considered to be insignificant.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A Public Right of Way (Footpath, no. 35.24/4/1) runs from the road immediately to the south of this site but does not enter the site.</p> <p>Local effects The site may diminish the experience of walking on the right of way to the south as it will have a visual impact, may generate dust and noise and also increase traffic on the road between the site and the right of way. However, the experience of being on this footpath is already likely to be disturbed by proximity to the M62 and a railway line (and it may not even be used as it is only 125m long, having been severed by the construction of the M62). The effect is rated as insignificant.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	-	-	0
15. To protect and improve the wellbeing,	<p>Proximity to population / community receptors / factors relevant to health and wellbeing There are no hospitals or clinics within 1km. 500m north lies Hensall (residential area). There is also a farmhouse 573m east, a school 650m west and the small village of Hensall Station (residential area c215m west)</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
health and safety of local communities	<p>and tiny village of Little Heck 200m to the east.</p> <p>Local effects Without mitigation it is possible that small scale noise and dust could increase. This may affect properties in Hensall Station or Little Heck, and could in theory affect properties as far as Hensall. However, Hensall station is likely to be upwind most of the time. Minor effects are likely without mitigation.</p> <p>Effects of traffic on wellbeing are not expected to be significant, and possible cumulative impacts with MJP54 in relation to traffic are also considered insignificant. However, further west along Weeland Road, where it joins the A19, the site may combine with traffic from other sites to the north and west. This may make the A19 roundabout busier and lead to greater noise and pollution affecting a limited number of properties from the roundabout south. The overall effect is minor negative, of which this site's contribution is probably close to negligible, particularly as the traffic levels are largely the same as historic traffic levels.</p> <p>We have made an assessment of the overall effect of traffic around the Weeland Road / A19 roundabout in the Sustainability Appraisal Report to further inform mitigation for all relevant sites.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones About 95% of this site is in Flood Zone 3. There is an area benefiting from existing flood defences to the east of the site, however, the standard of protection of these defences is not known. This site may be at lower risk given that connected Flood Zone 3 closer to the river benefits from flood defences.</p> <p>Four areas of surface water flooding also affect the site, totalling about 5% of the overall site area. The level of risk associated with these is generally low (1:1000 (0.1%)), however two of the areas include</p>	✓			✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>small regions of medium risk ((1:100 (1%)) and high risk ((1:30 (3.33%)) respectively.</p> <p>This site lies across two 1km squares where <25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers (rather than superficial deposits like sand).</p> <p>According to the 2012 planning statement for a neighbouring part of this site groundwater levels are around -1mAOD. For that part of the site at least, where extraction is to -0.5mAOD <i>“although flooding from a rising groundwater table is a possibility at the site, it is considered unlikely because of a small seasonal variation in groundwater levels of around 0.2m and a long term decline in groundwater levels probably caused by groundwater extraction”</i>⁴². It is assumed that a similar level of risk could also be present at this site, though this is dependent on the levels of extraction, and the underlying water table, which should be further investigated.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Site is currently in Flood Zone 3 and it is likely that it will remain as Flood Zone 3 after 2025, however, depth and velocity of moving water is likely to increase. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test⁴³ concluded that the site would ‘Pass’.</p>							?
	<p>⁴² Darrington Quarries Ltd, 2012. Hensall Sand Quarry, Planning application for the importation of compost, mixing of compost and sand, stockpiling and exportation of soil material at Hensall Sand Quarry: Planning Statement (August 2012) [URL: https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=8600]</p> <p>⁴³ The Sequential Test approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (Flood Zones 2 and 3) and other areas affected by other sources of flooding where possible.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>As sand extraction is 'water compatible' there are no significant effects. However, this site is in Flood Zone 3 – so assessment would need to look at the way it (particularly its restoration) displaces water to other areas. Mitigation may be needed (this may be more significant mitigation if properties are affected), though if the site is wet worked / or worked above the water table with no dewatering it may act as informal flood storage during operation. This could be explored in detail in the site specific flood risk assessment. Adjacent areas may benefit from flood defences.</p> <p>As a site in Flood Zone 3 flood storage could be achieved through restoration, though given the size of this site and distance from the river benefits would be negligible, so it would likely be better to restore the site to agriculture or ecology.</p> <p>A site specific flood risk assessment is required for this site. A suitable scheme will be required to drain or store surface water from the site that does not increase flooding on any receiving water body. Opportunities to integrate SuDS should be explored. Groundwater flood risk will need to be established at this site within the site specific flood risk assessment. The site specific flood risk assessment should also include a flood evacuation plan due to the presence of Flood Zone 3.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a small contribution to self-sufficiency in the supply of sand.</p> <p>Plan level / regional / wider effects The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0
								?
Cumulative / Synergistic effects⁴⁴								
Planning Context:	Nearest significant communities: 500m north lies Hensall, while Hensall Station is c140m west. The tiny Heck is also around 200m east. Further afield (but within 2km) is Great Heck. Both Hensall and Great Heck are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities...". MJP54 lies 660m south; MJP44 lies 1.06m south-east, several sites may use same parts of road network;							
Other Joint Minerals and Waste Plan Sites:	A number of dormant sand and gravel sites lie within 5km of this site: MJP44 1.6km south-west, MJP22 1.7km south-west, MJP54 1.6km south, WJP25 2.2km north-west							
Historic Landfills:	While 4 historic landfill sites lie to the west. Plasmor railhead lies 1km south.							
Water:	There are 2 potential minerals and waste sites within 2km (and numerous historic, dormant and active minerals and waste sites in the vicinity). In combination with these sites this site could exacerbate effects on hydrology depending on as yet unknown processes undertaken on site, such as dewatering or processing.							

⁴⁴ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Flooding:	All sites in functional floodplain must remain operational and safe for users in times of flood; result in no net loss of floodplain storage; not impede water flows and not increase flood risk elsewhere.
Transport / Air / Wellbeing:	There may also be minimal / very minor cumulative effects on air quality and noise if traffic from this site combines with WJP03 / MJP54 traffic and traffic from other developments (e.g. sites further north on the A19 where they send traffic southward) if similar routes are used for traffic.
Landscape:	In terms of landscape there is cumulative degradation of this 'sandy island' of landscape character in Selby and existing extraction site landforms in the area are poor.

Limitations / data gaps

No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues including protected species
- Design to mitigate impact / minimise the irreversible loss of best and most versatile agricultural land and protect high quality soil resources
- Design of development and landscaping of site to mitigate impact on: heritage assets (Listed Buildings-The Red House and the Church of St Paul) and archaeological remains), local landscape features and their respective settings, users of right of way to south
- Design to include site specific flood risk assessment, attenuation and surface water drainage including SuDS, as appropriate. The site specific flood risk assessment should also include a flood evacuation plan due to the presence of Flood Zone 3.
- Design to include suitable arrangements for access.
- A transport assessment and suitable arrangement for access and standoff from the railway
- Appropriate arrangements for control of and mitigation of the effects of noise, dust, etc.
- Design to undertake an assessment / proposal has taken into account the need for resilience to climate change factors.
- Appropriate restoration scheme using opportunities for habitat creation and taking account of the distinctive landscape character of the area.

MJP44 – Land between Plasmor Block Making Plant, Great Heck and Pollington Airfield

Site Name	MJP44 (Land between Plasmor Block Making Plant, Great Heck and Pollington Airfield, Heck, Selby) (XY 460142 421077)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of building sand from proposed new extraction site adjacent to former quarry
Size	8.16ha
Proposed life of site	22 year (estimated date of commencement by 2020)
Notes	Proposed new extraction site. Possible restoration to low level agriculture, , but no detailed design available yet Manufactured blocks leave the block making plant by road and rail

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve	<u>Proximity of international / national and local designations and key features</u> Natura 2000: 10km south-east is Thorne Moor SAC / SPA, 10km north-east - River Derwent SAC, 14km east- Humber Estuary Ramsar / SAC / SPA. No SSSIs within 5km. SINCs - Sand Quarry, Great Heck (SE52-17 Deleted SINC) lies adjacent to the site to the west. 3 further SINC within 2km - Disused Railway Line (SE51-02 Deleted SINC) 1km south-west, Balne Moor Ponds (SE51-07 Ratified SINC) 1.8km south-	✓		✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
habitat connectivity	<p>west, Ditch West of Balne Moor Ponds (SE51-18 pre-existing SINC) 2km south-west. In addition three Local Wildlife Sites lie within 2km of the site in East Riding (1.25km, 1.3km and 1.45km from site).</p> <p>Priority Habitat: the site is bordered to the north-east and south-west by deciduous woodland strips / blocks. Site close but not adjacent to Humberhead Levels Futurescape (circa 450m north).</p> <p>Local effects Site is predominantly arable with trees / shrubs between northern boundary and M62 and grassland / scrub on the western boundary. Site has the potential to support nesting birds, reptiles and badger and so some minor negative effects on these habitats may occur due to construction and operation of site. In the longer term the effect would be dependent on whether these features would be re-instated or new habitats created through restoration. In terms of habitat networks, the site is mostly enclosed by M62, the former Pollington Airfield (now a waste site) and the Plasmor factory. However, it is directly adjacent to the former Sand Quarry SINC which has been left as a wildlife area (though this presents no major concerns). There are also other sand quarry sites nearby, so there is potential to create habitats links in the area. Although the site is proposed to be restored to agriculture, biodiversity features should be incorporated and may include species rich hedgerows, field margins (if arable), species rich grassland (if pasture), bare sand slopes and trees.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors it is considered that there would be no significant impact on the integrity of Natura 2000 sites. It is also considered that there would be no impact upon SSSIs.</p>							?
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is within a NVZ (groundwater and surface water) and lies in Groundwater SPZ 3. The site falls within the Humber River Basin District. The nearest section of river is 'New Fleet Dain from Source to River Went' 530m south which is moderate ecological quality / not yet assessed chemical quality. This is an artificial waterbody with moderate overall potential and an overall status objective of good by 2027.' Groundwater: Aire and Don Sherwood Sandstone water body - good quantitative quality / poor chemical quality, current overall status = poor, overall status objective 'good by 2027'.</p>		✓		✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>CAMS: surface water resources available at least 95% of the time for most of site.</p> <p>Local effects The coincidence of the site with Groundwater SPZ 3 means that there is the potential for the site to disrupt water flow to a water source (although SPZ 3 represents the least sensitive groundwater protection category defined). Fuel spills, even above the saturated zone, could contaminate the aquifer, but risks could potentially be managed through mitigation, monitoring and permitting.</p> <p>There may also be issues with materials used to restore the site. Run off from, for instance overburden stored at the site may also find its way to surface water. However these impacts are also likely to be manageable through good site management. Because this site is in a NVZ, surface and groundwater water may be vulnerable during restoration phases of project if fertilisers are used. In summary, without mitigation impacts are minor negative in the short, medium and long term.</p> <p>Plan level/ regional/ wider effects There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by good site management.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Sand from this site would be used in the adjacent Plasmor block-making plant. Access: Confirmed that access will be direct from adjacent Plasmor block making plant with sand transported by dump truck or conveyor direct to the plant for use in manufacture of blocks. Manufactured blocks already leave the block making plant by road & rail; Light vehicles: 0 as no access proposed onto public highway; HGV vehicles: 0 as no access proposed onto public highway (and would substitute for 30 - 40 HGV movements per day which currently deliver from off-site).</p> <p>Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating green.</p> <p>PRoW: The site is not affected by a registered public right of way.</p> <p>Rail: 1.5km N (Hensall Station 2.2km west) / Nearest railhead: There is a railhead on site. Strategic</p>		✓	✓	✓	m+	m+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Road: M62 adjacent to north / 4.4km east to J34 of M62; Canal / Freight waterway: Aire and Calder Navigation: 300m south (Wharfe associated with WJP22).</p> <p>Local effects Site would not generate any direct vehicle movements (though through sales from the Plasmor block making plant an indirect negative effect might occur). In terms of co-location, between extraction here and the adjacent processing Plasmor plant, there will be a net benefit and reduction in transport miles and associated emission. While sustainable transport is not likely to contribute to this site it will take an estimated 30-40 HGVs off the road per day. The net effect is considered moderate positive effect.</p> <p>The Highways Assessment concludes that the site is not likely to generate significant travel demand⁴⁵.</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within a Hazardous Substances Consultation Zone or an Air Quality Management Area. Applying the 1km buffer around a site for possible impacts advised by MPS2 shows that it is possible Great Heck and Little Heck, Heck Farm and a number of other individual properties are in range of dust, though most receptors are a sufficient distance for pollution to be considered insignificant.</p> <p>Local effects In terms of emissions associated with freight, the sand extracted at this site is intended</p>		✓	✓		0	0	0

⁴⁵ Were traffic to be generated by the site, the Highways Assessment concluded that the site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway and that HGV movement is acceptable onto Heck and Pollington Lane.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>to be used at the adjacent Plasmor block-making plant. However, sales of sand may also occur, which would indirectly generate some traffic. This could lead to negligible to minor traffic pollution impacts to nearby receptors such as Great Heck (if this is the route taken). However, the site would substitute for 30 - 40 HGV movements per day which currently deliver from off-site, resulting in a net positive impact from traffic.</p> <p>Sand extraction at the site could lead to the generation and deposition of dust (although dust suppression measures can be implemented to effectively mitigate this impact) (negligible to minor negative impact). There are priority habitats adjacent to the site, which are deciduous woodland, However, effects on habitats are considered to be negligible.</p> <p>Due to the location of the site adjacent to the M62 it is likely that pollution levels in the area are already relatively high (although this stretch of M62 is outside of the M62 AQMA) which may make some receptors more vulnerable. However, this site is not particularly large so combined impacts are rated as minor positive to uncertain due to possible impacts on receptors that cannot be resolved until a dust / air quality assessment is undertaken. Mitigation may however reduce any impacts significantly. In the longer term, although there may be some initial dust impact from restoration, any impact is likely to be short lived and will quickly become insignificant.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	
5. To use soil and land efficiently and safeguard or enhance their	<p>Proximity of soil and land receptors Site is Grade 3 Agricultural Land. It is not known if this is Grade 3a (best and most versatile) or 3b. The site is however a greenfield site so inevitably some land will be lost until restoration is put in place. Nutrient recovery is not applicable to this site. Site does not lie within or adjacent to a development high risk area. In terms of land stability development does not</p>					-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
quality	<p>lie within or adjacent to a Coal Authority development high risk area</p> <p>Local effects As the site is relatively small (8.16ha), with a possible best and most versatile agricultural land (Grade 3) being lost.⁴⁶. Effects on land use and soil quality during the 22 years operational phase of the site are predicted to be minor negative. Restoration would be to agriculture, so no / insignificant long term effect. Effect could also be cumulative (see below).</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a very small in relation to the overall agricultural land lost in England per annum to development⁴⁷ but could have a small scale effect on national food production capacity.</p>							
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Priority Habitat - the site is bordered to the north east and south west by deciduous woodland strips / blocks. Site is predominantly arable and it is unlikely that any trees / hedgerows would be lost as a result of the development. It is understood that the sand from this site will be used at the adjacent Plasmor Block-making site, with some for wider sale.</p>		✓		✓	-	-	-

⁴⁶ The best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping the site is located within ALC Grade 3 land, without further investigation it is not known whether it is Grade 3a or 3b. For the purposes of this SA the precautionary principle approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

⁴⁷ 8.16ha (assuming all land is BMV) annualised across the 22 year life of the site would be an annual 0.37ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. An 8.16ha loss would represent a 0.01% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects A small amount of carbon storage habitat may be lost, though the effect of this on this objective is negligible. Access to the road network is good, however minerals would still need to travel to the likely markets, generating vehicle emissions that contribute to climate change. A significant amount of energy will be required for machinery to extract the minerals from the site, with associated emissions and use of natural resources.</p> <p>Overall, effects on this SA objective are considered minor negative in the short and medium term, falling to minor negative if the northern site continues to operate in the longer term.</p>							?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁴⁸ of a site Site lies in Flood Zone 1. Only very small areas (<5%) of low risk (1:1000(0.1%)) surface water flooding affect the site.</p> <p>CAMS: surface water resources available at least 95% of the time for most of site.</p> <p>Site is Grade 3 Agricultural Land.</p> <p>Local effects The site is unlikely to form a barrier to future species movement and other opportunities to significantly contribute to climate adaption are considered unlikely. Although dust deposition may occur, this is unlikely to be a significant enough effect to disrupt the wider ecological network. However, restoration in the long term would strengthen networks. Climate change would not affect the site in the latter part of the Plan period. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively. There would be a loss of agricultural land during the operation of the proposed site.</p> <p>Overall, the effects on this SA objective are likely to be minor negative although there is some</p>	✓		✓		-	-	0

⁴⁸ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>uncertainty as to any long term effects post restoration of the site.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects The site will contribute to the need for sand at the adjacent Plasmor block-making site. The site will however result in the extraction of an estimated 40,000 tonnes per annum of virgin materials during the operational lifetime of the site which will be unavailable for future use (unless recycled). This works against the SA objective, so it is scored negatively. The impact would cease in the long term.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		-	-	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects Although overburden and fines are likely to be generated by this site they are also likely to be useful in restoration so are unlikely to be taken off site. While indirectly the site may allow for extraction of primary resources, thus decreasing the opportunity for recycled and secondary aggregates to replace them (and reduce waste) there is still likely to be demand for primary aggregates such as sand (so this effect can only be considered by considering all sand extraction together and cannot be attributed to a single site – see preferred policy options SA (volume I)).</p> <p>Plan level / regional / wider effects As detailed above.</p>		✓		✓	-	-	0
10. To conserve	<p>Proximity of historic environment receptors No conservation areas within 1km, Registered Parks</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
<p>or enhance the historic environment and its setting, cultural heritage and character</p>	<p>and Gardens, Registered Battlefields or World Heritage Sites within 5km. No scheduled monuments or listed buildings in the close vicinity of the site.</p> <p>There are a number of Protected Military Remains of aircraft crash sites within the allocation site. However, the potential for remains of aircraft to be present is low to nil. There are no currently recorded archaeological sites within the allocation area. However, from evidence for the surrounding area, archaeological potential can be inferred, given the identification from archaeological recording and aerial photographs of activity comprising of linear boundaries, track ways and enclosures, likely to date from the later Iron Age / Romano-British periods.</p> <p>HLC broad type- extractive, HLC type- Quarry aggregates. The North Yorkshire HLC Project database record number HNY590 identifies this allocation site as being at the edge of a larger area of quarrying which has seen large scale extraction of aggregates, both sand and gravel, since the second edition. This extraction has been carried out in a landscape of planned parliamentary enclosure. The quarries are not present on the first edition suggesting that this is a result of the reorganisation of the landscape with enclosure. Legibility of this HLC type is partial which means that evidence relating to previous character types is visible within the present environment but is on the whole discontinuous.</p> <p>Local effects There is some archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards and, although the site has not been archaeologically evaluated, it is assumed that allocating this site would be likely to cause the loss of these archaeological remains if the site is extracted without mitigation. Investigation works required by the Joint Plan Policy D08 (Historic Environment) – <i>‘mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.’</i>, is expected to mitigate the impact to buried archaeology and this is considered a minor negative effect. However, it is acknowledged that there is a level of uncertainty about this effect because there is no evidence from prior archaeological evaluation to enable an informed assessment of the archaeological potential of the site.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>It is anticipated that there will no significant effect upon HLC.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> No National Parks, AONBs or Heritage Coast within 10km. Site is in Humberhead Levels NCA. The North Yorkshire LCA places this site in Landscape Character Type 23: Levels Farmland (broad type: farmed, lowland valley landscapes). This character type has: high visual sensitivity (as a result of the predominantly open character and flat landform, which facilitates long distance open views across the landscape and promotes strong inter-visibility with adjacent Landscape Character Types); low ecological sensitivity (resulting from the fact that much of this LC type encompasses improved agricultural land); and moderate landscape and cultural sensitivity as a result of the presence of a patchwork of historic drainage features (ditches and dykes), moated sites and grange sites. The site is also in the Selby LCA, categorised as 'River Aire Corridor'; LCA type: 'Open Fringe Farmland'. In terms of 'intrusion' the area is classified as disturbed.</p> <p><u>Local effects</u> This is a Greenfield site (extension to existing site). This site will further negatively alter the quality of the countryside around Great Heck which has already been extensively disturbed by industrialisation and other development. The local landscape cannot continue to accommodate this level of exploitation without wider efforts to counteract the cumulative degradation of this locally sandy 'island' within Selby's Levels Farmland (NY&Y L). Although the site lies in close proximity to the M62 an intervening embankment and hedgerow is likely to screen views from this direction.</p> <p>In the short, medium and early long term a greenfield site will be lost, and stripped of soil whilst working areas and plant movements will be locally visible. Impacts are therefore considered to be minor negative and could be readily mitigated. Following restoration it is considered that a low level restoration scheme will be difficult to integrate with adjoining landform and land uses and productive agricultural land is likely to have been lost. Due to the location of the site there may be pressure to expand industrial uses. Impacts following restoration are considered to be minor negative.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Sand from this site would be used in the adjacent Plasmor block-making plant.</p> <p><u>Local effects</u> Although a site of this scale (8.16ha) would only offer very limited job opportunities, it would support an existing business and support jobs in the adjacent block-works where the sand would be used. The allocation of this site would enable the adjacent block-making site to source sand from the closest possible location therefore reducing costs in terms of freight and therefore possibly keeping the cost down of valuable building products. Overall, during the operational phase of the site impacts are considered to be minor positive.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓	✓	+	0	0
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> IMD Area is Whitley. This is not in worst 20%. Nearest significant communities: Great Heck 500m west, Little Heck 1.1km north-west, Pollington 1.5km south-east, Hensall 2km north-west. Both Hensall and Great Heck are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities.."</p> <p><u>Local effects</u> Job opportunities arising from this site are likely to be limited, however it is considered that the allocation of the site would enable the provision of locally available construction materials by supporting the adjacent block-making site. However it is considered that immediate settlements are unlikely to directly benefit in any significant way. Site restoration plans are unlikely to either hinder or boost local tourism. Overall any effect is considered to be negligible..</p> <p><u>Plan level / regional / wider effects</u> Not applicable to this site.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
14. To provide opportunities to enable recreation, leisure and learning	<p><u>Proximity to recreation, leisure and learning receptors</u> A local footpath (no. 35.34/5/1) runs through the south of the site and along the eastern boundary (though this is no longer accessible due to the M62), an on road cycle route runs circa 250m north of the site along Green Lane. No national / regional routes lie within 500m.</p> <p><u>Local effects</u> The footpath that currently passes through this site is no longer accessible, though could be diverted to make it more accessible. It is therefore considered that impacts on recreation are negligible. During the restoration period it is not known whether any public rights of way will be incorporated in to the restoration plans.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> There are no hospitals or clinics within 1km. Great Heck lies 500m west, Little Heck lies 1.1km north-west and Pollington lies 1.5km south-east. A number of individual properties lie within 500m of the site.</p> <p><u>Local effects</u> Without mitigation it is possible that noise and dust could affect nearby residential receptors. This is more likely to affect isolated properties rather than larger settlements due to intervening distance. As extracted sand would be used at the adjacent site, it is not considered that significant impact on health and wellbeing impacts would occur in relation to traffic levels (and would in effect offset traffic pollution impacts as well as some noise. Overall impacts are considered to be negligible to minor negative during the operational phase of the site and neutral following restoration.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		-	-	0
16. To minimise flood risk and reduce the impact of flooding	<p><u>Proximity to flood zones</u> Site lies in Flood Zone 1. Only very small areas (<5%) of low risk (1:1000(0.1%)) surface water flooding affect the site.</p> <p>This site lies across two 1km squares where <25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers (rather than superficial deposits</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>like sand).</p> <p>The planning application for a biomass processing plant adjacent to the site stated that 'The Environment Agency advised that the aquifer level in this area is -12.0m AOD (20m below ground level)'. Additionally, boreholes to 13m in that application were dry⁴⁹. This is unlikely to present a significant issue for a water compatible development, even if it were to go below the water table.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'⁵⁰. Flooding is not a particular issue for this site and as sand extraction is 'water compatible' there are no significant effects. A site specific flood risk assessment will be required. Opportunities to integrate SuDS should be explored.</p> <p>Plan level / regional / wider effects None noted.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a small contribution to self-sufficiency in the supply of sand (and blocks and concrete products following processing at the adjacent site)</p> <p>Plan level / regional / wider effects The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0

⁴⁹ Ethical Partnership, 2009. Planning application for the extension of the biomass and wood fuel processing plant, Pollington Airfield, Selby: Supporting Statement

⁵⁰ MJP30 is at slightly lower surface water flood risk and MJP54 slightly higher, however, both are in Flood Zone 1. MJP22 is at significantly higher risk from river flooding. Therefore this site should be considered alongside but after MJP30 and before MJP54 and in preference to MJP22.

Cumulative / Synergistic effects⁵¹	
Planning Context:	<p>Nearest significant communities: Great Heck 500m west, Little Heck 1.1km north-west, Pollington 1.5km south-east, Hensall 2km north-west. Both Hensall and Great Heck are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities...". Site does not conflict with any allocations.</p> <p>Pollington is in East Riding and, being outside of the settlements covered by the settlement hierarchy would be covered (in the proposed submission strategy) by policy S4 'Supporting development in Villages and the Countryside) which supports development of an appropriate scale to its location. No allocations conflict with MJP44.</p>
Other Joint Minerals and Waste Plan Sites:	Site lies adjacent to WJP22. MJP54 is 620m west, while MJP22 is 1km north, WJP25 is 4.3km north-west.
Historic Minerals and Waste Sites:	Numerous historic and active minerals and waste sites lie to the north within 2km in the vicinity of MJP22 (see MJP22 for a description of these sites).
Landscape	There are 3 other potential MWJP sites within 2km. In addition the site is located in a fairly industrialised area and a number of existing minerals, waste and industrial sites lie in close proximity. A key cumulative effect in this area is a landscape impact as it is considered that the local landscape cannot continue to accommodate the level of exploitation seen in this area without wider efforts to counteract the cumulative degradation of this locally sandy 'island' within Selby's Levels Farmland.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including impact on the Sand Quarry SINC at Great Heck and protected species • Design to minimise the irreversible loss of best and most versatile agricultural land and to protect high quality soil resources • Design of development and landscaping of site to mitigate impact on: heritage assets (Pollington Hall Listed building and archaeological remains) and 	

⁵¹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

local landscape character and features and their respective settings

- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate and protection of aquifer
- Design to ensure protection of the aquifer
- Design to mitigate impact on public right of way and its users
- Appropriate arrangements for control of and mitigation of the effects of noise and dust
- Appropriate restoration scheme using opportunities for habitat creation and taking account of the distinctive landscape character of the area

MJP54 – Mill Balk Quarry, Great Heck

Site Name	MJP54 (Mill Balk Quarry, Great Heck, Selby) (XY 458872 421430)
Current Use	Mothballed Sand quarry (since 2008)
Nature of Planning Proposal	Extraction of sand from existing quarry by deepening of part of the site
Size	10.3ha
Proposed life of site	Restoration would be prior to end of 2030)
Notes	Proposed extension to depth of extraction within existing quarry. The current approved restoration scheme is short rotation coppice in base of the quarry with grassed perimeter slopes, but future restoration details would be established once the preferred method of extraction is determined. The existing planning permission is valid until 2042 and there are 220,000 tonnes of already consented reserves remaining at the site which would be worked when the site is re-opened)

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Assumptions- the existing quarry onsite forms part of the baseline situation as this is already in place and agreed timescales / restoration plans are projected forward to form the baseline (i.e. it is considered that the current quarry could be active until 2042 after which time the agreed scheme of restoration would be implemented). The timescale for depth extension of the quarry is unknown (i.e. the amount of years that it would take to extract sand between the currently permitted level and the deeper level) and therefore restoration is assumed to occur in the long term (based on the current quarry permission to 2042). It is assumed that restoration would be in line with the currently agreed scheme for the existing quarry.

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and	Proximity of international / national and local designations and key features Natura 2000: 12km south-east- Thorne Moor SPA / SAC, 11.5km north-east- River Derwent SAC. 5 SINCS within 2km - Disused Railway Line (SE51-02, deleted SINC) 430m south, Sand Quarry, Great Heck (SE52-17, deleted SINC)	✓		✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
geo-diversity and improve habitat connectivity	<p>735m east, Disused Pit (part in Eggborough) (SE52-21, deleted SINC) 1.05km north-west, Balne Moor Ponds (SE51-07, ratified SINC) 1.45km south-west, Ditch west of Balne Moor ponds (SE51-18, pre-existing SINC) 1.5m south-west.</p> <p>Priority Habitat- circa 20% of site covered by deciduous woodland (along northern, eastern and southern boundaries). Approx. 25% of site covered by England Habitat Network core woodland / ancient semi-natural woodland). Site close but not adjacent to Humberhead Levels Futurescape (circa 500m north).</p> <p>Previous Phase 1 habitat survey has been carried out at the site indicating that there is a possibility that the site could support protected species including bats, breeding birds, reptiles, invertebrates, great crested newts and other amphibians and badgers.</p> <p>Local effects Potential exists for the site to support a range of protected species however given the baseline situation, short and medium term impacts are considered to be neutral as extracting to deeper levels than currently consented is considered unlikely to significantly alter any existing disturbance to protected species (note: this assumes that the allocation would be deepening an active quarry, if the site is dormant for a period of time before deepening of the quarry, potential exists for disturbance to occur to habitats / species that have recolonized the site. Indeed, regenerated heathland habitats and associated protected species may now be on site. This is represented via an element of uncertainty in the assessment). In the long term impacts are considered to be neutral as it is assumed that restoration would be to short rotation coppice (in line with the baseline situation).</p> <p>It is noted from a site visit and from aerial photography that a heath type vegetation characteristic of the acid sandy soils found in the quarry appears to have developed on the site during the period that the current quarry has lay dormant. Similar habitats or opportunities to develop similar habitats may also exist at sites in close proximity to this quarry providing possible opportunities to create habitat links. Although the restoration of the site to short rotation coppicing would represent a neutral effect as there would be no change from the current projected baseline, it could represent a missed opportunity in relation to this objective. It would be more desirable to change restoration to compensate for any lost habitats that are on site at present (possible active or passive restoration). Similarly, restoration to water would be a missed opportunity.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Uncertainty is also noted in relation to when impacts would fall as this has not been specified.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors it is considered that there would be no significant impact on the integrity of Natura 2000 sites. It is also considered that there would be no impact upon SSSIs.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is within NVZ (groundwater and surface water) and the south-east corner of site lies in Groundwater SPZ 1, the middle section of site lies in SPZ 2 (circa 60% of site) and northern area lies in SPZ 3. A Yorkshire Water groundwater abstraction facility lies around 15m south of the site. The site falls within the Humber River Basin District and the nearest section of river is 'New Fleet Drain from Source to River Went' 340m south (ecological quality: moderate potential, chemical quality: does not require assessment). No visible connectivity. Groundwater: Aire and Don Sherwood Sandstone water body - good quantitative quality / poor chemical quality, current overall status: poor, overall status objective 'good by 2027'.</p> <p>CAMS: Surface water is available less than 30% of the time (with red / unavailable noted for q30, q50, q70 and q95 divisions)</p> <p>Local effects As this site is in a NVZ, surface and groundwater water may be vulnerable during restoration phases of project if fertilizers are used. The location of the site within groundwater SPZ 1 and 2 and in close proximity to a Yorkshire Water groundwater abstraction facility means that there is potential for disruption of water flow to a water source and increased potential of contamination of water resources due to extension in the depth of the existing quarry. According to Environment Agency GP3 guidance the Agency would object to quarries in SPZ 1, and object if an unacceptable risk in SPZ 2. Quarrying can deplete the aquifer, for instance by discharging groundwater to the surface during dewatering (if this occurs) or depriving the aquifer</p>		✓	✓	✓	m-	m-	m-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>of its protective layer. Of particular risk will be fuels spills at these sites, however, unless further processing of the mineral occurs risk will be confined to aquifer depletion if material is worked below the saturated zone, possible mobilization of pollutants from overburden and the risk from spillages, which are potentially manageable through mitigation, monitoring and permitting. Limitations and mitigation requirements will be greatest in SPZ 1 which may that require extraction only be allowed above the saturated zone. As a quarry already exists at the site it is assumed that impacts of sand extraction at the site on the SPZ have been deemed to be acceptable, however an increase in depth of the quarry has potential for additional impacts. There is also an issue regarding the switch off of local pumps by the water company. Negotiations with the water company over water pumping are still on-going and therefore without mitigation, impacts are considered to be moderate to major negative with significant uncertainty.</p> <p>As future restoration is proposed to be short rotation coppice on the base of quarry the water impacts of this are thought to be insignificant, though any change, e.g. to landfill, would need to be considered in detail.</p> <p>Surface water available for extraction is very limited, so this adds some uncertainty to the assessment. If water is required the environmental impact will be considered through the water licensing system.</p> <p>Uncertainty is also noted in relation to when impacts would fall as this has not been specified.</p> <p><u>Plan level/ regional/ wider effects</u> There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by good site maintenance.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is proximal to a number of major settlements (e.g. Selby 10km, Castleford 15km, Doncaster 16km, Leeds 28km). Access: Confirmed as being existing access at Mill Balk Quarry onto Mill Balk (C339) leading north to A645 at Hensall; Light vehicles: 10 two-way daily movements (submitter information); HGV Vehicles: 30-50 two way movements (submitter information).</p> <p>Net change in daily two-way trip generations: Light vehicles: 10; HGVs: 30-50. Traffic assessment rating: yellow.</p> <p>PRoW: Immediate access is not affected by PRoW.</p> <p>Rail: 570m east / Railhead also 570m east at MJP44; Strategic Road: Nearest strategic road is M62 280m north; Canal / Freight waterway: River Ouse 10km east.</p> <p>Local effects Site would generate 10 light vehicle movements per day and up to 50 two way HGV movements. The site does not include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway. However, HGV movements are deemed acceptable onto Mill Balk, so light vehicles will also be acceptable.</p> <p>The route taken would however pass some sensitive receptors. According to the traffic assessment “The site would use the existing quarry access onto Mill Balk with HGVs then turning north and heading along Mill Balk for approximately 1.5km to the junction with the A645. This section is however signposted as being subject to a 7.5T weight restriction ‘except for access’ and would also pass Hensall Community Primary School (where pupil pick up/ drop off is understood to be from the highway), St Pauls Church, as well other isolated employment and residential sites”. That assessment recommends that “As part of a future planning</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>consent for this site it is recommended that mitigation measures are considered to reduce/remove conflicts with the school and church which could include physical measures (e.g. extending the 30mph speed limit further south, parking arrangements at the school) as well as 'softer' type measures (e.g. timing agreements to avoid HGV movements at school times, an information campaign warning parents and children at the school that HGVs will be using Mill Balk)".</p> <p>There could be an opportunity to link to the nearby railhead, though extraction quantities are very low (reserve of 70,000 tonnes). The site is not likely to generate significant passenger transport demand.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					?	?	

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors Site is not within a Hazardous Substances Consultation Zone or an AQMA. Applying the 1km buffer around a site for possible impacts advised by MPS2 shows that it is possible Hensall, Great Heck villages and a number of isolated properties (closest Mill Farm, approx. 170m) are in range of dust, though most receptors are a sufficient distance for air pollution to be considered insignificant.</p> <p>Local effects Although the site access route does pass by a primary school and a number of dwellings, and the site is in close proximity to several other potential / active minerals and waste sites, it is not considered that the extension of the depth of an existing quarry would generate significantly more traffic and / or dust and associated air quality impacts than the baseline situation, albeit this may be spread over a longer period of time. On re-opening the quarry, it is considered that effects would be negative in the short and medium term during which time the existing quarry already has consent and a minor negative in the long term with some uncertainty. The neutral / minor negative score in the long term refers to the possibility that an extension in the depth of the quarry is likely to lead to a longer period of sand extraction and associated dust and emissions. There is an element of uncertainty in this assessment as it is currently unknown whether the proposed allocation would result in a longer lifetime of the quarry (permission until 2042).</p> <p>There may be also be a very minor / possible negligible impact on the A645 or beyond as traffic from this site combines with other traffic from MJP22 and other developments. It is uncertain when this impact would fall. Due to the extant planning permission, the portion of the cumulative impact from this site is apportioned to the long term.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	-	-	-
								?
5. To use soil and land efficiently and safeguard or enhance their	<p>Proximity of soil and land receptors Site is Grade 3 Agricultural Land. It is not known if this is Grade 3a (best and most versatile) or 3b. The site is an existing quarry. Nutrient recovery is not applicable to this site. Site does not lie within or adjacent to a development high risk area.</p> <p>Local effects As the site is an existing quarry and the potential allocation would be for extension of the</p>		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
quality	<p>depth of the quarry rather than the overall footprint, it is considered that no further area of land would be lost to the quarry and therefore a neutral effect is anticipated in the short and medium term. There is potential for a minor negative impact in the long term due to the possibility that an extension in the depth of the quarry may lead to a longer period of sand extraction than would otherwise be expected under the existing baseline situation, therefore delaying restoration plans.</p> <p>Plan level / regional / wider effects None noted.</p>							-
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Priority habitat currently lies onsite (circa 20% of site covered by deciduous woodland). However, this would not be lost as a result of this allocation for deepening of the quarry. Site is in relatively close proximity to junction 34 of the M62 (circa 3km) and numerous large settlements are relatively close (e.g. Selby 10km, Castleford 15km, Doncaster 16km, Leeds 28km).</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects The Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken notes climate change to river flood risk is unlikely to affect the site in the latter part of the Plan period. No further carbon storage land / habitat would be lost to this development in excess of the baseline situation. Access to the road network is good, however minerals would still need to travel to likely markets</p>	✓		✓	✓	m-	m-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>generating vehicle emissions that contribute to climate change. A significant amount of energy will be required for machinery to extract the minerals from the site, with associated emissions and use of natural resources.</p> <p>Overall, effects on this SA objective are considered moderate negative in the short and medium term, falling to minor negative if the northern site continues to operate in the longer term. An assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors must be undertaken⁵². The site may also lead to a delay in restoration which is assumed to be short rotation coppice, a source of carbon storage.</p>							?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁵³ of a site Site lies within Flood Zone 1. About 10% of the site is at risk of surface water flooding. Of this <5% is medium risk (1:100 (1%)). Surface water distribution is likely to change during extraction. No ecological networks present (other than a small area of core England Habitat Network onsite however the current planning consent allows for this to be removed and the underlying sand to be extracted).</p> <p>CAMS: Surface water is available less than 30% of the time (with red / unavailable noted for q30, q50, q70</p>					0	0	0

⁵² Proposals for new mineral extraction at a rate in excess of 75,000 tonnes per annum should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has been applied also to minerals output for the purposes of Development Management, Policy D11.

⁵³ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>and q95 divisions).</p> <p>Site is Grade 3 Agricultural Land. It is not known if this is Grade 3a (best and most versatile) or 3b. Proposal is for the deepening of an existing quarry.</p> <p>Local effects The site is not located within an area that is likely to flood (though groundwater rebound flooding appears to be affecting this site). It is not considered that the allocation of the site would inhibit the ability of neighbouring land uses to adapt to climate change given that the site is an existing quarry.</p> <p>Surface water available for extraction is very limited, so this adds some uncertainty to the assessment. If water is required, the environmental impact will be considered through the water licensing system.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will extract virgin sand which will be unavailable for future use (unless recycled). This is considered to have a high moderate effect on the SA objective.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓	✓	m-	m-	m-
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects on the waste hierarchy None noted.</p> <p>Plan level / regional / wider effects While indirectly the site may allow for continued extraction of primary resources, thus decreasing the opportunity for recycled and secondary aggregates to replace them (and reduce waste). There is still likely to be demand for primary aggregates such as sand (so this effect can only be considered by considering all sand extraction together and cannot be attributed to a single site).</p>					-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors There are 3 Listed Buildings within 1km (1 Grade II and 2 Grade II*). All located approximately 1km north-west of site. There are no currently recorded non-designated archaeological sites within the allocation area. The wider surrounding landscape has inferred archaeological potential comprising Romano-British settlement. However, the current development of the allocation site is likely to have removed any archaeological interest. The North Yorkshire HLC Project database record number HNY597 identified the allocation site as an area of sand extraction with previous evidence of gravel quarrying dated to the early 19th century. However previously this area was mainly characterised by parliamentary enclosure. Legibility of this HLC type is partial which means that evidence relating to previous character types is visible within the present environment but is on the whole discontinuous.</p> <p>Local effects It is considered that the current quarry development is likely to have removed any archaeological features that were present onsite.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character Site is in Humberhead Levels NCA. The North Yorkshire LCA places this site in Landscape Character Type 23: Levels Farmland (broad type: farmed, lowland valley landscapes). This character type has: high visual sensitivity (as a result of the predominantly open character and flat landform, which facilitates long distance open views across the landscape and promotes strong inter-visibility with adjacent Landscape Character Types); low ecological sensitivity (resulting from the fact that much of this LCA type encompasses improved agricultural land); and moderate landscape and cultural sensitivity as a result of the presence of a patchwork of historic drainage features (ditches and dykes), moated sites and grange sites. The site is also in the Selby LCA, categorised as 'River Aire Corridor'; LCA type: 'open fringe farmland'. In terms of 'intrusion' the area is classified as disturbed.</p> <p>Local effects Limited change in terms of landscape and townscape setting would be experienced in the short and medium term as the site is an existing quarry and is well screened.</p> <p>The quality of the countryside around Great Heck has already been extensively disturbed by sand quarries</p>	✓	✓	✓	✓	0	0	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>and other development and has a definite 'rural-urban fringe' character. It is considered that the local landscape cannot continue to accommodate this level of exploitation without wider efforts to counteract the cumulative degradation of this locally sandy 'island' within Selby's Levels Farmland (NY&Y L LCA). Thus in the long term a minor negative effect is recorded as it is not considered that a deeper quarry void will be capable of satisfactory integration with the landform of adjoining areas, and future land uses will be constrained. There is also the possibility that an extension in the depth of the quarry will extend the life of quarrying operations onsite which could contribute negatively to the cumulative situation in an already extensively disturbed area Satisfactory restoration of a deeper quarry will be more difficult to achieve.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is proximal to a number of major settlements (e.g. Selby 10km, Castleford 15km, Doncaster 16km, Leeds 28km).</p> <p>Local effects The estimated mineral reserve at the site without current planning permission is 70,000 tonnes of sand, with this potentially being made available to the market over the lifetime of the site. In the short and medium term it is not considered that this allocation would result in job creation. However in the long term, should an extension in the depth of the quarry result in a longer operational lifetime of the quarry,</p>	✓	✓	✓	✓	+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>existing jobs may be supported for a limited additional period of time. A longer operational life of the quarry would delay restoration which is currently approved to be to short rotation coppice. There may be some minor negative economic growth impacts as a result of the delay in restoration⁵⁴, as short rotation coppice would provide an economic opportunity for sale as an energy crop.</p> <p>There are no obvious nearby facilities that would have their prospects for growth enhanced or diminished as a result of this allocation, and while the site does not represent 'low carbon development' the proximity of this site to major markets is not likely to significantly increase the carbon footprint of construction projects that ultimately use this sand.</p> <p>Overall the deepening of part of the current site is considered to have a minor positive effect in the short term and medium term (the site would be operational), with a neutral effect in the long term following closure of the site. Uncertainty is also noted in relation to when impacts would fall as this has not been specified.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD Area is Whitley. This is not in worst 20%. Great Heck lies circa. 190m south, Hensall Primary School lies circa 1km north. Nearest residential property appears to be Mill Farm 160m north-west. Works located directly to the east of the site. Both Hensall and Great Heck are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities".</p> <p>Local effects Job opportunities arising from this site are likely to be very limited, and while the site would provide a further source of sand which could aid future development, the immediate settlements are unlikely to directly benefit in any significant way. The site is unlikely to either hinder or boost local tourism. Overall</p>					0	0	0

⁵⁴ Restoration would be prior to end of 2030

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>any effect is considered to be insignificant.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors Several short stretches of local footpath are located within 250m of the site including 50m north and 210m south. Old Gravel Pit Open Access Land (also Common Land) lies adjacent to the site access track to the north.</p> <p>Local effects It is not considered that the allocation of the site would have any impact upon recreation, leisure and learning opportunities in the short and medium term in comparison to the baseline situation. In the long term the allocation may extend the life of quarrying operations onsite however it is considered that this would have a negligible impact in relation to this objective.</p> <p>There may be some potential to restore the dismantled railway to the east of this site to a recreational route; however the impacts from this site are unlikely to affect recreation in a way which would require this level of compensation.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing There are no hospitals or clinics within 1km. Great Heck lies circa 190m south (residential area) and the edge of Hensall including the primary school lies circa 1km north. Nearest residential property appears to be Mill Farm 160m north-west.</p> <p>Local effects Noise, dust, traffic and access to amenities / facilities are considered likely to remain largely similar to the baseline situation.</p> <p>One issue has, however, been highlighted in the traffic assessment; traffic from the site, if it restarts (following this sites period of inactivity since 2008) would potentially conflict with picking up and dropping off at Hensall Community Primary School / events at St. Paul's Church, which takes place from the highway, and which may increase the risk to pedestrians. We have rated this as potentially moderate negative without</p>		✓		✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>mitigation.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones The site is located in Flood Zone 1. About 10% of the site is at risk of surface water flooding. Of this <5% is medium risk (1:100 (1%)). Surface water distribution is likely to change during extraction.</p> <p>This site lies across two 1km squares where <25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers (rather than superficial deposits like sand).</p> <p>A recent request for a scoping opinion NY/2013/0262/SCO at the same site has investigated groundwater levels at the site and found them to be at between – 3m and – 4mAOD. However, that same case highlighted that these levels were unusually high and thought to be the result of a local cessation in groundwater pumping⁵⁵. The deepening of this quarry may potentially (depending on depth planned) dip below this level. However extraction of sand is a water compatible use.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects The (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'. A suitable scheme will be required to drain or store surface water from the site that does not increase flooding on any receiving water body. Opportunities to integrate SuDS should be explored. A site specific flood risk assessment will be required. Groundwater flood risk will need to be established and clarified at this site within the site specific flood risk assessment.</p>					0	0	0

⁵⁵ MJCA, 2013. Letter to North Yorkshire County Council, dated 8 November 2013 [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=8972>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects None noted.							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects Deepening an existing site, rather than allocating a new site e would make a small contribution to self-sufficiency in the supply of sand.</p> <p>Plan level / regional / wider effects The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0
Cumulative / Synergistic effects⁵⁶								
Planning Context:	Nearest residential property appears to be Mill Farm 160m north-west. Works located directly to the east of the site. Both Hensall and Great Heck are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities." Site does not conflict with any allocations.							
Other Joint Minerals and Waste Plan Sites:	<p>Other Joint Minerals and Waste Plan Sites: MJP22 is 670m north and MJP44 is 1km south-east. WJP22 is 1.1km south-east, WJP25 3.2km north-west.</p> <p>Historic Minerals and Waste Sites: Numerous historic and active minerals and waste sites lie to the north within 2km in the vicinity of MJP22 (see MJP22 for a description of these sites).</p>					?	?	

⁵⁶ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Landscape, air quality, traffic, noise, hydrology and biodiversity impacts:	There are 3 other potential minerals and waste sites within 2km and a number of currently active and dormant minerals and waste sites. In the short term and medium term it is not considered that the allocation of this site would exacerbate cumulative impacts as little change from the current baseline situation is anticipated. In the long term, should the extension in depth of the quarry result in a longer operational period than is currently permitted (until 2042), the site may combine with others nearby to contribute towards cumulative landscape, air quality, traffic, noise, hydrology and biodiversity impacts. The magnitude of this cumulative impact is considered to be very minor and any effect is likely to be short term.
Waste	It is also noted that cumulatively all sand sites taken together may represent a disincentive to the further use of recycled and secondary materials. This effect is explored separately in the Preferred Options SA report.

Limitations / data gaps

No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues including impacts on protected species
- Design to minimise the irreversible loss of best and most versatile agricultural land and to protect high quality soil resources (as appropriate)
- Design of development and landscaping of site to mitigate impact on heritage assets (archaeological remains) and local landscape features
- Design to include an appropriate quantitative hydrogeological risk assessment and suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation, surface water drainage and SuDS and protection of the aquifer and abstraction points
- Suitable arrangement / Improvements to access and along Mill Balk road to the A645, including appropriate traffic management in the vicinity of the Hensall Community Primary School and Church of St Paul to mitigate potential conflicts with the users of the school and church
- Appropriate arrangements for control of and mitigation of the effects of noise and dust
- Appropriate restoration scheme using opportunities for habitat creation including to compensate for any loss of existing habitats

MJP09 – Barlby Road, Selby

Site Name	MJP09 (Barlby Road, Selby) (XY 462923 432372)
Current Use	Rail and road freight distribution facility including handling facility for aggregates
Nature of Planning Proposal	Retention of rail import and handling facility for aggregates
Size	25ha
Proposed life of site	30 years
Notes	Current lifespan of facility is tied by planning condition to the life of adjacent asphalt plant, but there is no specified end-date for the asphalt plant and further planning permission would only be required in the event of the asphalt plant closing. No restoration proposed.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Assumptions: This possible allocation represents a site that already exists and does not include any amendments to the current use / size / operations of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p><u>Proximity of international / national and local designations and key features</u> Natura 2000: 4km north-east is Skipwith Common SAC; 7km east is River Derwent SPA / SAC / Ramsar, 11.5km south-east is Humber estuary SPA / SAC / Ramsar. 2 SSSIs within 5km: Burr Close, Selby 3.3km west and Skipwith Common (also a NNR) 4.2km north.</p> <p>8 SINC's within 2km: Fields near Barlow Grange Farm (Ratified SINC, SE63-13) 460m south, Staynor Wood (Pre-existing SINC, SE63-16) 820m south, Roscarrs Ponds (Ratified SINC, SE63-06) 950m south-east, Ponds between Barlby and the River Ouse (Ratified SINC, SE63-11) 1.37km north, The Old Railway Line, Barlby Parish, Osgodby (Potential SINC (does not qualify) SE63-18) 1.3km north-east, Sturges Ponds (Deleted SINC, SE63-07) 1.4km south-west, Oakney Woods & Ponds (Ratified SINC, SE63-08) 1.64km south-west, Woods between Railway and Selby Canal (Potential SINC (does not qualify) SE63-05)</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>1.9km south-west.</p> <p>Closest area of priority habitat is a patch of deciduous woodland circa 140m west. Possibly some connectivity as the patch of woodland and the site both lie in Flood Zone 3. Site is located in a regional Green Infrastructure network (Ouse). Site close but not adjacent to Bishop Wood Living Landscape (circa 60m west).</p> <p>Local effects As this site already exists and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional effects are anticipated on biodiversity/geo-diversity as a result of the allocation of the site.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is within a surface water NVZ. This site would fall within the Humber River Basin District. Nearest section of river is 'River Ouse from River Wharfe to Trent Falls' adjacent to the site to the south. This river is of moderate ecological status and its chemical quality status is 'fail', with a status objective of good by 2027. Groundwater water body is Wharfe and Lower Ouse Sherwood Sandstone (quantitative quality: poor, chemical quality: poor, overall risk: at risk, groundwater status objective= good by 2027).</p> <p>CAMS: Surface water available at least 70% of the time (at least 5% of the time water licenses may be restricted).</p> <p>Local effects As this site already exists and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional effects are anticipated on water quality as a result of the allocation of the site.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is proximal to a number of major settlements (e.g. Selby adjacent to site, York 19km, Castleford 20km, Leeds 30km). Access: confirmed as being the existing unnamed road via feed-mill level crossing route to A19 at Barlby. No date yet for an access to be constructed from junction approximately 470m north of the river Ouse bridge on the A63 Selby Bypass. Light vehicles: updated to 25 two-way movements (submitter information); HGV vehicles: Updated to 120 two-way movements (submitter information).</p> <p>Net change in two-way daily vehicle trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green.</p> <p>Rail: Railhead present onsite; Strategic Road: Nearest strategic road network is A19 150m north and A63 220m east; Canal / freight waterway: The Canal Network (River Ouse) (freight waterway) runs adjacent to the site to the south.</p> <p>PRoW: does not affect access.</p> <p>Local effects This site would transfer minerals freight to rail, so although there would be up to 145 two way vehicle movements (which would be a continuation of current levels of traffic into the longer term), the site would ultimately reduce the journey length of those vehicles representing sustainable transport (though as an existing site in the short term there will be no impact above the baseline – the only indirect benefit being in the medium to long term through more assured retention). Highways assessment has concluded that this site is not likely to generate significant travel demand. However, the site does not include a sufficient frontage to enable an access of acceptable standards to be formed on to the public highway. No travel plan required. The site is not likely to generate significant travel demand.</p>	✓		✓	✓	0	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>There is potential scope to link this site out onto the A63 Selby Bypass which would relieve pressure on the A19.</p> <p>The traffic assessment notes that “As the light vehicle and HGV traffic generations of the site would remain the same, the traffic impacts of continuing the use of the site are expected to remain the same with the existing access arrangements. The expected relocation of the access to the East is likely to have a positive traffic impact by avoiding HGV traffic from the site entering Selby. Road safety benefits are also anticipated from the removal of the potential conflict between site traffic and the railway”.</p> <p>Plan level / regional / wider effects There is potential scope to link this site out onto the A63 Selby Bypass which would relieve pressure on the A19.</p>						?	?
4. To protect and improve air quality	<p>Proximity of air quality receptors Site is not within a Hazardous Substances Consultation Zone or an Air Quality Management Area (AQMA). Applying the 1km buffer around a site for possible impacts advised by MPS2 shows that it is possible that areas of Selby and Barlby are in range of dust.</p> <p>Local effects As this site already exists and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional effects are anticipated on air quality as a result of the allocation of the site. The benefit is in the medium to long term through more assured retention of the site, which will promote modal shift to rail and reduce air pollution. It is noted, however, that a fairly substantial new development has outline consent on the site adjacent to MJP09 (Olympia Park, including 995 dwellings, a new primary school and other amenities). This site may have longer term air pollution impacts on receptors at that site. Such receptors would be exposed to noise and dust without mitigation (though as that development has yet to be built it is assumed that impacts are at a sufficiently low level to enable that development to carry out its own mitigation).</p> <p>Plan level / regional / wider effects Effects are considered local in nature.</p>		✓	✓	✓	0	+	+
							?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
5. To use soil and land efficiently and safeguard or enhance their quality	<p><u>Proximity of soil and land receptors</u> Circa 70% of the site is classed as urban whilst the north east of the site is Grade 1 Agricultural Land (excellent quality). The site is an existing rail and road freight distribution facility and therefore no land use changes or changes to soil quality would ensue as a result of the allocation of this site. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p><u>Local effects</u> As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional land use changes or changes to soil quality would arise as a result of the allocation of this site.</p> <p><u>Plan level / regional / wider effects</u> Retention of this site may help to avoid the need for a replacement site within the Plan area. Potentially, reducing any land-take and associated loss of soils from undeveloped land that may be required to develop / expand a new or existing site.</p>					0	0	0
6. Reduce the causes of climate change	<p><u>Proximity of factors relevant to exacerbating climate change</u> Closest area of priority habitat woodland is a patch of deciduous woodland 140m away.</p> <p><u>Local effects</u> As climate change is a global issue effects are reported in wider effects below.</p> <p><u>Plan level / regional / wider effects</u> As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts likely to exacerbate climate change are likely to arise as a result of the allocation of this site in the short term. The benefit is in the medium to long term through more assured retention of the site, which will promote modal shift to rail and reduce climate change.</p>	✓			✓	0	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p><u>Proximity of factors relevant to the adaptive capacity⁵⁷ of a site</u> This site is entirely within Flood Zone 3 due to river and tidal flood risk. However, the flood zones do not acknowledge the presence and influence of the existing flood defences and the River Ouse Modelled Flood Outline indicates the area is defended to at least a 1:25 (4%) standard of protection. This site is entirely contained within an area benefitting from flood defences.. Site is located within a Green Infrastructure network (Ouse R9).</p> <p>Circa 70% of the site is classed as urban whilst the north east of the site is Grade 1 Agricultural Land (excellent quality). The site is an existing rail and road freight distribution facility and therefore no land use changes or changes to soil quality would ensue as a result of the allocation of this site.</p> <p><u>Local effects</u> This existing site is in Flood Zone 3. Flood events are likely to be deeper and more frequent as sea level rise and increased river flood risk begins to take effect. The standard of protection associated with the flood defence is indicated in the River Ouse Modelled Flood Outline as being defended to at least a 1:25 (4%) standard of protection; this standard of protection will reduce with climate change. No additional impacts in relation to climate change adaptability would arise as a result of the allocation of this site.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
8. To minimise the use of resources and encourage their re-use and safeguarding	<p><u>Proximity of factors relevant to the resource usage of a site</u> No spatial factors identified.</p> <p><u>Local effects</u> The allocation of this site would allow for the retention of the rail and road freight facility, including handling facility for aggregates. As this development already exists, effects are considered to be neutral, as the facility forms part of the baseline situation. However it should be noted that should the allocation of the site result in the life of this freight distribution facility being extended (in excess of the time period already allowed under the current planning permission (which is unknown as it is tied to the life of an adjacent development), this will prevent a negative impact from occurring in relation to this objective in the</p>					0	0	0

⁵⁷ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>future (i.e. it would be a long term positive effect).</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>							
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects Not applicable to this site.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>					0	0	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors Selby Conservation Area lies 575m west. The Abbot's Staithes Scheduled Monument (ID 1,004,181) lies 1km west and 130 listed buildings lie within Selby (closest to site circa 350m west). Allotment Gardens Named Designed Landscape lies 730m south-west.</p> <p>There are no recorded archaeological sites within the allocation area nor does there appear to have been any archaeological work carried out prior the development of the existing facilities. The existing land use is likely to have destroyed any archaeological features that may have been present within this allocation.</p> <p>In terms of HLC, the HLC broad type is 'Industrial' and HLC Type is 'mixed commercial'. The North Yorkshire HLC project database record number HNY6083 identifies this allocation site as a large</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>commercial area in Selby which consists of Mills, warehouses, depots and some engineering places. Such developments are located around the canals and docks and has fragmentary legibility⁵⁸ of the previous HLC which was planned enclosure.</p> <p>Local effects As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts in relation to the historic environment are anticipated as a result of the allocation of this site.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character Site is in Humberhead Levels National Character Area. The North Yorkshire and York Landscape Character Assessment (LCA) places approximately 60% of the site in Landscape Character Type 24: River Floodplain (farmed, lowland and valley landscapes) and the remaining area of the site is Landscape Character Type 01 Urban Landscape. Character Type 24 has high visual sensitivity (as a result of the predominantly open character and flat landform which facilitates long distance open views across the landscape and promotes strong inter-visibility with adjacent Landscape Character Types); High ecological sensitivity as result of the patchwork of fen, flood meadows, floodplain mires, marsh and swamp, inland bare ground and calcareous</p>		✓	✓		0	0	0

⁵⁸ The legibility attribute value is classed as fragmentary, a term which is employed where the previous historic character is only slightly visible within the landscape.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>grassland habitats; and high landscape and cultural sensitivity as a result of the presence of numerous historic settlement sites and designated landscapes, coupled with a dynamic landscape pattern of narrow river corridors. Character Type 01 Urban has varying visual sensitivity (in accordance with underlying topography and screening present) and varying overall townscape sensitivity (in accordance with number of significant townscape qualities, including historic buildings and settlement pattern, notable landmark buildings etc.). The site is also in the Selby LCA, categorised as 'Wharfe Ouse River Corridor'; LCA type: 'Valley Floor Farmland' in the north-east of the site and 'settlement' in the remaining area. In terms of intrusion the area is classified as 'disturbed'.</p> <p>Local effects As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts in relation to the quality and character of landscapes and townscapes would arise as a result of the allocation of this site. This site is proposed to last 30 years, however no restoration plans have currently been proposed adding uncertainty to the long term.</p> <p>Mitigation of any future visual impact at this site may be difficult to achieve due to an absence of space for mitigation. Additionally, the landscape context of the whole area needs to be looked at. In particular, there is the potential for this site to have a significant visual impact from the bypass as well as other locations, such as the Trans Pennine Trail to the south of the site boundary. However, the scope for enhancement is high.</p> <p>Plan level / regional / wider effects None noted.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Site is proximal to a number of major settlements (e.g. Selby adjacent to site, York 19km, Castleford 20km and Leeds 30km).</p> <p><u>Local effects</u> As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts in relation to job creation and achieving sustainable economic growth are anticipated as a result of the allocation of this site.</p> <p>As this development already exists, effects are considered to be neutral as the facility forms part of the baseline situation however it should be noted that should the allocation of the site result in the life of this freight distribution facility being extended (in excess of the time period already allowed under the current planning permission (which is unknown as it is tied to the life of an adjacent development)), this will prevent a negative impact from occurring in relation to this objective in the future (i.e. it would be a long term positive effect).</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> IMD Area is Barlby. This is not in worst 20%. Site is situated on the fringe of the Selby urban area. In addition the village of Barlby lies 170m north of the site. 2 primary schools lie within 1km (700m south and 800m west). Closest individual dwellings appear to be located circa 30m south-east. It is noted that a fairly substantial new development has outline consent on the site adjacent to MJP09 (Olympia Park, including 995 dwellings, a new primary school and other amenities). Selby is listed as a Principal Town in Selby Core Strategy. Policy SP2 states that 'Selby as the Principal Town will be the focus for new housing, employment, retail, commercial and leisure</p>		✓	✓	✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>facilities' while the policy also states that Designated Service Villages such as Barlby have some scope for additional residential and small-scale employment growth to support rural sustainability and to complement growth in Selby.</p> <p>Local effects As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts in relation to maintaining and enhancing the viability and vitality of local communities are anticipated as a result of the allocation of this site.</p> <p>In the longer term, it is important to note that the Olympia Park development will be to the west and east of this site, residential receptors will then be closer to this site (just a few metres way from the boundary according to the current site master plan (though with a landscape buffer)⁵⁹. Such receptors would be exposed to noise and dust without mitigation (though as that development has yet to be built it is assumed that impacts are at a sufficiently low level to enable that development to carry out its own mitigation).</p> <p>Plan level / regional / wider effects None noted.</p>						?	?
14. To provide opportunities to enable recreation, leisure and	<p>Proximity to recreation, leisure and learning receptors The Trans Pennine Trail national route runs adjacent to the site to the south and a local footpath lies circa 150m south of the site.</p> <p>Local effects As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts in</p>	✓		✓		0	0	0

⁵⁹ Olympia Park, 2012, Illustrative Master plan 14 [URL: <http://www.olympiapark.co.uk/news/illustrative-masterplan-option-14>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
learning	<p>relation to recreation, leisure and learning are anticipated as a result of the allocation of this site.</p> <p>Mitigation to improve / enhance the Trans Pennine Trail in this area could be a future opportunity if any further development at this site occurs.</p> <p>Plan level / regional / wider effects None noted.</p>						?	?
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing There are no hospitals or clinics within 1km. The site is situated on the fringe of the Selby urban area. In addition the village of Barlby lies 170m north of the site. 2 primary schools lie within 1km (700m south and 800m west) Closest individual dwellings appear to be located circa 30m south-east. It is noted that a significant new development at Olympia Park has outline consent on land adjacent to the site to the west.</p> <p>Local effects As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts in relation to wellbeing, health and safety of local communities are anticipated as a result of the allocation of this site.</p> <p>In the longer term, it is important to note that the Olympia Park development will be to the west and east of this site, residential receptors will then be closer to this site (just a few metres way from the boundary according to the current site master plan (though with a landscape buffer)⁶⁰. Such receptors would be exposed to noise and dust without mitigation (though as that development has yet to be built it is assumed that impacts are at a sufficiently low level to enable that development to carry out its own mitigation).</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	0	0	0
							?	?

⁶⁰ Olympia Park, 2012, Illustrative Master plan 14 [URL: <http://www.olympiapark.co.uk/news/illustrative-masterplan-option-14>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones This site is entirely within Flood Zone 3 due to river and tidal flood risk. However, the flood zones do not acknowledge the presence and influence of the existing flood defences and the River Ouse Modelled Flood Outline indicates the area is defended to at least a 1:25 (4%) standard of protection. This site is entirely contained within an area benefitting from flood defences.</p> <p>Surface water flooding also affects the site in patches of low risk (1:1000 (0.1%)) to high risk (1:30 (3.33%)) spread throughout the site (but covering less than 10% of its total area). About 5% of the site is at high risk (1:30 (3.33%)) of surface water flooding.</p> <p>No local groundwater flooding data is available. According to the Environment Agency 'areas susceptible to surface water flooding' map most of this site lies in two 1km squares where >75% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a relatively high proportion of locations mainly from consolidated aquifers (rather than superficial deposits like sand), subject to local conditions. A small portion of the southern part</p>	✓	✓	✓	✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>of this site lies in an area of >25% – <50% vulnerability to Clearwater flooding, and another small area of >50% to <75% vulnerability to Clearwater flooding.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test⁶¹. As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts in relation to flooding are anticipated as a result of the allocation of this site.</p> <p>Going forward as the site develops there may, however, be a need to factor in dealing with flood risk (as proximity to Ouse is a potential issue). Appropriate standoff from the River Ouse would be needed. In addition, there may be additional flood risk that arises through restoration, so this needs to be considered should the current use ever cease.</p> <p>Plan level / regional / wider effects None noted</p>							?
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population No spatial factors identified.</p> <p>Local effects As the site is an existing road and rail freight distribution facility and the potential allocation does not include any amendments to the current use / size / operations of the site, no additional impacts in relation to addressing the needs of a changing population are anticipated as a result of the allocation of this site.</p> <p>Plan level / regional / wider effects None noted</p>					0	0	0

⁶¹ The Sequential Test approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (Flood Zones 2 and 3) and other areas affected by other sources of flooding where possible. MJP24 is at lower flood risk than MJP09 and should be considered before this site.

Cumulative / Synergistic effects⁶²	
Planning Context:	Site is situated on the fringe of the Selby urban area. In addition the village of Barlby lies 170m north of the site. 2 primary schools lie within 1km (700m south and 800m west). Closest individual dwellings appear to be located circa 30m south-east. It is noted that a fairly substantial new development has outline consent on the site adjacent to MJP09 (Olympia Park, including 995 dwellings, a new primary school and other amenities). Selby is listed as a Principal Town in Selby Core Strategy. Policy SP2 states that 'Selby as the Principal Town will be the focus for new housing, employment, retail, commercial and leisure facilities' while the policy also states that Designated Service Villages such as Barlby have some scope for additional residential and small-scale employment growth to support rural sustainability and to complement growth in Selby.
Other Joint Minerals and Waste Plan Sites:	Other Joint Minerals and Waste Plan Sites: No sites within 2km.
Historic Minerals and Waste Sites	An active treatment facility lies 440m south. A waste transfer station lies 800m east, and a Household Waste Recycling Site lies 1.3km north-west. An authorised landfill site lies 1.7km south. 3 historic landfill sites lie to the north within 2km. Numerous minerals and waste applications lie within 2km (mainly extraction) and site coincides with a granted railhead.
Air Quality and Noise	<p>There is a possible cumulative effect in terms of the Olympia Park development bringing receptors closer to this site and within potential range of air pollution and noise impacts, This may result in a neutral to minor medium / longer term impact (though as that development has yet to be built it is assumed that impacts are at a sufficiently low level to enable that development to carry out its own mitigation).</p> <p>To resolve cumulative effects across SA objectives restoration in the long term should be considered, but a restoration scheme cannot currently be put in place. There needs to be consideration of whether to and how to influence what would happen upon site closure, particularly as this site may fall outside the remit of the Minerals Planning Authority.</p>
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	

⁶² Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Mitigation requirements identified through Site Assessment process

- Design to include suitable arrangements for route to public highway and the existing crossing of the railway, including taking account of the Olympia Park Strategic Development Site as allocated in the Selby Core Strategy (2013) and the potential to link to the A63 bypass to the east of the site
- Appropriate arrangements for control of and mitigation of the effects of noise and dust, taking into account the Olympia Park Development Site, if developed
- Design to include landscaping to mitigate impact on users of local roads and recreation facilities including (Trans Pennine Trail and the Selby A63 bypass) and on the heritage assets in the vicinity (Listed Buildings - Selby Lock, Lock House and Bridge) and their settings
- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate

MJP24 – Darrington Quarry Processing Plant Site and Haul Road

Site Name	MJP24 Darrington Quarry, Stubbs Lane, Cridling Stubbs, Knottingley, Selby (XY 450759 421212)
Current Use	Quarry plant and associated haul road
Nature of Planning Proposal	Retention of processing plant site and haul road for processing of Magnesian limestone extracted from the part of Darrington Quarry (MJP27) located in the Wakefield Council area
Size	10.4ha (plant site)
Proposed life of site	2028
Notes	Possible restoration: Unknown at present. A planning application to retain the plant and haul road at Darrington Quarry (NY/2012/0020/73) ⁶³ is currently awaiting determination. Extraction in Wakefield area currently permitted until 2028. Plant site area is the same location as MJP27 site.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	<p>Proximity of international / national and local designations and key features No Natura 2000 sites within 10km; 2 SSSIs within 5km: 3.35km south is Brockadale SSSI; 4.1km south-west (and outside the Plan area) is Wentbridge Ings. UK Priority Habitats: include a patch of deciduous woodland immediately adjacent to the south. Other small patches slightly outside the search area to the 405m north and 380m south-west.</p> <p>There are nine SINC sites occur within a 2km radius of MJP24 with the Plan area. These are: 260m east -</p>	✓		✓		0	0	+

⁶³ Application to vary condition no's 1, 2, 29, 30, 31 and 32 of Planning Permission C8/40/8AF/PA for a new restoration scheme, retain the existing plant and to extend the time period in which to implement the restoration scheme

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>SE52-01 'Bridleway, Cridling Stubbs Crossing' (ratified); 380m south - SE52 -24 'Wake Wood' (pre-existing SINC); 609m south - SE52-16 'Woodland adjacent to Old Quarry near Northfield' (Deleted SINC); 740m south-east - SE52-06 'Womersley and Cridling Stubbs Quarry' (Ratified SINC); 1.1km south - 'Rows Wood' (Deleted SINC); 1.26km south-east - 'Northfield Quarry' (Deleted SINC); 1.8km east - 'SE52-14' Gale Common Ash Disposal Site - Lagoons C and D' (Potential SINC); 1.9km south-east - 'Gale Common Ash Disposal Site - Soil Stockpile' (Potential SINC, outstanding Action); 1.9km south-east SE51-12 'Kingsland Wood' (Deleted SINC). Functional connectivity: track / footpath connects site with SE52- 01/SE52-16 / SE52-07. Outside of the Plan area there are a further 2 Local Wildlife Sites in Wakefield District, to the south of Knottingley). From aerial photos there appears to be some woodland within the boundary of the site – it is not clear whether this is existing woodland or screen planting.</p> <p>Local effects The plant site (which in its present form included crushing, screening and washing plant⁶⁴) and access track are currently in existence and active – therefore unless they were to lie dormant for a period of time it is not considered that there would be any impact on international or national sites, priority habitats or protected species or ecological networks as a result of the proposals (however, there would still be a need to investigate dust deposition (thought to be insignificant) and water extraction / discharge impacts on wildlife as conditions may have changed since the site was established).</p> <p>This proposal site is part of a wider Darrington Quarry complex which has proposals to restore to a mix of agriculture, short rotation coppice; woodland and low level calcareous grassland. Restoration of the plant site in conjunction with these other areas has the potential to create priority habitats and strengthen networks to aid species movement. However, it is uncertain as to whether this would happen. Long term management commitments should be made to secure these benefits.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites.</p>							?
⁶⁴ Darrington Quarry								

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Site is in in NVZ (groundwater and surface water); the site lies in SPZs for two groundwater abstractions. One of these abstractions is used for drinking water; the other, whereby SPZ 1 (20% of the site, at its northern boundary) seems to coincide with the plant itself and may be the site's own abstraction. The remaining area of the site is in SPZ 2 with the exception of around 2% of the site (the south-east corner) which lies outside of a SPZ.</p> <p>The site is in the Humber RBMP and is 1.7km from nearest mapped RBMP watercourse (New Fleet Drain Source to River Went) (this section is 'not yet assessed). Not visibly connected other than being downstream. In terms of groundwater the RBMP identifies the site as being in the Aire and Don Magnesian Limestone water body which has good quantitative quality / poor chemical quality, and a current overall status of poor. The overall status objective is 'good by 2027'.</p> <p>Site is in Don and Rother CAMS. Site is on the edge of (i.e. within) an area where no water is available at low flows. However, the assessment point (AP) downstream AP9 (Lower Went) state that this is a discharge rich AP and that water is available for licensing but licenses will be issued on a case by case basis.</p> <p>Local effects Although retaining the access road is unlikely to significantly affect water, the retention (and thus extended operation of the plant) will potentially draw on and dispose of water for screening and washing into the future. While this appears to be acceptable at present (notwithstanding the presence of a SPZ) as water sources are available, albeit restricted, the disposal of water has the potential to affect the status of local water bodies. The current planning application proposes that a specialist silt plant would handle water which, depending on efficacy may or may not reduce impacts⁶⁵. However, until it can be shown that impacts on water are acceptable (the sites would need to demonstrate no increased risk to the aquifer) the impact on water, the assessment will remain uncertain.</p>					?	?	0

⁶⁵ SLR Global Environmental Solutions. 2012. Darrington Quarry, Cridling Stubbs: Proposed Revisions to Restoration Scheme.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects As detailed above.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is close to the A1 and M62 giving it good access to key markets such as those in West Yorkshire and to the south of the Plan area (e.g. Castleford, Leeds); Access: Confirmed as being the existing Darrington Quarry access onto Stubbs Lane (C335), with the mineral to be bought from the Wakefield quarry site to the north of the M62 via the existing haul road and tunnel under Stubbs Lane; Light vehicles: 100 two-way movements (as sourced from Application details 08/01696/FUL); HGV vehicles: 146 two-way movements (as sourced from Application details 08/01696/FUL).</p> <p>Net change in daily two way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green.</p> <p>PRoW: Does not affect immediate site access (see also SA objective 14 below).</p> <p>Rail: national line circa 400m east. Nearest known railhead is 8.5km west (may be railheads in other planning authorities to east); Strategic Road: Site is proximal to J33 of M62 – 1.4 km east, and A1 – circa 2km south-west to junction. Canal / Freight waterway: Aire and Calder Navigation is circa 2.2km north.</p> <p>Local effects Plan site in Wakefield would generate around 246 two way vehicle movements per day which according to Highways Assessment is acceptable in terms of impact on Stubbs Lane. The site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway. Sustainable travel modes are not likely to contribute to the site. As the site is for processing of limestone originating within Darrington Quarry, it is assumed that this is simply an additional step in the process of getting limestone to market associated with the operation in Wakefield, rather than a new source of journeys. No significant impact from traffic, however a traffic assessment would still be required.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p><u>Proximity of air quality receptors</u> Site is not within a hazardous substances consent consultation zone or an AQMA. No buildings located along access track. The site is around 1km from the nearest settlement in Cridling Stubbs (although the haulage road passes closer to Knottingley) and around 850 metres to the nearest isolated property. It is screened by hedgerows and trees to the east and hedgerows to the west. A priority woodland to the south may be a receptor for dust.</p> <p><u>Local effects</u> Given that the site is some distance from receptors, the impacts to air quality are predicted to be largely insignificant. There may be small scale minor impacts on the priority woodland to the south (e.g. reduction in tree health) though this is thought to be insignificant. There may also be some dust from traffic to and from the haulage plant, though this is not thought to be significant enough to affect receptors in Knottingley to the north, and no other receptors are likely to be in range of dust impact (though this should be further investigated).</p> <p><u>Plan level / regional / wider effects</u> Effects are considered local in nature.</p>					0	0	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p><u>Proximity of soil and land receptors</u> Site is in on ALC Grade 2 agricultural land though this has already been developed. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p><u>Local effects</u> As the proposal is for the retention of an existing plant site and haul road, no additional land use changes or changes to soil quality would arise as a result of the allocation of this site.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Woodland lies adjacent to the site. Some woodland on site along Stubbs Lane and some standalone trees.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Given that this site and haulage road is already in place there are no impacts predicted other than possible minor loss of productivity to on site / adjacent trees / woodland from dust deposition on leaves, the effect of which on this objective is insignificant. As the site is expected to maintain current traffic volumes for processing of limestone, it is assumed that this is simply an additional step in the process of getting limestone to market associated with operation in Wakefield rather than a new source of journeys. No additional significant impact on the SA Objective is expected.</p>					0	0	0
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁶⁶ of a site About 10% of this site is prone to surface water flooding. Medium (1:100 (1%)) and high risk (1:30 (3.33%)) surface water flooding covers less than 5% of the site. This form of flood risk is spread across the site, though affects the access road in particular. Site is in Flood Zone 1.</p> <p>There are no intersecting ecological networks.</p> <p>Site is on Grade 2 land though this has already been developed.</p> <p>Local effects The SFRA Sequential Test notes climate change to river flood risk is unlikely to affect the site in the latter part of the Plan period. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively. No effects</p>					0	0	?

⁶⁶ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>predicted. Long term uncertainty is also noted and impacts will be dependent upon the restoration scheme that is implemented⁶⁷.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p><u>Proximity of factors relevant to the resource usage of a site</u> No spatial factors identified.</p> <p><u>Local effects</u> Given that the processing plant site and haulage road for the processing of Magnesian limestone are already in place / in-situ, the retention of the site would allow an estimate of 450,000 – 500,000 limestone extracted from the land in the Wakefield Council area to be processed. The retention of an existing site makes use of existing facilities and in directly prevents the need for a new facility to be developed elsewhere. Therefore a minor positive impact is predicted in relation to this objective.</p> <p><u>Plan level / regional / wider effects</u> See local effects above.</p>		✓		✓	+	+	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> This site, if it proceeds in line with the submitted planning application would recycle silt to utilise in quarry restoration, which is a minor positive contribution to minimising waste.</p> <p><u>Plan level / regional / wider effects</u> Considered to be the same as local effects.</p>	✓			✓	+	-	0

⁶⁷ Planning Statement Conditions 31 and 32, it is proposed to firstly amend the timescales for the completion of restoration and secondly, provide a new restoration scheme for the site (excluding the plant site).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> No conservation areas within 1km. Friarwood Valley Gardens (Grade II Registered Parks and Garden) is 4.4km west outside of Plan area. No registered battlefields or World Heritage Sites within 5km (within Plan area - may be some outside of Plan area as border is 0km away). Site lies 2.6km from the northern edge of the Scheduled Monument of 'Womersley medieval settlement remains and Victorian ice house'. 1 listed building within 1km (Grove Hall Grade II), south of Knottingley.</p> <p>Named designed landscapes include; Cridling Park (Deer Park) which is 750m east, Unnamed area outside of Plan area 850m west. Stapleton Park (designed landscape - ornamental parkland) is 1.4km south. Outside of 2km search area is Womersley Park (HNY613) (Designed Parkland - Ornamental Parkland) - 2.45km south-east.</p> <p>One of two quarries used during the Mediaeval period, and later, the other being at Castle Hill Wood to the south-east. The quarrying of Magnesian limestone from the Permian Cadeby Formation has been recorded at Stapleton since circa 1300. Extensive quarrying of the stone continued into the 20th century, leaving a vast area of working and abandoned quarries stretching from Leys Farm to Spring Lodge on the north and east of Stapleton Park.</p> <p>The North Yorkshire HLC project (database record HNY 589) records this allocation area as part of a wider / extensive area of limestone quarrying, containing a series of dispersed limestone quarries with the majority active and some disused. Previous to this, the landscape was characterised by strip fields which have been enclosed from an open field system, in this case mainly from North Field, probably associated with Womersley.</p> <p><u>Local effects</u> It is assumed that as the proposal is for the use of the site for mineral processing via extant quarry plant, the quarry character will be maintained and there will be no significant impact upon HLC. In terms of potential restoration, inspiration could be drawn from nearby parkland.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, AONBs or Heritage Coast within 10km. No Inheritance Tax Exemption Land within 5km. In terms of tranquillity landscape is 'disturbed'.</p> <p>Site is in Selby District 'Locally Important Landscape area'. This is recognised in Core Strategy by policy SP18: 'The high quality and local distinctiveness of the natural and man-made environment will be sustained by: <i>identifying, protecting and enhancing locally distinctive landscapes</i>'. There is no local landscape designation for parts of the site in Wakefield.</p> <p>Site is in North Yorkshire LCA as 'Magnesian Limestone Ridge'. This categorises the site as moderate to high visual sensitivity (as a result of the prominent nature of the ridge and inter-visibility with adjacent Vale Farmland with Dispersed Settlements and Vale Farmland with Plantation Woodland Landscape Character Types'). High ecological sensitivity (as a result of the presence of nationally important, species rich limestone grassland, several pockets of semi-natural ancient woodland scattered along the ridge, and SSSIs which encompass habitats sensitive to changes in land management). High landscape and cultural sensitivity as a result of the nationally significant Neolithic and Bronze Age monuments, in addition to the predominantly intact landscape pattern which is sensitive to changes in land management. In Selby LCA Southern area of Site in 'West Selby Ridge' Landscape Character Area / LCA type 'Rolling Wooded Farmland' (circa 40%). Northern part is in 'River Aire Corridor' Landscape Character Area and 'Open Fringe Farmland'.</p> <p>Local effects Although site is in a locally protected landscape, there will be no noticeable change to landscape as a processing plant has existed on this site for a long time and is currently active. In addition,</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>the site is located within an area that has been previously quarried and is largely screened by landform and plantation woodland. However, because the lifetime of the plant has been extended, effects are related to the continuation relative to the previously anticipated baseline, which would have seen the site restored earlier. This would result in minor negative effect (as surrounding land is still assumed to be undergoing / completing restoration), in the period from which this site starts its extended life. This would see this site remain as a local detractor.</p> <p>Plan level / regional / wider effects None noted.</p>							?
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to the A1 and M62 giving it good access to key markets such as those in West Yorkshire and the south of the Plan area (e.g. Castleford and Leeds).</p> <p>Local effects The estimated mineral reserve located in Wakefield Council area – 10,000,000 tonnes as at 2011, hence there is potential for the site to process a substantial amount of minerals made available to the market over the lifetime of the site. The site is reasonably proximal to possible markets so will help support growth within those markets. Limited numbers of jobs will be supported, which may support a few workers in nearby areas (most likely existing workers at the parent site).</p> <p>The processing potential of the site adds value and creates a high quality product using existing infrastructure (which at least in terms of the embodied energy of plant is more sustainable), though does not particularly represent low carbon development. In addition, possible markets are accessed by road, which could increase the carbon footprint of infrastructure built from the limestone, though not particularly significantly. The overall impact in relation to this objective are therefore considered to be positive in the short and medium term.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	+	+	0
13. Maintain and enhance	<p>Proximity of factors relevant to community vitality / viability IMD area is Whitley. Not in most deprived 20%. Nearest significant communities: the access road to site is around ½km from the town of Knottingley,</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
the viability and vitality of local communities	<p>but significantly further from the plant site. It is around 4km from Pontefract and a little over 2km from Darrington (all in Wakefield District). Generally this equates to an already urbanised landscape north-west of the site. Pontefract is defined as a Principal Town in Wakefield Core Strategy, Knottingley an Urban Area and Darrington a Village. Policy CS1 states that most new development will go to the Principal Towns while in other urban areas the scale of development will reflect the settlement's size and function amongst a range of other strategic priorities. 1600 houses per year are planned for Wakefield district as a whole, with 10% of this planned for Pontefract. Knottingley is one of 5 urban areas which will be the main focus for housing growth after the Principal Towns. Villages are expected to accommodate 5% of the housing requirement.</p> <p>In Selby District the settlements of Womersley, Brotherton, Beal, Cridling Stubbs and Kirk Smeaton lie within 5km. With Cridling Stubbs a little over 1km to the east, and the next nearest settlement of Womersley just over 3km south-east. Beal, Cridling Stubbs, Kirk Smeaton and Womersley are secondary villages in the Selby Local Plan. Brotherton is a Designated Service Village. Secondary villages are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10". SP4 allows various types of small scale residential development within settlement limits in secondary villages. Service Villages 'have some scope for additional residential and small scale employment growth', albeit within development limits.</p> <p>Local effects Given that the site is some distance from receptors the impacts to air quality are predicted to be largely insignificant, as are any impacts from noise. Visual intrusion is also unlikely so no effects are predicted.</p> <p>Plan level / regional / wider effects None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
14. To provide opportunities to enable recreation, leisure and learning	<p><u>Proximity to recreation, leisure and learning receptors</u> An access track to the site intersects with a path, though this is not listed as a public right of way. A Bridleway connect to this path. At its closest point the bridleway is 485m east. A diversion is also noted next to this bridleway at 270m east at its closest point.</p> <p>There is an adjoining footpath (Wakefield Footpath No. 29) which seems to coincide with a short length of Leys Lane (Wakefield's online map shows the footpath does not continue south towards Stubbs Lane & there is a gap on the lane between the south end of footpath No.29 & the east end of Wakefield Footpath No. 7).</p> <p><u>Local effects</u> The site is relatively well screened from the east, so impacts are likely to be insignificant. No increase in traffic above current levels is expected with site MJP24, though this would involve an extension in the time of operation of this site, so a negative effect to users of the right of way adjoining Leys Lane may be anticipated over a short section.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>	✓		✓		-	-	0
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> There is a school in Knottingley 950m north-west of the access track and residential development lies circa 900m north-west of the track (but further from the plant). To the south lie Scombeck Farm (850m south), Keepers Lodge (assumed residential 820m south), Beech House Farm (950m south) and 2 unidentified buildings (900m south). To the east at circa 1km is the village of Cridling Stubbs.</p> <p><u>Local effects</u> Given that the site is some distance from receptors, no significant effects on health and wellbeing are predicted.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1. About 10% of this site is prone to surface water flooding. Medium (1:100 (1%)) and high risk (1:30 (3.33%)) surface water flooding covers less than 5% of the site. This form of flood risk is spread across the site, though affects the access road in particular.</p> <p>The vast majority of this site lies in a 1km square where <25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers. A very small proportion of the access road falls between two 1km squares with the same groundwater flood susceptibility as the main area of the site.</p> <p>Groundwater levels at the adjacent Darrington East quarry site were considered to be below the proposed base of the restored quarry (13m AOD) in an application submitted in 2003 though no other local data is available through the North Yorkshire planning website.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'⁶⁸. This site is to retain a plant that is tied to an existing quarry. It would be unreasonable to disassociate the plant site from the linked quarry, and to move it elsewhere in the immediate vicinity of the site would only result in an equivalent level of flood risk. No significant effects are predicted.</p> <p>Plan level / regional / wider effects Effects considered local in nature.</p>					0	0	0

⁶⁸ MJP09 is in Flood Zone 3 but benefits from existing defences, however, it is at higher risk than this site. Therefore this site is preferable to MJP09.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> The site would make a small contribution to the processing / self-sufficiency in the supply of Magnesian limestone.</p> <p><u>Plan level / regional / wider effects</u> The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0

Cumulative / Synergistic effects⁶⁹

⁶⁹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

<p>Planning context</p>	<p>The access road to site is around ½km from the town of Knottingley, but significantly further from the plant. It is around 4km from Pontefract and a little over 2km from Darrington (all in Wakefield District). Generally this equates to an already urbanised landscape north west of the site. Pontefract is defined as a Principal Town in Wakefield Core Strategy, Knottingley and Urban Area and Darrington a Village. Policy CS1 states that most new development will go to the Principal Towns while in other urban areas the scale of development will reflect the settlement's size and function amongst a range of other strategic priorities. 1600 houses per year are planned for Wakefield district as a whole, with 10% of this planned for Pontefract. Knottingley is one of 5 urban areas which will be the main focus for housing growth after the Principal Towns. Villages are expected to accommodate 5% of the housing requirement.</p> <p>In Selby District, within 2km, Cridling Stubbs is a little over 1km to the east (and the next nearest settlement of Womersley just over 3km south-east). Cridling Stubbs and Womersley are secondary villages in the Selby Local Plan. Secondary Villages are covered by policy SP2 in the Selby Core Strategy: <i>“Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities”</i>.</p>
<p>Other Minerals and Waste Joint Plan Sites</p>	<p>Other Minerals and Waste Joint Plan Sites within 5km: Site is on same site as MJP27. WJP03 is 2.4km north-east. WJP10 is 3.7km south. MJP29 is 4km south.</p>
<p>Historic minerals and waste sites</p>	<p>Within 2km there are several historic landfill sites, concentrated to the north of the site. About 1km away is an inert landfill site and a dormant Magnesian limestone site (associated with Spring Lodge Quarry). There are several previous applications associated with Darrington Quarry / Spring Lodge Quarry for extraction and tipping on and adjacent to the site, while applications associated with extraction at Kellingley Colliery overlay the site and lie close by.</p> <p>MJP24 is adjacent to an existing active Magnesian limestone site (Darrington Quarry).</p>
<p>Limitations / data gaps</p>	
<p>No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.</p>	
<p>Mitigation requirements identified through Site Assessment process</p>	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues including impact on protected species • Design of development and landscaping of site to mitigate impact on: heritage assets (unregistered designed parkland), Green Belt and their respective settings and local landscape features • Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate 	

- Design to include suitable arrangements for public rights of way on Leys Lane (diversion or retention, and associated mitigation, as appropriate)
- Maintenance of appropriate standard of access onto Stubbs Lane
- Appropriate arrangements for control of and mitigation of the effects of noise and dust.
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt

MJP27 – Darrington Quarry (Recycling)

Site Name	MJP27 (Darrington Quarry Recycling, Cridling Stubbs, Knottingley, Selby) (XY 450759 421212)
Current Use	Quarry processing plant site
Nature of Planning Proposal	Inert waste recycling facility
Size	10.4ha
Proposed life of site	At least 2028
Notes	Proposed on same site as MJP24. Restoration unknown at present.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Assumptions: short term and medium term effects are assumed to cover the operational period of this facility. In the long term it is assumed that the site is restored to an unknown restoration scheme. The site is currently used as an aggregate recycling facility. It is understood that the proposed allocation would also be able to deal with soil (as opposed to just aggregate at the existing facility) and it is assumed that the quantity of material processed and the site infrastructure required will remain largely in line with the current situation at the existing aggregate recycling facility. The current use of the site is tied to the lifetime of Darrington Quarry (Wakefield area that is still active) and it is assumed that this will also be the case for the allocation site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	<p>Proximity of international / national and local designations and key features No Natura 2000 sites within 10km; 2 SSSIs within 5km: 3.35km south is Brockadale SSSI; 4.1km south-west (and outside the Plan area) is Wentbridge lngs.</p> <p>UK Priority Habitats include a patch of deciduous woodland immediately adjacent to the south. Other small patches slightly outside the search area to the 405m north and 380m south-west.</p>	✓		✓		0	0	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>There are SINC sites occur within a 2km radius of MJP27 (though it should be noted that to areas to the north and west of this site fall outside of the Plan area where there is no data). These are: 260m east - SE52-01 'Bridleway, Cridling Stubbs Crossing' (ratified); 380m south - SE52 -24 'Wake Wood' (pre-existing SINC); 609m south - SE52-16 'Woodland adjacent to Old Quarry near Northfield' (Deleted SINC); 740m south-east - SE52-06 'Womersley and Cridling Stubbs Quarry' (Ratified SINC); 1.05m south - 'Rows Wood' (Deleted SINC); 1.26km south-east - 'Northfield Quarry' (Deleted SINC); 1.84km east - 'SE52-14' Gale Common Ash Disposal Site - Lagoons C and D' (Potential SINC); 1.97km south-east - 'Gale Common Ash Disposal Site - Soil Stockpile' (Potential SINC, outstanding Action); 1.95km south-east SE51-12 'Kingsland Wood' (Deleted SINC). Functional connectivity: track / footpath connects site with SE52- 01/SE52-16 / SE52-07. From aerial photos there appears to be some woodland within the boundary of the site – it is not clear whether this is existing woodland or screen planting.</p> <p>Local effects The processing plant site is currently in existence and active (includes crushing, screening and washing plant) – therefore unless the site were to lie dormant for a period of time it is not considered that there would be any impact on international or national sites, priority habitats or protected species or ecological networks as a result of the proposals (however, there would still be a need to investigate dust deposition and water extraction / discharge impacts on wildlife as conditions may have changed since the site was established).</p> <p>This proposal site is part of a wider Darrington Quarry complex which has proposals to restore to a mix of agriculture, short rotation coppice; woodland and low level calcareous grassland. Restoration of the plant site in conjunction with these other areas has the potential to create priority habitats and strengthen networks to aid species movement, though it is not certain that this would be the restoration. Long term management commitments should be made to secure these benefits.</p> <p>However, dust deposition and the effect of water extraction and discharge on nearby priority habitats should be further investigated.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Site is in in NVZ (groundwater and surface water); the site lies in SPZ 1 (20% of the site, at its northern boundary) for two groundwater abstractions. One of these abstractions is used for drinking water. The remaining area of the site is in SPZ 2 with the exception of circa 2% of the site (the south-east corner which lies outside of a SPZ).</p> <p>The site is in the Humber RBMP and is 1.7km from nearest mapped RBMP watercourse (New Fleet Drain Source to River Went) (this section is 'not yet assessed'). Not visibly connected other than being downstream. In terms of groundwater the RBMP identifies the site as being in the Aire and Don Magnesian Limestone water body which has good quantitative quality / poor chemical quality, and a current overall status of poor / The overall status objective is 'good by 2027'.</p> <p>Site is in Don and Rother CAMS. Site is on the edge of (i.e. within) an area where no water is available at low flows. However, the Assessment Point (AP) downstream AP9 (Lower Went) state that this is a discharge rich AP and that water is available for licensing but licenses will be issued on a case by case basis. For groundwater, site is in North Magnesian Limestone which has restricted groundwater availability (i.e. licenses issued on a case by case basis).</p> <p>Local effects The retention, and thus extended operation of the recycling facility, will potentially draw on and dispose of water for screening and washing into the future. While this appears to be acceptable at present (notwithstanding the presence of an SPZ) as water sources are available, albeit restricted, the disposal of water has the potential to affect the status of local water bodies. A current planning application proposes that a specialist silt plant would handle water⁷⁰ which, depending on efficacy may or may not reduce impacts. However, MJP27 involves the use of the site as an inert waste recycling facility (as opposed to the use of plant for processing limestone under MJP24). This may present an increased risk to the aquifer (as certainty will be needed over the 'inert' nature of the waste) so potential additional mitigation may be required. In the long term impacts are uncertain depending upon the restoration scheme that will be implemented.</p>		✓		✓	?	?	?

⁷⁰ SLR Global Environmental Solutions. 2012. Darrington Quarry, Cridling Stubbs: Proposed Revisions to Restoration Scheme.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects As detailed above.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is close to the A1 and M62 giving it good access to key markets such as those in West Yorkshire and to the south of the Plan area (e.g. Castleford, Leeds); Access: Confirmed as being the existing Darrington Quarry access onto Stubbs Lane (C335); Light vehicles: No change to 100 two-way movements (as sourced from Application details 08/01696/FUL); HGV vehicles: No change to 146 two-way movements (as sourced from Application details 08/01696/FUL).</p> <p>Net change in daily two-way vehicle generation: Light vehicles: 0; HGVs: 0. Transport assessment findings: green.</p> <p>PRoW: Does not affect immediate site access (see also SA objective 14 below).</p> <p>Rail: National line circa 400m east. Nearest known railhead is 8.5km west (may be railheads in other planning authorities to east); Strategic Road: Site is proximal to J33 of M62 – 1.4km east, and A1 – circa 2km south-west to junction. Canal / Freight waterway: Aire and Calder Navigation is circa 2.2km north.</p> <p>Local effects Site is unlikely to generate significant travel demand. Site would generate around 246 two way vehicle movements per day which according to Highways Assessment is acceptable in terms of impact on the existing transport network, i.e. no additional vehicles (to those of MJP24). The site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway. Sustainable travel modes are not likely to contribute to the site. As the site is for processing of inert waste it this could include inert waste from the adjacent quarry as well as other sources of inert waste. It is possible that much of this will utilise existing vehicles backhauling the waste.</p> <p>However, the traffic assessment notes that “As the proposal is not expected to generate any additional HGV</p>		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>or light vehicle traffic, the traffic impacts of the proposal are negligible on the basis of the continued operation of site through the MJP24 proposal. Should MJP24 not be put forward as part of the Joint Plan, the MJP27 proposal would require reassessment”.</i></p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors Site is not within a hazardous substances consent consultation zone or an AQMA. The site is around 1km from the nearest settlement of Cridling Stubbs and around 850 metres from the nearest isolated property. It is screened by hedgerows and trees to the east and hedgerows to the west. A priority woodland to the south may be a receptor for dust.</p> <p>Local effects Given that the site is some distance from receptors the impacts to air are predicted to be largely insignificant. There may be dust impacts on the priority woodland to the south, these are considered insignificant. In any case, as this site will involve backhauling of waste using existing journeys impacts from vehicle use are not considered significant.</p> <p>Plan level / regional / wider effects Effects are considered local in nature.</p>					0	0	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Site is on ALC Grade 2 land though this has already been developed. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects Proposal is for the inert waste recycling facility, within the grounds a processing plant site / former quarry. No impact in the short to medium term. Long term impacts will be dependent upon the restoration scheme that is implemented.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Woodland lies adjacent to the site. Some woodland on site along Stubbs Lane and some standalone trees.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Given that the processing plant is already in place there are no impacts predicted other than possible minor loss of productivity to on site / adjacent trees / woodland from dust deposition on leaves, the effect of which on this objective is insignificant. However, as an unknown tonnage of waste is to be imported to this site there will be a negative carbon impact, (though as discussed under objective 3 vehicle numbers may be quite low as existing vehicles are likely to be used). The site would also recycle inert waste, which is expected to be positive for climate change as ultimately it will reduce the embodied energy of construction materials. On balance, minor positive is predicted over the medium and long term. Long term impacts will be dependent upon the restoration scheme that is implemented.</p>	✓			✓	+	+	?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁷¹ of a site About 10% of this site is prone to surface water flooding. Medium (1:100 (1%)) and high risk (1:30 (3.33%)) surface water flooding covers less than 5% of the site. This form of flood risk is spread across the site, though affects the access road in particular. Site is in Flood Zone 1.</p> <p>There are no intersecting ecological networks.</p> <p>Site in on Grade 2 land though this has already been developed.</p> <p>Local effects The SFRA Sequential Test notes climate change to river flood risk is unlikely to affect the site in the latter part of the Plan period. Climate change effects on surface water flooding are likely to increase</p>					0	0	?

⁷¹ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>the extents of the areas at risk and also the depth of flooding for each event respectively. No effects predicted in the short and medium term. Long term impacts will be dependent upon the restoration scheme that is implemented, but are likely to be either neutral or minor positive.</p> <p>Plan level / regional / wider effects None noted.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This allocation will recycle inert waste and also facilitate the recycling of aggregates / soil (estimated 100,000 tonnes annual output of aggregate and soil). It is therefore considered that this allocation may offset the demand for virgin materials in the short and medium term resulting in a minor positive impact. It is assumed that the site would be restored in the long term and therefore impacts in relation to this objective are no longer likely to be generated.</p> <p>Plan level / regional / wider effects None noted.</p>	✓			✓	+	+	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects This site would recycle inert waste. This use would facilitate the movement of waste up the waste hierarchy and therefore result in a positive impact in the short and medium term in relation to this SA objective. It is assumed that the site would be restored in the long term and therefore impacts from restoration in relation to this objective are likely to be neutral.</p> <p>Plan level / regional / wider effects None noted.</p>	✓		✓		+	+	0
10. To conserve or enhance the historic	<p>Proximity of historic environment receptors No conservation areas or listed buildings within 1km. Friarwood Valley Gardens (Grade II Registered Parks and Garden) is 4.8km west outside of Plan area. No registered battlefields or World Heritage Sites within 5km (within Plan area - may be some outside of Plan area as border is 0km away). Site lies 2.6km from the northern edge of the Scheduled Monument of</p>					0	0	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
environment and its setting, cultural heritage and character	<p>'Womersley medieval settlement remains and Victorian ice house'.</p> <p>Named designed landscapes include Cridling Park (Deer Park) which is 750m east, Unnamed area outside of Plan area 1.35km west. Stapleton Park (designed landscape - ornamental parkland) is 1.4km south, Just outside of 2km search area is Womersley Park (HNY613) (Designed Parkland - Ornamental Parkland) - 2.45km south-east.</p> <p>The North Yorkshire HLC project (database record HNY 589) records this allocation area as part of a wider/ extensive area of limestone quarrying containing a series of dispersed limestone quarries with the majority active and some disused. Previous to this, the landscape was characterised by strip fields which have been enclosed from an open field system, in this case mainly from North Field, probably associated with Womersley.</p> <p>Local effects It is assumed that as the proposal is for the use of the site for recycling plant, the quarry character will be maintained and there will be no significant impact upon HLC. Long term impacts will be dependent upon the restoration scheme that is implemented. In terms of potential restoration, inspiration could be drawn from nearby parkland.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, AONBs or Heritage Coast within 10km. No Inheritance Tax Exemption Land within 5km. In terms of tranquillity landscape is 'disturbed'.</p> <p>Site is in Selby District 'Locally Important Landscape area'. This is recognised in Core Strategy by policy SP18: 'The high quality and local distinctiveness of the natural and man-made environment will be sustained</p>	✓			✓	0	0	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
townscapes	<p>by identifying, protecting and enhancing locally distinctive landscapes...'. Site is in North Yorkshire LCA as 'Magnesian Limestone Ridge'. This categorises the site as moderate to high visual sensitivity (as a result of the prominent nature of the ridge and inter-visibility with adjacent Landscape Character Types'). High ecological sensitivity (as a result of the presence of nationally important species and habitats scattered along the ridge, and SSSIs sensitive to changes in land management). High landscape and cultural sensitivity as a result of the nationally significant Neolithic and Bronze Age monuments, in addition to the predominantly intact landscape pattern which is sensitive to changes in land management. In Selby LCA Southern area of Site in 'West Selby Ridge' Landscape Character Area / LCA type 'Rolling Wooded Farmland' (circa 40%). Northern part is in 'River Aire Corridor' Landscape Character Area and 'Open Fringe Farmland'. Site is located in greenbelt.</p> <p>Local effects Although site is in a locally protected landscape, there will be no noticeable change to landscape as a processing plant has existed on this site for a long time and is currently active. In addition, the site is located within an area that has been previously quarried and is largely screened by landform and plantation woodland. A change in site use to inert waste recycling is unlikely to have significant impacts in the short and medium term although it is noted that processing of inert waste may contribute to the restoration of Darrington Quarry as there is a shortfall of materials. In the medium term, restoration of Darrington Quarry within NYCC may be completed during the timescale of this allocation but it would not be possible to remove the processing plant and restore this area as it would still be operating on behalf of the site within Wakefield Metropolitan District Council (so this might, in combination with MJP24, cause a delay in restoration). In the long term impacts will be dependent upon the restoration scheme that is implemented but potential exists for positive impacts in relation to this objective.</p> <p>Plan level / regional / wider effects None noted.</p>							?
12. Achieve sustainable economic growth and	<p>Proximity of factors relevant to sustainable economic growth Site is close to the A1 and M62 giving it good access to key markets such as those in West Yorkshire and to the south of the Plan area (e.g. Castleford 8km and Leeds 20km).</p>		✓	✓		+	+	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
create and support jobs	<p>Local effects The proposed site is estimated to process imported waste – 100,000 tonnes and output of recycled material (aggregate and soils) – 100,000 tonnes annually over the lifetime of the site. The site is reasonably proximal to possible markets so will help support growth within those markets. Overall, it is considered that the allocation of the site would enable value to be added to current waste products during the operational period. It is therefore considered that impacts would be minor positive in the short and medium term. Long term impacts will be dependent upon the restoration scheme that is implemented.</p> <p>Plan level / regional / wider effects None noted.</p>							
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD area is Whitley. Not in worst 20%. Nearest significant communities: Cridling Stubbs lies 975m east, Knottingley lies 1.2km north. To the south lie Scombeck Farm (850m south), Keepers Lodge (assumed residential 820m south), Beech House Farm (950m south) and 2 unidentified buildings (900m south). Site is around 4km from Pontefract and a little over 2km from Darrington (all in Wakefield District). Generally this equates to an already urbanised landscape north west of the site. Pontefract is defined as a Principal Town in Wakefield Core Strategy, Knottingley an Urban Area and Darrington a Village. Policy CS1 states that most new development will go to the Principal Towns while in other urban areas the scale of development will reflect the settlement's size and function amongst a range of other strategic priorities. 1600 houses per year are planned for Wakefield district as a whole, with 10% of this planned for Pontefract. Knottingley is one of 5 urban areas which will be the main focus for housing growth after the Principal Towns. Villages are expected to accommodate 5% of the housing requirement.</p> <p>In Selby District the settlements of Womersley, Brotherton, Beal, Cridling Stubbs and Kirk Smeaton lie within 5km. With Cridling Stubbs a little over 1km to the east, and the next nearest settlement of Womersley just over 3km south-east. Beal, Cridling Stubbs, Kirk Smeaton and Womersley are secondary villages in the Selby Local Plan. Brotherton is a Designated Service Village. Secondary Villages are covered by Policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10'. SP4 allows various types of small scale residential development within settlement limits in secondary villages. Service Villages 'have some</p>					0	0	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>scope for additional residential and small scale employment growth', albeit within development limits.</p> <p>Local effects Given that the site is some distance from receptors the impacts to air quality are predicted to be largely insignificant, as are any impacts from noise. Visual intrusion is also unlikely so no effects are predicted in the short and medium term. Long term impacts will be dependent upon the restoration scheme that is implemented.</p> <p>Plan level / regional / wider effects None noted.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A bridleway lies circa 460m east of the site at the closest point. A diversion is also noted next to this bridleway at 270m east at its closest point.</p> <p>There is an adjoining footpath (Wakefield Footpath No. 29) which seems to coincide with a short length of Leys Lane (Wakefield's online map shows the footpath does not continue south towards Stubbs Lane & there is a gap on the lane between the south end of footpath No.29 & the east end of Wakefield Footpath No.7).</p> <p>Local effects The site is relatively well screened from the east, so impacts are likely to be insignificant in the short and medium term. Long term impacts will be dependent upon the restoration scheme that is implemented.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	?
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing There is a school in Knottingley 950m north-west of the access track and residential development lies circa 900m north-west of the track (but further from the current plant). Residential development lies circa 1km east (village of Cridling Stubbs). To the south lie Scombeck Farm (850m south), Keepers Lodge (assumed residential 820m south), Beech House Farm (950m south) and 2 unidentified buildings (900m south).</p> <p>Local effects Given that the site is some distance from receptors, no significant effects on health and wellbeing are predicted in the short and medium term. Long term impacts will be dependent upon the</p>					0	0	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	restoration scheme that is implemented. Plan level / regional / wider effects None noted.							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1. About 10% of this site is prone to surface water flooding. Medium (1:100 (1%)) and high risk (1:30 (3.33%)) surface water flooding covers less than 5% of the site. This form of flood risk is spread across the site, though affects the access road in particular.</p> <p>The vast majority of this site lies in a 1km square where <25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers. A very small proportion of the access road falls between two 1km squares with the same groundwater flood susceptibility as the main area of the site.</p> <p>Groundwater levels at the adjacent Darrington East quarry site were considered to be below the proposed base of the restored quarry (13m AOD) in an application submitted in 2003 though no other local data is available through the North Yorkshire planning website.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'⁷². No significant effects are predicted. Long term impacts will be dependent upon the restoration scheme that is implemented.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	?

⁷² MJP09 is in Flood Zone 3 but benefits from existing defences, however, it is at higher risk than this site. Therefore this site is preferable to MJP09.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> The site would make a small contribution to self-sufficiency in the supply of recycled materials, though much of this may well be used in restoration.</p> <p><u>Plan level / regional / wider effects</u> As local effects above.</p>					0	0	0
Cumulative / Synergistic effects⁷³								
Planning context	As MJP24.							
Other Minerals and Waste Joint Plan Sites	Site is on same site as MJP24. No further sites lie within 2km.							
Historic minerals and waste sites	Other Minerals and Waste Joint Plan Sites within 5km: Site is on same site as MJP27. WJP03 is 2.4km north-east. WJP10 is 3.7km south. MJP29 is 4km south.							
Landscape	In terms of landscape, restoration of Darrington Quarry within NYCC may be completed during the timescale of this allocation but it would not be possible to remove the recycling plant and restore this area as it would still be operating on behalf of the site within Wakefield Metropolitan District Council (so this might, in combination with MJP24, cause a delay in restoration).							
Limitations / data gaps								
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.								

⁷³ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues including impacts on protected species
- Design of development and landscaping of site to mitigate impact on heritage assets (unregistered designed parkland such as Cridling Park) and Green Belt and their respective settings, and local landscape features,
- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate
- Design to ensure protection of the aquifer; proposals should be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level
- Maintenance of appropriate standard of access onto Stubbs Lane
- Appropriate arrangements for control of and mitigation of the effects of noise and dust
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt and a Locally Important Landscape Area.

MJP26 – Barnsdale Bar, near Kirk Smeaton (recycling)

Site Name	MJP26 Barnsdale Bar Recycling, Barnsdale Bar Quarry, Long Lane, Kirk Smeaton, Selby (XY 451409 414654)
Current Use	Quarry, former landfill site and inert aggregate recycling facility
Nature of Planning Proposal	Recycling of inert waste to produce secondary aggregate
Size	45.6ha
Proposed life of site	Throughout Plan period
Notes	Possible restoration: no detailed design. Operator seeking flexibility to locate the recycling facility within the site in order that it is close to areas undergoing restoration at the time, as current recycling area is limited to only one part of the site. Site lies adjacent to the county boundary with the administrative area of Doncaster Council.

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Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	<p><u>Proximity of international / national and local designations and key features</u> Natura 2000: No international sites within 15km. 5 SSSIs within 5km: 1.99km north - Brockadale SSSI; 3.4km north-east - Forlorn Hope Meadow; 4.6km north-west - Wentbridge Ings; 4.51km south-east - Owston Hay Meadows; 3.65km south-west - South Elmsall Quarry; Just outside of search area at 5.09km is Shirley Pool SSSI. No Local Wildlife Sites / SINCs within 2km in the Plan area, however, Barnsdale Wood Local Wildlife Site (LWS) lies circa 430m south-east, Scorcher Hills Wood LWS lies 1.6km south and Skelbrooke Park LWS</p>	✓		✓	✓	-	-	?

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>lies 1.8km south of the site in Doncaster Metropolitan Borough Council (MBC) Area.</p> <p>Priority habitats: In terms of priority habitats, a small patch of deciduous woodland lies adjacent to northern edge of site within neighbouring MJP28. 100m east and 375m (outside of search area) north-east are patches of deciduous woodland. 320m (outside of search area) north there is a long strip of deciduous woodland with an additional patch 420m north. No ecological networks present, but area directly to the south of the site lies within a Biodiversity Opportunity Area (policy SP35 in the Doncaster Development Plan).</p> <p>Local effects Impacts on SSSIs are unlikely and no impacts are predicted on North Yorkshire SINCs or on the LWS within Doncaster MBC. No impacts are predicted on woodland sites. From the information provided an inert recycling plant is currently in existence and is active, but the operator is seeking to move the plant within the former quarry / landfill site as restoration progresses. There could be potential impacts to protected species / on site habitats if suitable habitats have regenerated on undisturbed areas of quarry / landfill. Further survey information and site assessment is needed to inform a mitigation strategy.</p> <p>Although no formal ecological networks are noted, there are significant opportunities for the creation of priority habitats as part of an overall restoration scheme for the whole Barnsdale quarry site. The surrounding area has a good existing network of priority habitats so opportunities exist to create high quality habitats and greater habitat connectivity. Thus the long term impact is uncertain to positive.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Site in in NVZ (groundwater and surface water). Site more or less midway between two RBMP rivers. 1.8km north is 'Went from Hoyle Mill Stream to Blowell Drain' Current ecological quality is 'poor potential' / chemical quality: 'does not require assessment' (no clear visible connectivity). 1.6km south is 'The Skell from Source to Ea Beck': current ecological quality is 'moderate potential', chemical quality: 'does not require assessment' (no clear visible surface connectivity is noted). RBMP Groundwater: Aire and Don Magnesian Limestone water body: good quantitative quality / poor chemical quality / current overall status is poor, overall status objective 'good by 2027'.</p>		✓	✓	✓	-	-	-

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>Site is in Don and Rother CAMS. Site is on the edge of (i.e. within) an area where no water is available at low flows. However, the assessment point downstream AP9 (Lower Went) states that this is a discharge rich AP and that water is available for licensing but licenses will be issued on a case by case basis. For groundwater, site is in the North Magnesian Limestone unit which has restricted groundwater availability (i.e. issued case by case).</p> <p>Local effects The site is some distance from Water Framework Directive (WFD) surface water bodies. Water is also available, though restricted in low flows. Nonetheless impacts may occur, for instance to groundwater, through fuel spills or changes to the chemistry or turbidity of minor water bodies (although the waste accepted is inert, so risk are relatively low). This may or may not be exacerbated by moving the recycling facility. Although we have rated these impacts as minor negative, they are likely to be readily mitigated through good operating procedures (and the assessment notes that the current site operates an environmental management system).</p> <p>Plan level / regional / wider effects As detailed above.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is close to the A1 and M62 giving it good access to key markets such as those in West Yorkshire and to the south of the Plan area (e.g. Wakefield, Leeds, Barnsley); Access: Confirmed as being existing Barnsdale Bar Quarry access along Long Lane onto Woodfield Road (approximately 115m east of Barnsdale Bar junction of A1 with A639/A6201); Light Vehicles: none additional to MJP28 traffic; HGV Vehicles: none additional to MJP28 traffic.</p> <p>Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green.</p> <p>PRoW: Immediate access to the site is shown on maps as a bridleway in Doncaster.</p> <p>Rail: 3.8km south. Nearest railhead: 10.6km north-east; Strategic / major road: A1 junction with A6201 is circa 500m south; Canal / Freight waterway: River Don / River Don Navigation circa 10.2km south-east.</p> <p>Local effects There would be no additional vehicles to MJP28 from this site as the proposal is simply to</p>		✓		✓	0	0	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>move an existing recycling plant. The site has no direct connection / frontage to a public highway, though from here HGV movement, at least at the levels connected with MJP28, is acceptable. Sustainable transport is not likely to contribute to access to the site. A traffic assessment would be required. Neutral impact.</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within a Hazardous substances consultation zone. It is not within an AQMA however Wakefield Council has an AQMA along the A1 (circa 170m to west) for NO₂. Glebe Farm 300m west. Westfield Farm 480m north-west. Highfield Farm 720m north-west. Warren House Farm 550m south. To the north of the site is Kirk Smeaton, the nearest settlement, a little over 1.5km to the North, and Womersley >4km away.</p> <p>Local effects It may be hard to predict the route by which accepted 'inert waste' will arrive from, though this site's proximity to the A1 should help it draw traffic that has travelled at least some of the way along the strategic road network away from many settlements. The local section of the A1 is an AQMA and does pass close to some receptors. However, the proposal is to move an existing recycling facility within the site which is not expected to generate any additional vehicle movements.</p> <p>A parallel situation exists for dust impacts, where the baseline situation in terms of dust generated would be similar. However, depending on the location of the facility at any given time it may or may not be located closer to receptors sensitive to dust, such as local farms. This adds some uncertainty to the assessment. However, due to the distance to receptors it is considered a neutral effect with uncertainty until further investigated.</p> <p>Plan level / regional / wider effects Effects are considered local in nature.</p>		✓	✓		0	0	0
						?	?	?

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors The site is in an area of Grade 2 land (though this land is already being used for minerals). In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects No direct effect predicted above the current situation. Long term impacts will be dependent upon the restoration scheme that is implemented (though final restoration is unknown, so this is qualified with some uncertainty).</p> <p>Plan level / regional / wider effects None noted.</p>		✓			0	0	0
								?
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Small patch of deciduous woodland lies adjacent to northern edge within neighbouring MJP28. 100m east and 375m (outside of search area) north-east are patches of deciduous woodland. 320m (outside of search area) north there is a long strip of deciduous woodland with an additional patch 420m north.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects As this proposal is to move a recycling plant within the site, which would not affect any significant carbon sinks, and the operation itself would not produce significant greenhouse gases above the baseline situation, no significant effect is predicted.</p> <p>However, some uncertainty is noted in the long term as this proposal may or may not enable an extension in the period in which the plant is operational and restoration is not defined.</p>		✓		✓	0	0	0
								?
7. To respond and adapt to the	<p>Proximity of factors relevant to the adaptive capacity⁷⁴ of a site Surface water flooding low risk (1:1000 (0.1%)) to high risk (1:30 (3.33%)) affects about 15% - 20% of the site. Western part of site is</p>		✓	✓		?	?	?

⁷⁴ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
effects of climate change	<p>prone to surface water flooding though only around 10% – 15% of this is medium risk (1:100 (1%)) to high risk. A much smaller proportion of the eastern site suffers from any level of surface water flood risk with <5% at medium risk to high risk of surface water flooding. As extraction is likely to change the topography of the site where flooding occurs across this site is likely to change as extraction progresses. Site is in Flood Zone 1.</p> <p>The site is in an area of Grade 2 land (though this land is already being used for minerals).</p> <p>Local effects Surface water flooding is a problem on parts of the site, and climate change effects are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively. These effects are avoidable. For instance, it will be important for the plant to avoid areas at highest risk through applying a sequential approach (refer to SA objective 16 for further details) to positioning within the site where possible and to execute appropriate emergency planning. We have assessed this as uncertain until the situation is made clear.</p> <p>Plan level / regional / wider effects None noted.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This plant will recycle inert waste (e.g. construction waste) and also facilitate the recycling of aggregates / soil (estimated 100,000 tonnes annual output of aggregate and soil) or use it in restoration. This is positive in the short and medium for resource use. It is assumed that the site would be restored in the long term and therefore impacts in relation to this objective are no longer likely to be generated.</p> <p>Plan level / regional / wider effects None noted.</p>					+	+	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> This plant will recycle inert waste (e.g. construction waste) or use it in restoration. This use would facilitate the movement of waste up the waste hierarchy and therefore result in a moderate positive impact in the short and medium term in relation to this SA objective. It is assumed that the site would be restored in the long term and therefore impacts from restoration in relation to this objective are likely to be neutral.</p>		✓		✓	m +	m +	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> No conservation areas within 1km (both within and outside of the Plan area). Kirk Smeaton Conservation Area lies just outside the search area at 1.4km north-north-east. No Registered Parks and Gardens within 5km. No World Heritage Sites within 5km. In terms of Scheduled Monuments 'Multivallate Enclosure 550 yards (500m) west of Norton Mills' (ID1,004042) is 2km north-east. Just outside of search are, at 2.3km south, is 'Roman Fort at Robin Hood's Well' (ID1,002,930). No listed buildings within 1km.</p> <p>There are a number of named designed landscapes (from pre validated dataset derived from HLC): Stapleton Park (HNY598) (Designed landscape - ornamental parkland) 2.5km north. Womersley Park HNY613 (Designed landscape - ornamental parkland) is 3.5km north-east. Additionally 'Campsmount Park, Campsall Park and Garden of Special or Local Historic Interest' lies circa 1.8km south-east, and Owston Park lies circa 4km south-east in Doncaster Metropolitan Borough Council Area.</p> <p>Archaeological investigations in advance of extraction on land within and adjacent to this site revealed evidence for two phases of activity, an enclosure complex of late Iron Age and field systems / settlement of the Romano-British period.</p> <p>Prior to extraction there was high archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards. However, archaeological mitigation recording has been</p>					0	0	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>completed in recent years in response to recent extraction.</p> <p>The legibility attribute (as recorded in the Historic Environment Record) of the Barnsdale Bar and Long Dale Quarry value is classed as invisible. This term is used where the previous historic character is not visible at all. Another part of this area (to the east) is a small area of possible strip fields which consists of medium sized semi irregular fields defined by 's curved' hedgerows. This area has partial legibility with some boundary change since the first edition and is possibly medieval in date. The overall character seems to suggest that it represents a medieval pattern of enclosure. There has been some boundary loss. This legibility would likely now be classed as fragmentary or invisible.</p> <p>Local effects The proposed development is the continued use of existing quarry site for the location of a recycling facility. Therefore there will be no archaeological impacts because the archaeological resource was recorded in advance of the previous extraction.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, AONBs or Heritage Coast within 10km. No Inheritance Tax Exemption Land within 5km. Site is in Selby District 'Locally Important Landscape area'. This is recognised in Core Strategy by policy SP18.' Adjacent to the site to the south lies Doncaster Metropolitan Borough Council's Area of Special Landscape Value. There are no adjacent locally designated landscapes in Wakefield Metropolitan District.</p> <p>Site is in North Yorkshire LCA as 'Magnesian Limestone Ridge'. This categorises the site as moderate to</p>	✓	✓	✓	✓	-	-	-

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>high visual sensitivity / high ecological sensitivity / and high landscape and cultural sensitivity. In Selby LCA Southern area of Site in 'West Selby Ridge' Landscape Character Area / LCA type 'Rolling Wooded Farmland' (circa 40%). Northern part is in 'River Aire Corridor' Landscape Character Area and 'Open Fringe Farmland'. Site is in the Green Belt for West Yorkshire. In terms of tranquillity this land is defined as 'disturbed'.</p> <p>Local effects The site (along with MJP28) is within a locally important landscape area. The landscape in this area is in need of enhancement so adding to existing quarrying impacts will not help. This could leave the area with a more industrialised character. However, it should be borne in mind that this proposal represents a necessary step to be taken in order to further facilitate restoration</p> <p>The site is broadly compatible with the purposes of the Green Belt, particularly as the site is already developed for quarrying / recycling / restoration. It is felt that there should be a presumption in favour of the restoration benefitting the local landscape. It wouldn't be desirable to leave the area industrialised in perpetuity.</p> <p>The site is located below the highest parts of the Magnesian Limestone Ridge so is unlikely to be seen on the skyline although this would need to be checked, as would views from the A1, from which the site is not well screened (i.e. glimpses of the quarry are possible from the A1 even in summer, but lower areas may well be screened, for example, visibility of the site from Middlefield Lane would be reduced due to landform).</p> <p>Vehicle movements are not expected to change local character. However, some uncertainty is noted in long term as this proposal may or may not enable an extension of the operational lifetime of the site.</p> <p>There is a cumulative landscape impact with other limestone quarries in the locality (although the contribution of this facility within an existing site boundary is small). There is some concern that the perception of this part of Selby District from the A1 might be affected (particularly as there is a service station in the vicinity of the sites).</p> <p>Plan level / regional / wider effects None noted.</p>							?

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to the A1 and M62 giving it good access to key markets such as those in West Yorkshire and to the south of the Plan area (e.g. Wakefield, Leeds and Barnsley).</p> <p>Local effects No impact predicted as this represents a continuation of current operation, though the life of the site may or may not be extended in the longer term (extended operation would be positive for a low carbon economy).</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	0	0	+
								?
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD area is Whitley. Not in worst 20%. Nearest significant communities: to the north of the site is Selby District with Kirk Smeaton the nearest settlement a little over 1.5km to the North, and Womersley >4km away (both Secondary Villages in the Selby Local Plan – See MJP24 for description).</p> <p>To the west of the Site lies Wakefield. The significant settlements in this area are Upton, North Elmsall, Thorpe Audlin, and part of Badsworth, all of which are over 1km away. Upton is a Local Service Centre (in which limited housing up to a maximum scheme size of 10 houses is allowed – policy CS3, and the role of development will be appropriate to the size of the community – CS1), South Elmsall is a ‘other urban area’ and Thorpe Audlin and Badsworth are Villages. (See MJP24 for policy description). There is a scattering of small housing sites in Upton, two of which are on the eastern edge (around 2km away). There are more allocations in South Elmsall through this is more distant at 4km.</p> <p>The remaining settlements to the south and East are in Doncaster. The closest of these are Campsall, Norton and Askern (2.5 to 5km away and beyond the 2km search area used in this assessment) with Skellow and Carcroft further afield (4 to 5km south). According to Doncaster Core Strategy, Askern, though small, is a Principal Town, while the other settlements are all defined as being either ‘Larger Villages’ or in the case of Skellow, a renewal town. All these sites are in the Green Belt which confines their expansion.</p>					0	0	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects There are a number of growing communities in the surrounding area, though this site will have little impact upon them as they are beyond the range of key amenity impacts and the proposal is mostly concerned with moving an existing plant within the site.</p> <p>Plan level / regional / wider effects None noted.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A bridleway adjoins the track that separates the eastern and western parts of this site and comes within 80m of the southern boundary of the site (outside of Plan area). 120m west of the site a bridleway (34.43/10/1) adjoins a possible access track to the site. There is also a bridleway circa 350m east of the site (outside of Plan area).</p> <p>Local effects The impacts on recreation are uncertain as although the site boundary and operation remains the same as the current situation, the recycling operation would move within the site which may or may not bring it within sensory range of receptors such as rights of way. There is also a bridleway to the south of the site.</p> <p>There is currently a break in the bridleway network along Long Lane (a route exists at south and north ends but is not a designated route in the middle section).</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		?	?	?
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing Glebe Farm 300m west. Westfield Farm 480m north-west, Highfield Farm 720m north-west, Warren House Farm 550m south.</p> <p>Local effects The impacts on health and wellbeing are considered neutral as the site boundary and operation remains the same as the current situation.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		0	0	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Surface water flooding low risk (1:1000 (0.1%)) to high risk (1:30 (3.33%)) affects about 15% to 20% of the site. Western part of site is prone to surface water flooding though only around 10% to 15% of this is medium risk (1:100 (1%)) to high risk. A much smaller proportion of the eastern site suffers from any level of surface water flood risk with less than 5% at medium risk to high risk of surface water flooding. Site is in Flood Zone 1.</p> <p>This site lies across two 1km squares where less than 25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers.</p> <p>According to a recent hydrological assessment for an adjacent part of the quarry, mineral workings in the past have been maintained approximately 2m above the maximum recorded groundwater levels. However, there is a north east gradient, with the highest levels being recorded at the north east of this site (though in this site at least groundwater has remained unaffected by quarrying)⁷⁵.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'. Surface water flooding is a problem on parts of the site, and this is expected to get worse with climate change. A site specific flood risk assessment will be required. This should address the issues of draining clean surface water without causing additional flood risk.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		-	-	-
17. To address the needs of a	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with</p>	✓			✓	+	+	+

⁷⁵ FCC Environment, 2014. Proposed Extension of Barnsdale Bar Quarry: Hydrological and Hydrogeological Assessment [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=9532>]

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
changing population in a sustainable and inclusive manner	<p>any known allocations in other plans.</p> <p>Summary of effects on a changing population The site would support recycling of inert waste and would better enable restoration which is broadly positive for the population.</p> <p>Plan level / regional / wider effects As local effects above.</p>							?
Cumulative / Synergistic effects⁷⁶								
Planning context	Site is adjacent to adjacent to MJP28. Please see MJP28 for a description of the planning context.							
Other Minerals and Waste Joint Plan Sites	Within 5km MJP28 is adjacent to the north. MJP29 is 2.2km north-west. WJP10 is 2.4km north-west. There is 1 current site marked on the Doncaster Minerals map in the Doncaster Core Strategy, circa 450m south of the site.							
Historic minerals and waste sites	There is a group of historic landfill sites about 1.5km to 2km south west in Wakefield District, while there is a historic landfill about 2km south in Doncaster. Waste has also been handled at Barnsdale Bar (and the site is still listed as authorised). To the north Smeaton Limeworks has also seen historic landfilling. There is a protected area of search (PAS) for minerals to the east of Upton. Doncaster Metropolitan Borough Council Unitary Development Plan designates an area directly to the south of the site as a mineral site buffer zone to ensure that mineral operations, or waste disposal operations during restoration are not unnecessarily restricted. Within the buffer zones, the council seek to prevent non-mineral development which would be adversely affected by such operations. There are no sites identified in the Barnsley Doncaster Rotherham Joint Waste DPD in this area.							
Landscape	There is a cumulative landscape impact with other limestone quarries in the locality (although the contribution of this facility within an existing site boundary is small). There is some concern that the perception of this part of Selby District from the A1 might be affected (particularly as there is a service station in the vicinity of the sites).							

⁷⁶ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Limitations / data gaps

No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues including impacts on protected species
- Design to minimise the irreversible loss of best and most versatile agricultural land and protect high quality soil resource
- Design of development and landscaping of site to mitigate impact on its setting and on local landscape features
- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate
- Design to ensure protection of the aquifer
- Design to include suitable arrangements for public rights of way and other unclassified tracks such as Long Lane and associated mitigation, as appropriate
- Maintenance of appropriate standard of access along Long Lane to Woodfield Road
- Appropriate arrangements for control of and mitigation of the effects of noise and dust
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt and a Locally Important Landscape Area

WJP10 – Went Edge Quarry Recycling, Near Kirk Smeaton

Site Name	WJP10 Went Edge Quarry, Kirk Smeaton, Selby, WF8 3JS, (XY 449948 417206)
Current Use	Part of existing quarry and industrial estate
Nature of Planning Proposal	Recycling of construction and demolition waste for secondary aggregate
Size	7.24ha
Proposed life of site	2032 (as MJP29)
Notes	<p>Restoration as part of the overall restoration of the quarry with quarry floor to be restored to limestone grassland (pasture or hay) with an open mosaic limestone grassland on the quarry sides formed by natural regeneration with small pockets of trees and shrubs planted.</p> <p>Part of the WJP10 site has planning permission for the extraction of Magnesian limestone.</p> <p>Existing restoration scheme for quarry is to limestone grassland with blocks of woodland and scrub.</p>

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and	<p>Proximity of international / national and local designations and key features No Natura 2000 sites within 15km. SSSI: Brockadale adjacent to northern / western side with apparently some overlap on with northern side. Wentbridge Ings 2.3km north-west. Forlorn Hope Meadow 4.14km east.</p> <p>SINC: SE51-01 Brockadale, Wentbridge (potential SINC) is immediately adjacent to the north west at its</p>	✓	✓	✓	✓	-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
improve habitat connectivity	<p>nearest point (though the SINC is divided across 3 distinct parts, with additional areas 165m north-west and circa 170m north). Downward slope to site may suggest some functional connectivity.</p> <p>Most (95%) of site coincides with area of upland mixed woodlands (according to national maps, though the situation on the ground is that this land has now been quarried).</p> <p>Ecological corridors: All of site is in the River Went Corridor (Living Landscape) of which the Yorkshire Wildlife Trust managed Brockadale SSSI is a core part. All of Site is in GI Network (Went Sub-regional).</p> <p>Local effects SSSI Impact Risk mapping suggests that waste management may have an impact on Brockadale SSSI. With a recycling facility these impacts could come through run off from the site or the accidental introduction of potentially invasive species (e.g. through the import and subsequent run off of soils in construction waste). It is assumed that any plant would be within the base of the quarry, which would effectively contain surface run off by blocking flow into the SSSI.</p> <p>There may also impacts on protected species from the recycling plant and the relocation of the industrial estate. Restoration at the existing quarry could be also impacted by the proposals (grassland and woodland planting).</p> <p>In the short term there would be impacts on local habitats and species during works. In the medium term, the impacts may continue though wider habitats on site would be maturing. In the long term restoration is unknown.</p> <p>There are opportunities to restore to quality habitat in the longer term. Restoration of quarry bottom to calcareous grassland will be carried out around industrial estate. Integrating the restoration into the existing SSSI would be easier if the existing industrial estate were not relocated.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p><u>Proximity of water quality / quantity receptors</u> Site is in a NVZ (surface water and groundwater).</p> <p>Humber RBMP: 80m north is the 'heavily modified' River 'Went from Hoyle Mill Stream to Blowell Drain'. Current ecological quality: poor potential / chemical quality: 'does not require assessment'. The current overall potential is 'poor' but the overall status objective is 'good by 2027'. Possible connectivity due to severe downhill slope between site and river. No RBMP lakes in vicinity. Groundwater: Aire and Don Magnesian Limestone waterbody - good quantitative quality / poor chemical quality, current overall status is poor, overall status objective 'good by 2027'.</p> <p>Site is in Don and Rother CAMS. Site is in an area where water is available at low flows, though licenses will be discharged on a case by case basis. For groundwater, site is in North Magnesian Limestone which has restricted groundwater availability.</p> <p><u>Local effects</u> Recycling proposals are for inert construction and demolition waste so water impacts from the waste are expected to be low. Because the recycling operation is assumed to be taking place in the base of the quarry run off is not expected to be a significant issue while any deliberate releases of water would be regulated by environmental permit. Recent investigations show that groundwater recharge takes place off site so there is unlikely to be an effect on the aquifer, and while faulting in the limestone could theoretically allow some pollutants from spills to make their way into the river Went, the site is physically separated from the river and on site topography encourages water to flow away from receptors⁷⁷. Assuming proposals are similar to this, the impacts would be minimal, though uncertainty is noted and any new proposals would have to be thoroughly investigated.</p> <p><u>Plan level / regional / wider effects</u> As detailed above.</p>					0	0	0
							?	?

⁷⁷ Went Edge Quarry, 2014. Environmental Statement Non-Technical Summary

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is close to the A1 giving it good access to key waste sources such as those in West Yorkshire and to the south of the Plan area (e.g. Wakefield, Leeds); Access: Confirmed as being the existing Went Edge Quarry access onto Went Edge Road (C344) approximately 290m east of A1(M) south-bound junction at Wentbridge; Light Vehicles: 6 daily two-way movements (submitter details); HGV vehicles: 108 daily two-way movements (submitter confirmed estimate).</p> <p>Net change in daily two-way trip generations: Light vehicles: 6; HGVs: 108: traffic assessment rating: yellow.</p> <p>PRoW: No PRoW affect immediate access.</p> <p>Rail: nearest line is circa 4km east / nearest known railhead: circa 10.2km east. Strategic / Major Road: site is approximately 290m east of A1(M) south-bound junction at Wentbridge; Canal / Freight waterway: Aire and Calder Navigation is 6.6km north.</p> <p>Local effects Site would generate 108 two way HGV movements per day. According to the Highways Assessment the site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway and HGV movement onto road is acceptable. However, no sustainable travel modes are likely to contribute to the site.</p> <p>According to the traffic assessment for this site “<i>All HGV traffic to and from the site would be expected to approach and depart from the A1 with a 7.5T weight restriction preventing HGVs passing through Wentbridge to the East of the A1. The route from the submission site to the A1 avoids all settlements and is used by HGVs from the existing Went Edge quarry operations and is thus not expected to result in any significant traffic impacts</i>”. In addition, traffic impacts on the A1 are expected to be relatively low, and the traffic assessment states “<i>At the junction with the A1, 40-45 HGVs a day are expected to approach from and depart to the south which would equate to approximately 2-3 HGV additional HGVs per hour in either direction to the south. 60-65 HGVs a day are also expected to approach from and depart to the north which would equate to an average of approximately 3-4 HGVs an hour over a typical working day</i>”. Highways England have communicated that they have no immediate concerns.</p>		✓		✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Some concerns have been raised in historic planning applications about maintenance and signage so minor negative impacts are noted.</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors Not within hazardous substances consultation zone. Not within an AQMA, however Wakefield Council has an AQMA along the A1 (circa 400m to west) for NO₂.</p> <p>Local effects Construction and transport of waste to the site would generate dust, which could be deposited on the adjacent SSSI, with a small loss of productivity. With 150,000 tonnes of waste expected to be imported annually, transport movements can be expected (see objective 3). Traffic pollution from this site may make a small negative contribution to the achievement of air quality objectives in the AQMA when considered in combination with traffic from the A1 so future proposals may need to further examine such impacts.</p> <p>Plan level / regional / wider effects Effects are considered local in nature.</p>		✓		✓	-	-	-
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Most of site ALC Grade 2. Northern 20% is Grade 3. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects The land has already been quarried, so no impact will occur. However, restoration plans to limestone grassland will have benefits.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Priority woodland adjacent to north and west of site.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects The site is unlikely to have a significant effect on the woodland and will not otherwise degrade carbon rich habitats. Restoration will restore some habitats including grassland and trees with some minor benefit. However, while the site has good access to markets, importing 60,000 tonnes of waste per year will generate significant carbon through road freight journeys. In addition, there is potentially a benefit to recycling construction waste (if it goes back in to the market) thus reducing the carbon footprint of construction.</p>	✓			✓	-	-	+
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁷⁸ of a site The EHN and a Living Landscape lie to the north of the site. Site is in Flood Zone 1. Site is affected by small patches of surface water flooding across the site but predominantly in the eastern site area. Flood risk is mostly low risk (1:1000 (0.1%)) but very small areas medium risk (1:100 (1%)) and high risk (1:30 (3.33%)) are present.</p> <p>Most of site ALC Grade 2. Northern 20% is Grade ALC 3. Current use is details as part of existing quarry and industrial estate.</p> <p>Local effects Although the site is in Flood Zone 1 it is in close proximity to Flood Zone 2 to the north east corner. Flood Zone 2 may encroach the site with the impacts of climate change. The site does not block an ecological network, which runs adjacent to it, though there may be some benefit in buffering this network so it continues to function fully under climate change (when dust and tree stress may be a more significant issue). This appears to be likely given the proposed restoration in the long term. Surface water flooding affects about 10% of the site which is readily avoidable.</p>		✓	✓		0	0	+

⁷⁸ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<u>Plan level / regional / wider effects</u> None noted.							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p><u>Proximity of factors relevant to the resource usage of a site</u> No spatial factors identified.</p> <p><u>Local effects</u> There is a benefit to recycling construction waste (as an estimate of 60,000 tonnes of recycled materials is output) as it makes it usable again, thus reducing the material footprint of construction. It is therefore considered that this allocation may offset the demand for virgin materials in the short and medium term resulting in a moderate positive effect. It is assumed that the site would be restored in the long term and therefore impacts in relation to this objective are no longer likely to be generated.</p> <p><u>Plan level / regional / wider effects</u> None noted</p>	✓			✓	m +	m +	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> Recycling construction waste (or any other waste) would help move this waste up the waste hierarchy and therefore result in a positive impact in the short and medium term in relation to this SA objective. It is assumed that the site would be restored in the long term and therefore impacts from restoration in relation to this objective are likely to be neutral.</p> <p><u>Plan level / regional / wider effects.</u> None noted.</p>	✓		✓		m +	m +	0
10. To conserve or enhance the historic environment and its setting, cultural	<p><u>Proximity of historic environment receptors</u> The boundary of the Wentbridge Conservation Area lies 700m to the west of this site. 3 listed buildings within 1km – all Grade II. Named designated Landscapes: Stapleton Park (Designed landscape, ornamental parkland – designed by Capability Brown) 365m north.</p> <p>The area to the south has recently been subject to archaeological evaluation by geophysical survey and trial trenching which has identified evidence of archaeological remains in the form of boundary ditches of a possible coaxial or brickwork field system that existed on the site of late Iron Age and Romano-British date.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
heritage and character	<p>However, the proposed location of the recycling facility is within an area of former quarry where it is assumed with a high degree of certainty that any previously surviving heritage assets will have been destroyed as a result of the quarrying activity.</p> <p>The North Yorkshire HLC project (database record HNY 652) records this as part of a much larger area characterised by fields defined by 's-curved', mainly hedgerow, boundaries. There is quite a lot of variation in shape and size but the area is unified in being derived from the medieval strips. These fields have been enclosed from the strips worked in middle field and west edge field. This is probably one of the largest areas of strip fields digitised up to now. There is quite a high degree of boundary loss but it still is a coherent medieval derived landscape. However, as this part of the allocation site has previously been quarried the legibility within the area of former quarry is invisible as development has completely replaced an earlier field system.</p> <p>Local effects The proposed recycling development is unlikely to change HLC. As the site is already part quarried and part permitted for quarrying there is unlikely to be an impact on archaeology above the projected baseline. This equates to a neutral effect. As another part of this site is proposed as a quarry extension it is not envisaged that this proposal would have any impact on the supply of building stone.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character There are no National Parks, AONBs or Heritage Coast within 10km, and no ITE land within 5km.</p> <p>Site is in Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by Policy SP18: 'The high quality and local distinctiveness of the natural and man-made environment will be sustained by: identifying, protecting and enhancing locally distinctive landscapes'.</p> <p>North Yorkshire LCA places this site in the Magnesian Limestone Ridge: Moderate to high visual sensitivity / high ecological sensitivity / high landscape and cultural sensitivity. Site also in Selby LCA: Southern 60% is West Selby Ridge (rolling wooded farmland) and northern part in West Selby Ridge (Limestone Valley) in</p>		✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>the Selby LCA.</p> <p>Site is in West Yorkshire Green Belt. In terms of tranquillity site is 'disturbed'.</p> <p>Local effects The landscape in this area is in need of enhancement so extending impact will not help, however the site is unlikely to be visible from key visual receptors such as designated landscapes and is not close to settlements. It is considered that the landscape can probably accommodate this level of change if temporary, small scale and sited on the quarry floor. The site would be screened by woodland and external bunding and planting and there are already vehicle movements so vehicles from this site would make little difference. Effects range from neutral to minor negative depending on the nature of the proposal. In the long term, as the site lies in a locally important landscape area, where the focus should be on landscape enhancement, the plan may become a slightly more prominent detractor.</p> <p>There may be some screening lost if the existing industrial estate is moved or as a result of further quarrying. While there is existing bunding and planting around the site, further vegetation / bunding may be required, but ultimately it is difficult to mitigate the large hole left through quarrying.</p> <p>While this is a brownfield land site (which would in theory make such development acceptable in the Green Belt) there is a cumulative impact on landscape arising from the range of uses on site / ad hoc development taking place over a long period of time. A possible cumulative risk also comes from quarrying and other uses nearby.</p> <p>Plan level / regional / wider effects None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Site is close to the A1 giving it good access to key waste sources such as those in West Yorkshire and to the south of the Plan area (e.g. Wakefield, Leeds).</p> <p><u>Local effects</u> If recycling waste (probably construction waste) brings new products (e.g. aggregates) back into the economy this will increase supply of building materials and make choice and competitive pricing more likely, which ultimately will support investment in built infrastructure. The site will also support a limited number of jobs. In the longer term the industrial estate will continue to provide jobs, though these may be the same as the existing industrial estate.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> IMD rank- 16,354 - Not in most deprived 20%, Whitley Ward. To the north and east of the site is Selby District with Kirk Smeaton the nearest settlement around 1.5km to the East, and Womersley about 3.4km away to the north east (both are Secondary Villages in the Selby Local Plan – See MJP24 for description).</p> <p>To the west of the Site lies Wakefield district. The significant settlements in this area are Upton, a small part of North Elmsall, Thorpe Audlin, Darrington and Badsworth, all of which are over 1km away. Carleton and East Hardwick also fall in this area. Upton is a Local Service Centre (in which limited housing up to a maximum scheme size of 10 houses is allowed – Policy CS3, and the role of development will be appropriate to the size of the community – CS1), South Elmsall is a ‘other urban area’ and Thorpe Audlin, Darrington and Badsworth are Villages, with other settlements being too small to be classified. (See MJP24 for policy description).</p> <p>There is a scattering of small housing sites in Upton, two of which are on the eastern edge (around 2km away). There are more allocations in South Elmsall through this is more distant at 4km.</p> <p>The remaining settlements to the south and East are in Doncaster and include small parts of Campsall and about half of Norton (>4km away). According to Doncaster Core Strategy these are defined as being ‘Larger Villages’. Both these settlements are in the Green Belt which confines their expansion. Defined</p>		✓	✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>villages will accommodate infill housing only.</p> <p>Local effects Most communities are too distant to experience significant amenity impacts that may impact on tourism etc. and the sites proximity to the A1 generally avoids community receptors. The site will continue to provide some job opportunities for local communities. In the longer term the industrial estate will continue to provide jobs, though these may be the same as the existing industrial estate.</p> <p>Plan level / regional / wider effects None noted.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A footpath running through Brockdale SSSI (Footpath 35.43/1/2) lies, shielded by trees, circa 50m north. This intersects with a north-south running footpath (35.43/9/2) about 360m west of the site. 180m south east of the site lies the west-east running footpath (35.43/2/1).</p> <p>Local effects Users along local footpaths are likely to experience some noise from this site, though the nearby A1 will likely be a noisier detractor, which should make effects relatively insignificant. The quarry is close to a popular route through Brockdale SSSI, though this would be shielded from view (and probably noise) by trees and a slope. There is possibly a negative visual / noise impact on the route across the field to the west. Impacts will range from neutral to minor negative.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	-	-	0
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing No schools or health centres within 1km. Nearest property is Rectory Farm (930m south-east) and nearest settlement is Kirk Smeaton 1.5km away to the east).</p> <p>Local effects No direct effects predicted. However, traffic from this site may help work against air quality objectives associated with the nearby A1 AQMA, which has the potential to adversely affect properties close to the A1. Although the problem is associated with far greater volumes of traffic, so the actual effect of this quarry is small, it should not be discounted. The effect of traffic from the industrial estate is likely to be</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	less. Plan level / regional / wider effects None noted.							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1. Site is affected by small patches of surface water flooding across the site but predominantly in the eastern site area. Flood risk is mostly low risk (1:1000 (0.1%)) but very small areas medium risk (1:100 (1%)) and high risk (1:30 (3.33%)) are present.</p> <p>This site lies across two 1km squares where <25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers.</p> <p>A 2006 Committee Report for a planning application for extraction at this site referred to the Environment Agency's confirmation that the water table was significantly below the base of the site⁷⁹. More recently, according to a recent 2014 planning application for another part of the quarry immediately adjacent to the south, the quarry floor, at 20m AOD, is still 6 metres above the water table measured at its highest point (14m AOD)⁸⁰.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'⁸¹. Surface water flooding affects about 10% of the site which is readily avoidable. A site specific flood risk assessment will be required. This should address the issues of draining</p>					0	0	0

⁷⁹ North Yorkshire County Council, 2006. Planning and Regulatory Affairs Committee 29 August 2006: Proposed extraction of limestone from areas 1 and 2 to stabilise the quarry face at Went Edge Quarry, Kirk Smeaton by Meakin Properties

⁸⁰ Cromwell Mining Consultants. 2014. Environmental Statement. Went Edge Area 4 [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=9255>]

⁸¹ WJP21, WJP22 and WJP24 have similar levels of flood risk from surface water. WJP 21 and WJP24 are located in Flood Zone 1; WJP22 is within Flood Zones 2 and 3 to a minor extent. Therefore this site should be considered alongside WJP21 and WJP24 but is preferable to WJP22.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>surface water without causing additional flood risk. SuDS could be used for draining / storing surface water.</p> <p>Plan level / regional / wider effects None noted.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site could make a contribution to the supply of aggregates and other building product for the Plan area and beyond (if it is concerned with construction / demolition waste recycling) which may support the housing and employment markets. The industrial estate would also support jobs.</p> <p>Plan level / regional / wider effects As local effects above.</p>		✓		✓	+	+	+
Cumulative / Synergistic effects⁸²								
Planning context	Site is immediately adjacent to MJP29. For a review of the planning context see the MJP29 assessment.							
Other Minerals and Waste Joint Plan Sites	MJP29 is adjacent, MJP28 is 2km south, MJP27 is 3.8m north, MJP26 is 2.4km south.							
Historic minerals and waste sites	See MJP29 assessment.							
Air	The key cumulative effect is associated with the pollution from this site and pollution from the A1 AQMA. The site is predicted to make small but perhaps not insignificant contribution.							

⁸² Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Landscape	There is a cumulative impact on landscape arising from the range of uses on site / ad hoc development taking place over a long period of time. A possible cumulative risk also comes from quarrying and other uses nearby.
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Limitations / data gaps

No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues, including impacts on the Brockdale SSSI and protected species including measures to address and control of invasive species
- Design to minimise the irreversible loss of best and most versatile agricultural land and to protect high quality soil resource
- Design of development and landscaping of site to mitigate impact on: Green Belt and local landscape features and their settings
- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate Design to ensure protection of the aquifer
- Design to include suitable arrangements for access onto Went Edge Road and local roads including to the A1 (north-bound as well as south-bound)
- Appropriate arrangements for control of and mitigation of the effects of noise and dust, and impacts on air quality
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt

WJP16 – Common Lane, Burn

Site Name	WJP16 Selby Waste Transfer Facility, Common Lane, Burn, Selby, YO8 8LB (XY 460350 429206)
Current Use	Former airfield
Nature of Planning Proposal	Bulking and transfer of municipal and commercial waste
Size	1.42ha
Proposed life of site	15 to 20 years
Notes	Adjacent to an existing waste recycling operation. Possible restoration: none specified.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000: 8.5km north-east - Skipwith Common SAC; 7.5km east - River Derwent SAC/SPA/Ramsar; 13km south-east - Humber Estuary SAC / SPA/Ramsar. No SSSI within 5km.</p> <p>SINC: 9 SINCS within 2km: SE63-05 (Woods between Railway and Selby Canal - Potential SINC - does not qualify) is 1.53km north-west; SE63-08 (Oakney Woods and Ponds - Ratified SINC) is 1.53km north-west; SE62-06 (Scrub land, Henwick Hall Lane, Brayton - Potential SINC - does not qualify) is 520m east; SE62-02 (Woodland on Barlow Pasture, Botany Bay Farm - Ratified SINC) is 950m east; SE62-18 (Field near Primrose Hill, Cat Babbleton) is 1.5km south-east; SE62-19 (Burn Disused Airfield - Ratified SINC) is 1.28km south-west; SE52-19 (Selby Canal and towpath - ratified SINC) is 670m west. SE53-05 (Brayton</p>	✓		✓		-	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Barff - Ratified SINC).</p> <p>Priority Habitats: No priority habitats onsite or adjacent. There is some deciduous woodland circa 280m south-east. No ecological networks or green infrastructure.</p> <p>Local effects It is considered that there would be no impacts on SSSIs or SINC. Although no nationally important habitats would be threatened, there is some potential on the site for reptiles and nesting birds. Himalayan Balsam <i>Impatiens glandulifera</i> may also be a problem on this site. In summary, an insignificant to minor negative impact may occur during construction in the short term.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites.</p>					?		
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Site is in a NVZ (surface water).</p> <p>Humber RBMP: RBMP water body 'Selby Canal' is 380m north and is connected to site by Flood Zone 2. Ecological Quality: Moderate potential / Chemical quality: 'does not require assessment'. Overall potential is 'moderate'; overall status objective is 'good by 2027'. No local RBMP lakes. RBMP Groundwater: 'Wharfe and Lower Ouse Sherwood Sandstone': current quantitative quality - poor / chemical quality - poor.</p> <p>Site is in Aire and Calder CAMS in the Lower Aire area - with AP6 the relevant assessment point. Here surface water may be available for licensing, though because this AP is discharge rich, license applications will be considered on a case by case basis. For groundwater abstraction, site is in an area of Sherwood Sandstone Aquifer where no new groundwater licenses will be granted.</p> <p>Local effects Planning proposal is for waste bulking and transfer site, so potential impacts will result from run off, leachate from storage of waste in the transfer facility and fuel spills / run off from vehicles. These</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>are all expected to be readily resolvable through good site management / vehicle washing etc., so it is assumed they would be dealt with through the environmental permitting system rather than the planning system. A slight concern is the placement of this site in Flood Zone 2, which could result in pollution washing off this site in a flood event and affecting the Selby Canal. However, the effect of this would be relatively small scale, rare and temporary and the aforementioned risk abatement measures could help mitigate for this.</p> <p>Discharges of water may need to be in agreement with Internal Drainage Board.</p> <p>Plan level/ regional/ wider effects There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by the environmental permitting system during operation.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is close to Selby, though is remote from many waste facilities (only categories of landfill within 5km). Access: Existing access onto Common Lane, Burn (C330) approximately 805m east of A19; Light vehicles: 12 two way movements (screening request NY/2013/0051/SCR; HGV vehicles: 64 two way movements. Rail: 450m east / nearest known railhead is 4km north-east; Strategic Road: A19 790m west; Canal / Freight waterway: Selby Canal 425m north.</p> <p>Net change in daily two-way vehicle trip generations: Light vehicles: 12; HGVs: 64. Transport assessment rating: green.</p> <p>PRoW: Immediate site access is not affected by PRoW.</p> <p>Local effects Site would generate journeys by waste collection vehicles which would then 'bulk up' to heavier vehicles. The effect of this is that it would reduce traffic volumes overall (a positive effect). HGV movement is acceptable on the road according to the Highways Assessment, and the site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway. No travel plan is required and sustainable transport is not likely to contribute to the site.</p> <p>The traffic assessment reports local effects: "Traffic data from a traffic survey in 2013 along Common Lane</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>shows the route to be used by around 500 vehicles a day with 10% of these vehicles being HGVs. Whilst the proposed development would more than double HGV numbers using the route, the road only serves other industrial and agricultural premises, with no receptors fronting onto the highway. The impacts are thus expected to be minor for Common Lane with no capacity issues". We have rated this local effect as negligible to minor negative.</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors No AQMAs or Hazardous substances consent sites within 10km.</p> <p>Selby is the key settlement in the search area (1km to the north), while outlying settlements such as Thorpe Willoughby and Brayton are north west of the site. A number of small scattered villages also lie in the search area, the largest of which are West Haddlesey and Burn (which is 880m south-west of the site). No health centres / hospitals or schools within 1km.</p> <p>Local effects Most receptors lie out of range of the site. This site will deal with 65,000 tonnes of waste per year. As 76 two journeys a day would be generated, this would cause some additional dust / air pollution to a limited number of receptors with 200m of roads running out of the site. Depending on routes taken a small number of farmhouses and a limited number of properties in the north of Burn may also be affected. Minor negative to uncertain.</p> <p>Plan level / regional / wider effects Effects are considered local in nature.</p>		✓		✓	-	-	-
5. To use soil and land efficiently and safeguard or enhance their	<p>Proximity of soil and land receptors Site is located in an area of ALC Grade 2 land. However, site is on a former airfield. Not particularly associated with land contamination, but may require some further consideration at planning application phase. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
quality	<p>Local effects No impact as previously developed land.</p> <p>Plan level / regional / wider effects None noted.</p>							
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change No proximal habitats that may be affected. There is some deciduous woodland circa 280m south-east.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Site is reasonably proximal to Selby (1km) and generally waste transfer is a means of bulking waste for more efficient transit so overall the effect is positive.</p>	✓			✓	+	+	+
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁸³ of a site About 5% of the site is at low risk (1:1000 (0.1%)) of surface water flooding. Site is in Flood Zone 2.</p> <p>Site is located in an area of ALC Grade 2 land. However, site is on a former airfield.</p> <p>Local effects Site is at a moderate risk of flooding and the SFRA notes the depth of flooding associated with Flood Zone 2 is likely to increase with climate change and the site may be at risk from Flood Zone 3</p>		✓		✓	-	-	-

⁸³ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>encroaching from the south east of the site. A slight concern is the placement of this site in Flood Zone 2, which could result in pollution washing off this site in a flood event and affecting the Selby Canal. However, the effect of this would be relatively small scale (as site would likely be defined as less vulnerable), rare and temporary and further risk abatement measures could help mitigate potential risk. Long term uncertainty is also noted and impacts will be dependent upon the restoration scheme that is implemented.</p> <p>Plan level / regional / wider effects None noted.</p>							?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects A waste transfer station would ultimately help to get waste to recycling and other treatment centres (assisting the circular economy by ultimately reducing resource consumption). Its indirect beneficial effect would be dependent on the final destination of the waste.</p> <p>Plan level / regional / wider effects. See local effects above.</p>	✓			✓	+	+	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects A waste transfer station would ultimately help to get waste to recycling and other treatment centres (moving it up the waste hierarchy in most cases). Its indirect beneficial effect would be dependent on the final destination of the waste.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>		✓		✓	+	+	0
10. To conserve or enhance the	<p>Proximity of historic environment receptors No designated features noted.</p> <p>Burn airfield, a former RAF airfield dating to the 1940s is the only heritage asset recorded on the HER</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
historic environment and its setting, cultural heritage and character	<p>within this site. The potential for surviving assets of earlier date in this area is felt to be low, based upon the limited evidence for archaeological remains known from the immediately surrounding area.</p> <p>Local effects The North Yorkshire HLC project (database record HNY5799) records the Plan area forms part of a wider area known as Burn airfield, which is now disused and has significant legibility. The airfield dates to the 1940s. The previous HLC, which was piecemeal enclosure, has been removed by the building of the airfield. While there has been piecemeal enclosure here previously the airfield is a significant area of the landscape with its own historic character value.</p> <p>As this allocation site is a small part at the very north-eastern edge of the former airfield, it is not felt that the proposed development will have a significant impact upon the HLC of the area, although it is acknowledged that there will be an impact upon the legibility of this HLC type which is assumed to be insignificant to minor negative.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, AONBs or Heritage Coast within 10km. No ITE within 5km. No local landscape designations. NCA: Humberhead Levels.</p> <p>North Yorkshire LCA: Levels Farmland / Farmed, Lowland and Valley Landscapes. High visual sensitivity as a result of the predominantly open character and flat landform which facilitates long distance open views across the landscape and promotes strong inter-visibility with adjacent Landscape Character Types; Low ecological sensitivity, resulting from the fact that much of this Landscape Character Type encompasses improved agricultural land; Moderate landscape and cultural sensitivity as a result of the presence of a patchwork of historic drainage features (ditches and dykes) moated sites and grange sites. Selby LCA categorizes this site as River Aire Corridor: (detailed: flat open farmland). Tranquillity: disturbed, with moderate light pollution.</p> <p>Local effects Site will be visible from the Trans Pennine Trail which passes to the east, close to the site (200m at the closest point). It may also be visible from the Selby Canal, 400m to the north. The nearest</p>		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>settlement is Burn village, approximately 800m distant, but would not affect its setting due to distance and intervening vegetation. The landscape setting of Burn village has been degraded as in the late C19th the area was a mosaic of woodland, fields and heath, which have largely been lost to WW2 airfield development.</p> <p>The site may have negative effects on the capacity of the local landscape to absorb change as the landscape is flat and generally open, while land uses surrounding airfield site are still largely rural. Burn Airfield is farmed but runways remain with some active use by Burn Gliding Club. Existing ad hoc development on the northern parts of the former airfield appears out of place. There are already buildings on the adjacent site so a new waste transfer station development would continue an existing trend and add to cumulative adverse visual and landscape effects. Buildings will be prominent in the flat, open landscape, though the site is partly screened by existing hedgerows and hedgerow trees.</p> <p>Vehicle movements from the site will have little effect on character as there is already some traffic.</p> <p>There might be a cumulative impact of this site with development already on the airfield, which might have landscape / visual effects on users of the Trans Pennine Trail in particular.</p> <p>In the long term it is noted that there is a need for a landscape strategy for the former Burns Airfield before further development takes place (to avoid the earlier pattern of ad hoc development). Once built, there would be little difference in effects over the next 30 years (assuming no other development takes place on adjoining land).</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Site is close to Selby, though is remote from many waste facilities (only categories of landfill within 5km).</p> <p><u>Local effects</u> While dealing with waste effectively is an important part of a functioning, sustainable economy the area is not rich in waste facilities. Therefore this transfer station will be an important part of ensuring that waste can be transported to disposal or recycling / reuse in a more cost effective way. The overall impact in relation to this objective are therefore considered to be positive in the short and medium term.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓		✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> IMD area is Hambleton – not in the worst 20%. Selby is the key settlement in the search area (1km to the north), while outlying settlements such as Thorpe Willoughby and Brayton are north west of the site. A number of small scattered villages also lie in the search area, the largest of which are West Haddlesey and Burn (which is 880m south-west of the site). Selby is the Principal Town while Brayton and Thorpe Willoughby are Designated Service Villages. Policy SP2 states that ‘Selby as the Principal Town will be the focus for new housing, employment, retail, commercial and leisure facilities’ while the policy also states ‘the following Designated Service Villages have some scope for additional residential and small-scale employment growth to support rural sustainability and in the case of Brayton and Thorpe Willoughby to complement growth in Selby. Note: Selby Sites and Policies Local Plan is still in development with an initial consultation underway at time of writing.</p> <p><u>Local effects</u> Although this site will provide a small number of jobs, it is remote enough from communities as to not particularly affect their vitality, though some further assessment of traffic effects at Burn would be needed. The nearest tourism receptor is the Trans Pennine Trail, from which the site will be visible. Local users of the Trans Pennine Trail may find their section of this walking / cycling route changes slightly in terms of character and noise. However at a regional scale this effect is reduced as the trail traverses several industrial sites which are a notable part of the character of the trail. Overall minor negative until</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	restoration takes effect. Plan level / regional / wider effects None noted.							
14. To provide opportunities to enable recreation, leisure and learning	Proximity to recreation, leisure and learning receptors This small site is 110m north of a footpath (35.14/15/1) that travels round the nearby airfield. The Trans Pennine Trail, at its closest point, is circa 0.2km east of site. Local effects Users of the Trans Pennine Trail will experience some, though limited, visual intrusion, dust and possibly odour, as will rights of way users to the south (though the site may be partly screened by hedgerows along Common Lane). Although not a National Trail, the Trans Pennine Trail is a nationally significant trans regional route. However, because of its route, non-local users will be acquainted with industrial views. The canal towpath to the north of this site may also be impacted in a similar way to the Trans Pennine Trail, though it appears to be screened to some degree. Plan level / regional / wider effects None noted.		✓	✓		-	-	0
15. To protect and improve the wellbeing, health and safety of local communities	Proximity to population / community receptors / factors relevant to health and wellbeing Nearest Village is Burn and fringes of Brayton within 1km. A small number of farm properties lie within 1km. Local effects Waste Transfer Stations can have noise or dust impacts on receptors, which may affect wellbeing. Most receptors are thought to be too distant for these impacts, though receptors in nearby farms and the edges of Burn and Brayton should be investigated. Traffic along Common Lane may get heavier, which may increase risk to a small number of pedestrians, cyclists and other road users. Plan level / regional / wider effects None noted.		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones About 5% of the site is at low risk (1:1000 (0.1%)) of surface water flooding. Site is in Flood Zone 2. This site lies in a 1km square where <25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'⁸⁴. Site is at a moderate risk of flooding (which could become worse with climate change). A slight concern is the placement of this site in Flood Zone 2, which could result in pollution washing off this site in a flood event and affecting the Selby Canal. However, the effect of this would be relatively small scale (as site would likely be defined as less vulnerable), rare and temporary and further risk abatement measures could help mitigate for this. A flood risk assessment would be required.</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	-	-	-
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a small contribution to the bulking and transfer of municipal and commercial waste.</p> <p>Plan level / regional / wider effects The site may also support markets outside of the Plan area.</p>					+	+	0

⁸⁴ Sites WJP08 and WJP19 should be considered before this site. However, this site is preferable to WJP06, WJP15, WJP11, WJP05 and WJP18.

Cumulative / Synergistic effects⁸⁵	
Planning context	Selby is the key settlement in the search area (1km to the north). Brayton to the north west of the site, and Burn to the west also lie in the 2km search area. Selby is the Principal Town while Brayton is a Designated Service Village. Policy SP2 states that 'Selby as the Principal Town will be the focus for new housing, employment, retail, commercial and leisure facilities' while the policy also states 'the following Designated Service Villages have some scope for additional residential and small-scale employment growth to support rural sustainability and in the case of Brayton and Thorpe Willoughby to complement growth in Selby. The 2005 Local Plan shows no allocations conflict with the site.
Other Minerals and Waste Joint Plan Sites	MJP09 is 3.5km north-east.
Historic minerals and waste sites	There are historic extraction and landfilling applications associated with a brickworks 1.4km north-east, and an authorised landfill site to the north of that (at 1.8km north-east of the site).
Landscape	In SA Objective 11 the assessment noted that the site may have negative effects on the capacity of the local landscape to absorb change as the landscape is flat and generally open, meaning that cumulative effects are possible. There are already buildings on the adjacent site so a new waste transfer station development would continue an existing trend and add to cumulative adverse visual and landscape effects. Buildings will be prominent in the flat, open landscape, though the site is partly screened by existing hedgerows and hedgerow trees. In the long term it is noted that there is a need for a landscape strategy for the former Burns Airfield before further development takes place.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on protected species and including measures to address and control invasive species • Design of development and landscaping of site to mitigate impact on: users of the Trans Pennine Trail leisure trail and local landscape character 	

⁸⁵ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate Design to ensure protection of the aquifer and surface water bodies including the Selby Canal
- Design to include suitable arrangements for access onto Common Lane
- Appropriate arrangements for control of and mitigation of the effects of noise and dust

WJP06 Land adjacent to former Escrick Brickworks

Site Name	WJP06 Land adjacent to former Escrick Brickworks, Escrick, YO19 6ED, Selby (XY 461919 440761)
Current Use	Agriculture
Nature of Planning Proposal	Importation of inert waste for use in restoration of proposed clay extraction within preferred area (MJP55)
Size	112ha
Proposed life of site	31.5 years
Notes	Proposed as new landfill for restoration following proposed extraction of clay (MJP55). Possible restoration: No detailed design available yet, but would be back to agriculture at or near original ground levels. This site would only be developed if minerals extraction within MJP55 preferred area occurs

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features 3.5km south-east - Skipwith Common Special Area of Conservation (SAC); 7km east - Lower Derwent Valley SAC / Special Protection Area (SPA) / Ramsar. Site of Special Scientific Interest (SSSI): Acaster South Ings is 3km north-west; Church Ings is 4.8km north-west; Skipwith Common is 2.9km south-east; Skipwith Common is also a National Nature Reserve (NNR). SSSI Impact Risk Zone (IRZs) show that the northern part of the site is highlighted as having the potential to affect Acaster South Ings SSSI, while the southern end of the site has the potential to affect Skipwith Common.</p> <p>Site of Importance to Nature Conservation (SINC): 11 SINC's / potential SINC's lie within 2km. Of these the</p>	✓	✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>following lie within 500m: SE64-10 (York and Selby Cycle Track (ratified SINC) which runs between and immediately adjacent to the east and west sections of this site and the western boundary of the southern plot; SE64-06 (Heron Wood - Stillingfleet - potential SINC) is immediately adjacent to the northern edge of the western site; SE64-04 (Hollicars Wood, Ratified SINC) is 250m east of southern tip of access track and SE63-12 (Riccall Dam, Potential SINC).</p> <p>Priority Habitats: several patches of deciduous woodland immediately north and south of the site with more patches close by. The Woodland Trust confirmed the presence of ancient woodland along the site boundary. A lowland fen patch is circa 10m to south of site (co-incident with Trans Pennine Trail).</p> <p>Southern part of the site is within a Bee Line buffer. Site visit confirmed ponds, grasslands, arable, woodland, hedgerows and standalone trees were present on site.</p> <p>Local effects Although invasive species are not noted in this location, the presence of a ditch next to the site could act as a pathway for invasive species that might be brought in during any restoration.</p> <p>While through MJP55 on site habitats may have been disturbed, some species may move back on to site between extraction and landfilling, so monitoring will be important. Completion of restoration should see the baseline return to the norm, though much depends on how it is implemented (for instance, an ecology strategy / management plan for the site may help secure integrated biodiversity).</p> <p>There could be impacts on adjacent habitats such as Heron Wood if hydrology changes. For instance, surface water flooding at the site might transfer pollutants to Heron Wood SINC</p> <p>Plan level / regional / wider effects Impacts upon the Natura 2000 site at Skipwith Common will need further investigation before a position on likely significant effect could be made. This assessment will need to consider the hydrological and hydrogeological links between this site and the Skipwith Common which relies on the maintenance of water levels to maintain wet heath communities. Further assessment would also need to consider dust deposition and transport routes from the site in relation to Skipwith Common (uncertainty).</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>The northern tip of the site also lies in the IRZ for Acaster South Ings, which is sensitive to operations such as landfill, which may result in leachate affecting damper meadows on site. However, at least in terms of surface water there seems to be little 'connectivity' between this site and Acaster South Ings (though this may warrant further investigation as landfill is used to restore the site) and historically this site has handled inert rather than active waste.</p> <p>Inert landfill in clay extraction sites is generally a low risk to groundwater as clay is a non-aquifer with limited groundwater inflow dependent on permeability⁸⁶. This makes any risk to Skipwith Common unlikely.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p><u>Proximity of water quality / quantity receptors</u> Site is in a Nitrate Vulnerable Zone (NVZ). Not in a Source Protection Zone (SPZ).</p> <p>River Basin Management Plan (RBMP): The site is In the Humber RBMP in the 'Riccall Dam Catchment (tributary of Ouse)' water body. This has an overall status of moderate and the status objective is 'good by 2027'. There are no local RBMP lakes. RBMP Groundwater water body is 'Sherwood Sandstone': quantitative status objective: good by 2021.</p> <p>Catchment Abstraction Management Strategies (CAMS): surface water resources available at least 70% of the time. Groundwater is restricted.</p> <p><u>Local effects</u> The on-going landfilling of this site may present risks to the achievement of groundwater quality objectives if incorrectly managed (though it is assumed that normal highly regulated landfill design</p>					-	-	-

⁸⁶ See Stuart, A. and Davies, J, 2002. *An assessment of relative environmental sustainability of sub-water table quarries*. Environment Agency, Bristol [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/290396/sp2-173-tr-2-e-e.pdf]

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	<p>requirements would apply and the risk of leachate occurring would be low). More likely however is that on-going deliveries to the site could generate impacts such as the release of pollutants or nutrients from fuel spills the site which could make their way into the 'Riccall Dam Catchment' RBMP water body. Compaction may also be an issue on site which may create pathways for on-site run off. These impacts would require mitigation, though again this would be dealt with through the permitting system. Groundwater impacts would need further investigation, but clay is an 'aquitar' which acts as a low permeability block between and aquifer and the surface so impacts are most likely to be fairly low.</p> <p>Plan level / regional / wider effects No wider effects noted.</p>					?	?	?
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is close to A19 with good access to key sources of inert waste in York and Selby. Access: Confirmed to be as existing via the former Escrick Brickworks and U722 unclassified road by Escrick Business Park onto the A19.</p> <p>Light Vehicles: 10 two-way movements; Heavy Goods Vehicle (HGV): 100 two-way movements (sourced from screening opinion request NY/2013/0165/SCR).</p> <p>PRoW: Immediate access to the site is not affected by PRoW.</p> <p>Rail: 7.25km west / nearest railhead: 7.8km south; Strategic Road: A19 borders eastern edge of site; Canal / Freight waterway: River Ouse is 3.5km west.</p> <p>Selby are undertaking a highways study that could contribute information to these sites.</p> <p>Local effects This site would generate 100 two way HGV movements a day and 10 light vehicle movements. Although the site has no direct connection / frontage to a highway maintainable at the public expense, HGV movements on the receiving road (A19) are deemed acceptable. Sustainable modes of transport are unlikely to contribute to the site. The site is not likely to generate significant passenger transport demand.</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	<p>According to the traffic assessment “As with the MJP55 submission, the site would be accessed via the U722 unclassified road which also serves Escrick Business Park and leads directly onto the A19. The U722 passes in close proximity to the Escrick Business Park and mitigation measures are likely to be required to limit the impacts such as noise and dust and removing conflicts with pedestrians and road users at the business park”.</p> <p>As the site would be likely to have dust / noise impacts on the nearby Escrick Business Park and bisects the Trans Pennine Trail mitigation would be required.</p> <p>Overall, minor negative effects are predicted over the short and medium term.</p> <p>Plan level / regional / wider effects There may be cumulative traffic effects with site allocations further south along the A19 as it approaches the M62.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors No Air Quality Management Areas (AQMAs) within 5km. Not within a Hazardous substances consultation zone. It is noted that the A19 in York forms part of an AQMA for Nitrogen Oxides (NOx) pollution.</p> <p>Park Farm Business Park lies adjacent to the southern boundary of the site and several isolated farms and a children’s nursery lie within 1km. There are also 6 residential properties adjacent to the business park. To the north of the site (around 2km north) is the village of Escrick and around 2km south is Riccall. Further out Stillingfleet lies to the west and Skipwith is to the South east and Kelfield to the south west (all Selby). Nearest school is in Escrick. No hospitals, health centres or clinics within 2km.</p> <p>Local effects Presumably waste will arrive at the site via the A19. 200,000 tonnes of waste per year will be imported to a total of 4 million tonnes of waste. This will have a minor dust and odour impact on the local business park and residential receptors as well as a possible small scale effect on the nearest AQMA, which is at York (the traffic assessment states that two thirds of HGV trips are expected to come from York) (though waste consignments are likely to come from a range of sources rather than a single source in York).</p>		✓		✓	m	m	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	<p>Plan level / regional / wider effects There may be cumulative effects with site allocations further south such as the Southmoor Energy Centre as the A19 nears the M62. Similarly, the site may combine with traffic further north en route to / from York.</p> <p>Mitigation (e.g. screening, damping down) is required to deal with dust and odour impacts.</p>							
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Site is largely Grade 3 Agricultural Land Classification (ALC) (good to moderate quality) with a small corner marked as possible Grade 2. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects The land will already have been lost due to clay quarrying (MJP55). Landfilling and restoring will ultimately return the site to baseline conditions before MJP55 (or represent a significant improvement in contrast to a baseline of a post extraction site).</p> <p>Plan level / regional / wider effects Same as local effects, however, if restored to agriculture at original ground level, restoration the potential to contribute positively to soil in the wider Plan area.</p>	✓		✓		0	0	0
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Priority woodlands lie adjacent to the site. Hedges and trees exist on site. Soil carbon: Low (49.67 tC/ha); Carbon in vegetation: Low (4.04 tC/ha).</p> <p>Local effects See wider effects below.</p> <p>Plan level / regional / wider effects Habitat and soils would already have been lost due to quarrying (see MJP55). However, this site would eventually shift 4 million tonnes of construction waste onto the site (over 20 years) with associated vehicles (100 HGVs / 10 Light vehicles per day). Overall during the operational phase of the proposed site is expected to have a minor negative effect on the SA Objective, although there is some uncertainty as to any long term effects post restoration of the site.</p>	✓		✓		-	-	?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁸⁷ of a site Isolated patches of the England Habitat Network (EHN) to north of site. About 60% of this site lies in Flood Zone 2 with about 35% being in Flood Zone 1 and <5% being in Flood Zone 3, but benefiting from existing defences. About 15% of the site is at risk from surface water flooding. This is mainly low risk (1:1000 (0.1%)) with small areas of medium risk (1:100 (1%)) and high risk (1:30 (3.33%)).</p> <p>Site is largely ALC Grade 3.</p> <p>Local effects Flooding will be an issue for this 'less vulnerable' site with a moderate risk from future river flooding and a low risk from surface flooding (but with patches of high risk). This will require an appropriate FRA and emergency planning procedure to be put in place and suitable application of an on-site sequential approach. In terms of habitat connectivity there will be no direct effects, though it is suggested that buffering the isolated patches of habitat adjacent to the site may increase their resilience. ALC land will already have been lost due to clay quarrying (MJP55). Overall, the effects on this SA objective are likely to be minor negative although there is some uncertainty as to any long term effects post restoration of the site.</p> <p>Plan level / regional / wider effects Same as local effects.</p>		✓	✓		-	-	?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified</p> <p>Local effects Landfilling of inert waste (particularly if it could have been recycled) will work against this objective.</p> <p>Plan level / regional / wider effects See local effects above.</p>	✓			✓	m	m	0

⁸⁷ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> Landfilling of inert waste (particularly if it could have been recycled) will work against this objective.</p> <p><u>Plan level / regional / wider effects</u> See local effects above.</p>	✓		✓		m -	m -	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> Escrick Conservation Area approx. 1km north-east. Moreby Hall and Nun Appleton Hall (Grade II Registered Park and Garden) are 2.3km north-west and 4.9km west. There are a number of Listed Buildings within Escrick Conservation Area including Grade II* Escrick Park and Coach House 550m to north-east. Stillingfleet Conservation Area and associated listed buildings are approx. 1.6km west. Scheduled Monument York prebendary manor moated site, 300m north west of Hawthorn Farm.</p> <p>Site visit confirmed the site is screened by topography and woodland so is not visible. No other contribution to asset significance was observed.</p> <p>Named designed landscapes: Escrick Hall (designed landscape - ornamental parkland) is 400m east. Moreby Hall (designed landscape -ornamental parkland) is 2km north-west (i.e. just outside 2km).</p> <p>An Iron Age or Roman enclosure with field system and track ways has been identified as crop marks on air photographs and transcribed as part of the Vale of York National Mapping Programme project commissioned by English Heritage. There are various other smaller elements within the system which are assumed to be related although perhaps of a different phase.</p> <p>The North Yorkshire Historic Landscape Character (HLC) project (database records HNY 5413 & 5581) records parts of this allocation area as parts of wider areas of late modern improved fields which consists</p>	✓		✓		-	-	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	<p>of large irregular fields defined by erratic hedgerows. This area has fragmentary legibility due to the high degree of boundary loss and was previously planned enclosure which had been enclosed by agreement. The HLC project (database records HNY 6327 & 23913) also records parts of this allocation area as parts of a wider areas of piecemeal enclosure which consists of medium sized irregular fields defined by regular hedges in some areas and medium sized fields which are irregular in form and are defined by erratic external and regular internal hedgerows in others.</p> <p>Local effects The site visit carried out for MJP55 noted no effect of significance on the designated heritage assets or areas. As changes will already have taken place under MJP55 (and be continuing to take place) there is no effect from archaeology loss (MJP55 recorded major impacts for archaeological loss). However, further changes in HLC will take place in the short and medium term (as a new landform takes shape). However, this may be less significant as the land is restored to agriculture).</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, Areas of Outstanding Natural Beauty (AONBs) or Heritage Coast within 10km. No ITE land within 5km.</p> <p>National Character Landscape (NCA): Southern 50% in Humberhead Levels. Northern 50% in Vale of York. NYCC Landscape Character Assessment (LCA) places this site within 'vale farmland with plantation woodland and heathland'. This has moderate visual sensitivity (a strong sense of openness and patches of plantation woodland disrupt views to adjacent Landscape Character Types in places); moderate ecological</p>	✓		✓		-	-	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	<p>sensitivity overall (much of this Landscape Character Type comprises improved agricultural fields. There are, however, large areas of lowland heathland and a network of remnant lowland heaths outside these major areas). Moderate landscape and cultural sensitivity overall. (In places, historic landscape patterns are compromised by modern developments. There are, however, numerous historic landscape features present, including parkland landscapes, historic villages and prehistoric earthworks). Selby LCA places site in 'Skipwith Lowland LCA Area' (Flat wooded farmland LCA Type) and Wharfe Ouse River Corridor LCA Area (LCA type: Semi-enclosed farmland).</p> <p>York Green Belt in Selby is 600m north. In terms of tranquillity 70% of site disturbed. Western 30% is undisturbed.</p> <p>Local effects Site is not within a locally protected landscape, but it would be visible from the Trans Pennine Trail. The site is about 1.5 - 2km from Escrick and is visible from the A19 on the approach from the south. This area may be sensitive to change due to the proximity to Escrick Park. The site is 2km north of Riccall and would not affect its immediate setting.</p> <p>The site is currently countryside degraded by large scale hedgerow and hedgerow tree loss. It is in intensive agricultural use, but it is relatively unspoilt by development and within a landscape influenced by the Escrick Estate. However, impacts from feature loss are attributed in this assessment to MJP55 rather than WJP06 which deals with subsequent landfilling. The existing brickworks site is isolated from other similar development and is not currently conspicuous from the A19 although it would also be visible from the Trans Pennine Trail. The site is not currently fully screened. Partial screening may be provided by hedgerows in some views but the countryside is relatively flat and open. There are blocks of woodland to the north west which would provide screening in views from that direction. There could be some mitigation through screen planting but this would interfere with current open views.</p> <p>In the short-term effects depend on the extent of operational area at any one time. Mitigation screen planting would change the character of the local area as it is presently open. In the medium term effects continue, depending on phasing and restoration proposals. In the long term effects are dependent on restoration. Restoration at original ground levels would have benefits.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>It will be important to retain soils lost during excavation of MJP55 for later restoration. Lighting at night may also have an impact in this rural location.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to A19 with good access to key housing markets in York and Selby.</p> <p>Local effects Few economic benefits. However, allowing the restoration of the site would allow for disposal of construction waste, some of which, if disposed of more creatively, might generate usable products releasing value from a waste resource and thus supporting business.</p> <p>There may be some negative effects on the business park in terms of dust and setting, which may influence the locational choices of businesses (which may affect local jobs).</p> <p>Plan level / regional / wider effects None noted.</p>	✓			✓	-	-	0
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability Index of Multiple Deprivation (IMD) area is Riccall with Escrick. Not in most deprived 20%. Nearest significant communities: To the north of the site (around 2km north) is the village of Escrick and around 2km south is Riccall. Further out (all >2km) Stillingfleet lies to the west and Skipwith is to the South east and Kelfield to the south west (all Selby).</p> <p>Escrick and Riccall are designated Service Villages in the Selby Local Plan. Stillingfleet, Skipwith and Kelfield are all Secondary Villages. Secondary Villages are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10". Service Villages 'have some scope for additional residential and small scale employment growth', albeit within development limits.</p> <p>Local effects Tourism receptors at Escrick Park Estate and the Trans Pennine Trail may be affected by</p>	✓		✓		-	-	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	<p>views of this site. There are few benefits to communities of landfilling construction waste as opposed to recycling it. However, it would aid restoration in the longer term (which would be positive for nearby communities and possibly tourism).</p> <p>There may be some negative effects on the business park in terms of dust and setting, which may influence the locational choices of businesses (which may affect local jobs).</p> <p>Plan level / regional / wider effects None noted.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors Trans Pennine Trail goes between the two halves of this site within 10m of each half. It also runs immediately adjacent to the western side of the southern block of this site. A bridleway crosses the western part of the site and then follows the boundary. It turns into a footpath as it moves away from the site in the south-west corner.</p> <p>Local effects Users of the bridleway that crosses the site could experience major visual intrusion, as well as noise and dust and safety impacts and it is likely that this route would need to be diverted.</p> <p>Plan level / regional / wider effects Users of the Trans Pennine Trail could experience major visual intrusion, as well as noise and dust impacts (including from any movement that might take place on the bridge across the Trans Pennine Trail). Although not a National Trail this is a nationally significant trans regional route. Recreational tourists at Escrick Park Estate may also experience glimpses of this site without mitigation. Usage figures would be needed to more accurately predict effects on the Trans Pennine Trail.</p> <p>Mitigation could include screening as well as improvements and enhancements of the Trans Pennine Trail.</p>		✓	✓		m -	m -	0
15. To protect and improve the wellbeing, health and safety of local	<p>Proximity to population / community receptors / factors relevant to health and wellbeing Several farm properties and a business park lie within 1km.</p> <p>Local effects The main health risk from this site is expected to come from traffic which will increase the heaviness of traffic on the A19 by 110 two way journeys per day and through noise, smell and vibration</p>		✓	✓	✓	m -	m -	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
communities	<p>decrease wellbeing at human population receptors along the A19 and around the business park. This is, however, already a busy road so effects are considered to be minor negative at worst. Local users of the Trans Pennine Trail may find their section of this walking / cycling route changes significantly in terms of character and noise. However at a regional scale this effect is reduced as the Trail traverses several industrial sites which are a notable part of the character of the trail. Overall moderate negative until restoration takes effect.</p> <p>Plan level / regional / wider effects The site may contribute to a cumulative effect further south around the A63 / A19 roundabout as it combines with other Joint Plan sites, and further north as it combines with other traffic. Health effects may be increased driver frustration, increase chance of road accidents, or increased exposure to low levels of pollutants.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Isolated patches of the EHN to north of site. About 60% of this site lies in Flood Zone 2 with about 35% being in Flood Zone 1 and <5% being in Flood Zone 3, but benefiting from existing defences. About 15% of the site is at risk from surface water flooding. This is mainly low risk (1:1000 (0.1%)) with small areas of medium risk (1:100 (1%)) and high risk (1:30 (3.33%)).</p> <p>The southern part of this site lies within a series of three 1km squares where >75% of their area has conditions which support Clearwater flooding. Although this is a higher risk area, flooding occurs mainly from consolidated aquifers (rather than superficial deposits like clay). The northern part of the site lies within two 1km squares where the proportion of the area which may support 'clear water' flooding is <25%. As a former clay site in a clear water flooding area the site's vulnerability to groundwater flow is likely to be negligible. Therefore groundwater flooding is unlikely to cause any significant problems.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Present day Flood Zone 3 in the vicinity of the site is shown as being within an area benefiting from a flood defence with a design standard of 1:25 (4%). The level of protection is expected to reduce with climate change. The depth of flooding associated with Flood Zone 2 is likely to increase with climate change and the site may be at risk from Flood Zone 3 encroaching from the south east of the site. Climate change</p>		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	<p>effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively.</p> <p>Local effects Landfill is 'more vulnerable', though this landfill would be inert, so effects are considered to be minor. A Strategic Flood Risk Assessment (SFRA) Sequential Test undertaken for the site concluded that this site would 'Pass'. A site specific flood risk assessment will be required which should confirm the impact of climate change on river flooding at this site. The flood risk assessment should also address the issues of draining surface water using SuDS, without causing additional flood risk. An emergency plan should be prepared in case of a flood event as this site is in Flood Zones 2 and 3.</p> <p>Plan level / regional / wider effects None noted.</p>							?
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects No notable benefits to a changing population.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
Cumulative / Synergistic effects⁸⁸								
Planning context	Site has the same boundary as MJP55. See MJP55 for a summary of the planning context.							
Other Minerals and Waste Joint Plan Sites	See MJP55.							

⁸⁸ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Historic minerals and waste sites	Historic Minerals and Waste Sites: See MJP55
Traffic / Air pollution / Health	Cumulative effects with other minerals and waste sites are not predicted. However, there is expected to be a cumulative impact with traffic arising from a variety of housing, employment and industrial sources along the A19.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on the Heron Wood SINC/ancient woodland, and protected species and any potential hydrological impacts on the Skipwith Common SAC / SSSI • Design to minimise the irreversible loss of best and most versatile agricultural land and to protect high quality soil resources • Design of development and landscaping of site to mitigate impact on heritage assets (archaeological remains, Escrick Conservation Area, Listed Buildings including Escrick Park and unregistered designed landscape at Escrick Park) and local landscape features and their respective settings and the leisure route • Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate. An emergency plan should be prepared in case of a flood event as this site is in Flood Zones 2 and 3 • Design to ensure protection of the aquifer and surface water bodies • Appropriate arrangements for the crossing of the Trans Pennine Trail and maintenance of the access to the A19 • Appropriate arrangements for control of and mitigation of the effects of air pollution, lighting, noise and dust including on local residences and businesses • Appropriate restoration scheme using opportunities for habitat creation. 	

WJP21 – Brotherton Quarry, Burton Salmon

Site Name	WJP21 (Brotherton Quarry, Tadcaster Road, Burton Salmon, Selby) (XY 449093 426488)
Current Use	Quarry
Nature of Planning Proposal	Import of inert waste for restoration purposes
Size	20.5ha
Proposed life of site	Until 2020
Notes	Application NY/2013/0324/73, to extend the period of time for extraction and restoration of the eastern part of the site (which involves importation of soils for restoration purposes) until 31 December 2020, was granted in October 2014. This proposal would extend the area of proposed material import to include the western part of the quarry with a potential need for about 400,000 tonnes of inert material to restore the site. Restoration to agriculture and woodland. Annual tonnage import is 250,000.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	<p>Proximity of international / national and local designations and key features No Natura 2000 sites within 15km. 2 SSSIs within 5km - Fairburn and Newton Ings 1.2km west and Madbanks and Ledsham Banks 3.9km north-west.</p> <p>SINC: 6 SINC within 2km within the Plan area (Plan boundary lies circa 1km away so may be others outside of the boundary). One SINC lies partly within the site - Byram Park (pre-existing SINC, SE42-06, covers the access road at the west of the site). Byram Park (pre-existing, SE42-03) lies 13m north, Woodland at Western Edge of Byram Park (pre-existing SINC, SE42-05) lies 16m south, Frog Hall Quarry (pre-existing SINC, SE42-04) 80m south, Bank of</p>	✓		✓		-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>River Aire, Fairburn-Brotherton (ratified SINC, SE42-02) 950m west and Bywater Wood (ratified SINC, SE52-04) 1.4km north-east. A Local Wildlife Site in Wakefield is located 1.7km west.</p> <p>Priority Habitat: The majority of the site (circa 85%) is covered by Priority Habitat Inventory (deciduous woodland). The site is also largely surrounded to the north, south, east and west with additional areas of priority habitat. Although a number of blocks of deciduous woodland do still adjoin the site to the north, south and east, the priority habitat deciduous woodland that is identified within the site boundary has all been removed to facilitate mineral extraction. EHN - circa 25% of the site (western and northern area) covered by core EHN (woodland). Fairburn Ings RSPB reserve lies 1.5km south-east.</p> <p>Networks: Site lies within 'Aire' regional GI corridor and 'Humberhead Levels' Futurescape. 'Lower Aire Valley Corridor' Living Landscape lies circa 60m from site.</p> <p>Local effects It is also considered unlikely that there would be any significant impacts upon nearby SSSIs. The site access route is through Byram Park SINC (SE42-06). This SINC has not been surveyed so we have no information on quality of the site. This access route does however appear to be existing and in current use, and so impacts are likely to be minor with mitigation.</p> <p>Protected species that could be impacted include reptiles, amphibians (if ponds present) invertebrates (associated with bare ground), nesting birds, badgers, foraging bats. Surveys would be required to identify and fully assess potential impacts.</p> <p>Due to the nature of the allocation, it is considered that there is potential for invasive plants to be imported with waste to the site.</p> <p>In the short and medium term it is considered that minor negative impacts could occur in relation to disturbance to regenerated habitats and any protected species. In the long term impacts will be dependent upon the final restoration scheme. It is understood that current permission (NY/2013/0324/73) is for restoration to agriculture but there is potential for benefits to biodiversity through sympathetic pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<u>Plan level / regional / wider effects</u> Considering the source of any impacts, as well as potential.							
2. To enhance or maintain water quality and improve efficiency of water use	<p><u>Proximity of water quality / quantity receptors</u> Site is in a NVZ (surface water and groundwater). Not in a SPZ.</p> <p>In the Humber RBMP the nearest section of river is 'Aire from River Calder to River Ouse' 850m south-west (ecological quality: moderate; chemical quality: fail). No clear connectivity. No RBMP lakes present. RBMP Groundwater: Aire and Don Magnesian Limestone waterbody; good quantitative quality / poor chemical quality; current overall status is poor; overall status objective 'good by 2027'.</p> <p>CAMS: Source water available at least 70 per cent of the time (and may be available at low flows (Q95 availability is 'yellow')</p> <p><u>Local effects</u> The on-going landfilling of this site may present risks to the achievement of groundwater quality objectives if incorrectly managed (though it is assumed that normal highly regulated landfill design requirements would apply and the risk of leachate occurring would be low). On-going deliveries to the site could generate impacts such as the release of pollutants or nutrients from fuel spills which could make their way into nearby water bodies. Compaction may also be an issue on site which may create pathways for on-site run off. These impacts would require mitigation. Groundwater impacts would need further investigation.</p> <p>Generally it is considered that the environmental permitting regime would work effectively to reduce any impacts to a non-significant level, while there are no significant planning issues in relation to water.</p> <p><u>Plan level / regional / wider effects</u> As detailed above.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is close to the strategic road network with good access to housing markets in Castleford (5km), Leeds (18km) and Selby (13km); Access: Confirmed as existing at Brotherton Quarry access onto A162 (approximately 50m south of Byram Nurseries), between Burton Salmon & Brotherton.</p> <p>Light vehicles: 12 two-way movements estimated (submitter information); HGV vehicles: 56-112 two-way movements estimated (submitter information).</p> <p>Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green.</p> <p>PRoW: Immediate access is not affected by PRoW.</p> <p>Rail: 350m east (station at Knottingley 2.7km south) / nearest known railhead 11.3km south-east; Strategic road: A1 is 1.2km west (J42 circa 5.5km north-west). Canal / Freight waterway: Site is 2km north of the Aire and Calder Navigation / River Aire.</p> <p>Local effects Site would generate 56-112 two way HGV movements. However, the traffic assessment notes that traffic data shows that a modest 5,500 vehicles a day use the A162 while receptors are generally set back from the highway. Traffic from this site would be at the same level as existing levels. However, in this assessment the potential for impacts to be extended into the future is noted. The site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway however, and HGV movement is acceptable on to the road. Sustainable travel is not thought likely to contribute to the site. However, given the site's proximity to the River Aire / Aire and Calder Navigation there may be some potential to link with wharves at Ferrybridge⁸⁹.</p> <p>Minor negative impacts are predicted as allocating this site would extend existing traffic levels into the</p>		✓		✓	-	-	0

⁸⁹ See Leeds City Council, undated. Marine Aggregate in the Yorkshire Region: increasing the annual tonnage used [URL: leeds.gov.uk/docs/FPI_nrw_sub_019%20034%20marine%20aggregate%20in%20the%20yorkshire%20region.pdf - URL is no longer available] for a list of possible available wharfage on the Aire.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>future (rather than being completely new impacts).</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors No AQMAs within 5km (however Wakefield's AQMA along the M62 (for NO₂) lies 7.25km north-west. Not within a Hazardous substances consultation zone.</p> <p>The site lies between the settlements of Poole 200m north, Burton Salmon 550m north and Brotherton 600m south. 1 primary school lies within 1km (Burton Salmon 700m north). The closest residential property to site appears to be circa 70m west of the site access point.</p> <p>Local effects As the site is located in close proximity to a number of settlements, there is potential for minor negative impacts in relation to dust during the operational phase of the development (from site operations and traffic). It is however acknowledged that mitigation may reduce any impacts significantly however this is currently unknown until a dust / air quality assessment is undertaken and any required mitigation is outlined. Air pollution resulting from site traffic may also contribute towards a minor negative impact in relation to air quality during landfill operations. In the longer term, restoration to agriculture and woodland is considered to have a neutral impact in relation to this objective.</p> <p>Plan level / regional / wider effects Effects are considered local in nature.</p>		✓	✓	✓	-	-	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors The western are of the site (circa 60%) is ALC Grade 3 (good to moderate) and the eastern area is in ALC Grade 2 (very good). In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects The land has already been lost due to quarrying and currently has been left to re-vegetate. Landfilling and restoring the site to agriculture will ultimately return the site to agricultural productivity.</p> <p>Plan level / regional / wider effects None noted.</p>	✓		✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Priority Habitat deciduous woodlands lie adjacent to the site.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects It is not considered that any habitats that hold significant carbon stocks would be lost as a result of the infilling operations. The site is in relatively close proximity to potential inert waste sources including Castleford (5km), Leeds (18km) and Selby (13km). It is however recognised that the allocation would result in around 400,000 tonnes of inert waste being transported to the site resulting in CO₂ emissions from transportation.</p>	✓			✓	-	-	-
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁹⁰ of a site Site lies in Flood Zone 1 and about 5% of the site is at low risk (1:1000 (0.1%)) of surface water flooding.</p> <p>The western are of the site (circa 60%) is ALC Grade 3 (good to moderate) and the eastern area is in ALC Grade 2 (very good). The land has already been lost due to quarrying and currently has been left to re-vegetate.</p> <p>Networks: Site lies within 'Aire' regional GI corridor and 'Humberhead Levels' Futurescape. The 'Lower Aire Valley Corridor' Living Landscape lies circa 60m from site. Circa 25% of the site (western and northern area) covered by core England Habitat Network (woodland).</p>	✓		✓		0	0	0

⁹⁰ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects The SFRA Sequential Test notes the depth of flooding associated with Flood Zone 2 is likely to increase with climate change and the site may be at risk from Flood Zone 3 encroaching from the south east of the site. Although a number of habitat networks are present on and around the site, given that the site is an existing quarry, it is considered unlikely that infilling operations in order to enable restoration will significantly impact upon nearby ecological networks. In the long term, the allocation may contribute towards the creation of a coherent ecological network should sympathetic restoration, including creation of priority habitats, be implemented.</p> <p>Plan level / regional / wider effects None noted.</p>							?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects Landfilling of inert waste (particularly if it could have been recycled) will work against this SA Objective. Though it will be used in restoration. Will reduce the need for virgin material for restoration. Overall minor positive effect.</p> <p>Plan level / regional / wider effects See local effects above.</p>	✓			✓	+	+	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects Landfilling of inert waste, which is the least favoured option of the waste hierarchy, particularly if it could have been recycled, will work against this SA Objective. Though it will be used in restoration.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		-	-	0
10. To conserve or enhance the historic	<p>Proximity of historic environment receptors No Conservation Areas within 1km. Registered Park and Garden- Ledston Hall and Park (Grade II*, ID 1,001,221) lies 4.5km north-west outside of the Plan area. 1 Scheduled Monument within 2km, Ferrybridge near Knottingley (ID 1,005,799) 1.8km south-west. Listed</p>	✓		✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
environment and its setting, cultural heritage and character	<p>Buildings - 16 Listed Buildings within 1km (all Grade II), closest to site- Poole Manor Farmhouse (Grade II, ID 1,167,503) 165m north.</p> <p>Named Designed Landscapes (within 2km): Site lies within Byram Park (Deer Park- Lancelot 'Capability' Brown), Fryston Park 1.3km west.</p> <p>Non-designated heritage assets: Archaeological work in the eastern part of the allocation area in advance of quarrying has revealed a complex of field boundaries, enclosures and trackways, which originated in the Iron Age and continued into the Roman period. It is not clear from NYCC records whether archaeological mitigation recording was carried out prior to extraction in that area.</p> <p>HLC: HLC Broad Type – designed landscape, HLC Type – deer park. The North Yorkshire HLC project (database record HNY 6133) records this allocation area as part of the wider area of Byram Park which is marked on the first edition Ordnance Survey map (circa 1850) as a deer park, although it is shown on recent aerial photographs as being under the plough, it is still marked on the modern mapping as Byram Park. There is a quarry in part of it. It dates to the post medieval period and due to these changes in character the park has fragmentary.</p> <p>Local effects Whilst the archaeological potential of this area is certain from the discoveries and finds made to date, it is assumed that the existing land use as an existing quarry is likely to have destroyed any archaeological features that may have been present within this allocation. It is therefore considered that there would be no effect from archaeology loss. The import of inert waste and consequent changes to the landscape, is however unlikely to affect designated assets and is only likely to generate minor adverse effects on local historic character which may be lessened when the site is restored.</p> <p>Potential source of building material for the repair of York Minster at the site. As such, it is recommended a geological / petrographical survey should be carried out prior to any potential change of land use.</p> <p>Plan level / regional / wider effects None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> No National Parks, AONBs or Heritage Coast within 10km. NO ITE land within 5km. The site does not lie within a local landscape designation however Selby Locally Important Landscape Area lies 1km north at the closest point. The site lies within Green Belt.</p> <p>LCA: Site lies within Southern Magnesian Limestone NCA. NYCC LCA places this site within 'Magnesian Limestone Ridge': Moderate to high visual sensitivity / high ecological sensitivity/ high landscape and cultural sensitivity. Site also in Selby LCA: 'River Aire Corridor' (flat wooded farmland).</p> <p>The site is largely screened and distant from designated landscapes, but it does lie within the former Byram Park: a very extensive designed landscape (of which remnants are left) influenced by Capability Brown, the nationally significant 18th century landscape designer. The park is currently being assessed by Yorkshire Gardens Trust because the tercentenary of Capability Brown's birth is in 2016. The parkland is undesignated but 10 listed buildings remain, mostly in the core area around the former Hall and pleasure gardens. The boundary wall, lake, northern lodge and one of the western lodges, and some plantation woodlands remain – possibly more.</p> <p><u>Local effects</u> The allocation site is an existing active quarry, and the proposals are not considered to alter the existing setting of Byram village (it could eventually improve the quality of its landscape context). There was at one time a closer relationship between the parkland and the village of Brotherton (Byram is a recent settlement built within the Park), and there may have been some views over the River Aire Valley. The proposal for importation of inert waste for restoration purposes, would contribute to restoring</p>	✓		✓		0	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>original ground levels.</p> <p>It is considered that the allocation site could be accommodated within the landscape as it is for the purposes of restoration. There has been historic quarrying within western parts of Byram Park but C20th and C21st extraction has been on a larger scale and the current quarry has cut across the former parkland and avenue, adversely affecting its character and constraining restoration.</p> <p>Although the site does lie in greenbelt, it is compatible with its purposes. If the inert waste is used to restore original ground levels the proposal will also improve the quality of the green belt. The local landscape is degraded and considered to be in need of regeneration.</p> <p>The site lies within the River Aire regionally significant green infrastructure corridor in the Leeds City Region Green Infrastructure Strategy and in the long term the proposals would be compatible.</p> <p>Overall impacts are considered to be neutral in the short term, changing to minor positive in the medium term as the site is restored. In the long term it is considered that there is potential for positive impacts depending upon the final scheme (ground levels as close to the original levels as possible would be considered a major positive impact – so any fill that can be put into this quarry to restore ground levels would be good).</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							?
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Site is close to the strategic road network with good access to housing markets in Castleford (5km), Leeds (18km) and Selby (13km).</p> <p><u>Local effects</u> Few economic benefits. However, allowing the restoration of the site as this would allow for disposal of construction waste, some of which, if disposed of more creatively, might generate usable products releasing value from a waste resource and this supporting business.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD area is Fairburn and Brotherton. Not in worst 20%. Nearest significant communities: The site lies between the settlements of Poole 200m north, Burton Salmon 550m north and Brotherton 600m south. 1 primary school lies within 1km (Burton Salmon 700m north). The closest residential property to site appears to be circa 70m west of the site access point.</p> <p>Brotherton is listed in the Selby Core Strategy as a Designated Service Village where limited further growth is considered appropriate. Burton Salmon is a 'Secondary Villages with defined Development Limits'. These are covered by Policy SP2 in the Selby Core Strategy: 'Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10'.</p> <p>Local effects There are few benefits to communities of landfilling construction waste as opposed to recycling it. However it would aid restoration in the longer term (which would be positive for nearby communities and possibly tourism).</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors Two local footpaths lie within 250m of the site access track, one 220m south-west and one 70m north. No regional or national routes pass within 500m. During the site visit various informal cycle tracks onto site from woodland along the access track to extraction area were observed.</p> <p>Local effects It is not considered that users of the identified nearby public rights of way may not experience significant impacts as a result of this development. This is because the site is well screened to the east and although traffic to the site is likely to increase, it is already an operational quarry with associated HGV movements and this change is therefore not considered to represent a significant impact. In the medium and long term impacts are considered to be neutral as the site is proposed to be restored to agriculture.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects None noted.							
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing The site lies between the settlements of Poole 200m north, Burton Salmon 550m north and Brotherton 600m south. The closest residential property to site appears to be circa 70m west of the site access point.</p> <p>Local effects The main health risk from this site is expected to come from traffic which will increase traffic levels / risk of accident on the A162 for a short extended period and through noise and vibration decreasing wellbeing at human population receptors along the route to site (however, receptors are generally set back from the road). Overall impacts are considered to be minor negative until restoration takes effect.</p> <p>Plan level / regional / wider effects As the site lies in close proximity to a number of other developments including minerals and waste operations there is potential for cumulative traffic impacts, including on the adjacent A162 which also receives traffic to the existing quarry. This cumulative impact is considered to be negligible given current traffic volumes.</p>		✓		✓	-	-	0
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site lies in Flood Zone 1 and about 5% of the site is also subject to low risk (1:1000 (0.1%) to high risk (1:30 (3.33%)). <2% of the site area is high risk ((1:30 (3.33%)).</p> <p>More than half of the site lies in a 1km square where <25% of the area has conditions that might support Clearwater groundwater flooding. This means the site is in an area where groundwater flooding happens in a minority of locations mainly from consolidated aquifers.</p>	✓	✓	✓		-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects The SFRA Sequential Test undertaken for the site concluded that this site would 'Pass'⁹¹ A small area of the site is at risk from surface water flooding. Landfill is 'more vulnerable', though this landfill would be inert, so effects are considered to be minor. The re-profiled land post restoration will dictate any longer term impacts. A site specific flood risk assessment will be required. This should address the issues of draining surface water without causing additional flood risk. Foul water will need to be dealt with via an environmental permit.</p> <p>Plan level / regional / wider effects None noted.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects No notable benefits to a changing population.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
Cumulative / Synergistic effects⁹²								
Planning context	<p>Nearest significant communities: The site lies between the settlements of Poole 200m north, Burton Salmon 550m north and Brotherton 600m south. Byram lies 620m south. Ferrybridge in Wakefield District is 1.8km south, while Knottingley is about 2km south.</p> <p>Brotherton is listed in the Selby Core Strategy as a Designated Service Village where limited further growth is considered appropriate. Burton Salmon is a 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "<i>Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or</i></p>							

⁹¹ WJP10, WJP22 and WJP24 have similar levels of flood risk from surface water. WJP10 is within close proximity to Flood Zone 2 and WJP22 is within Flood Zones 2 and 3 to a minor extent. Therefore this site should be considered alongside WJP24 and WJP10 and is preferable to WJP22.

⁹² Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

	<p><i>maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10'.</i></p> <p>Wakefield's Core Strategy defines Knottingley including Ferrybridge as an Urban Area (most new development will take place in the urban areas. In areas outside of the sub-regional City of Wakefield and the Principal Towns of Castleford and Pontefract development will reflect the settlement's size and function). There are several large allocations for employment in Knottingley which may generate traffic on local roads.</p>
Other Minerals and Waste Joint Plan Sites	WJP06 3.6km south-east and MJP27 is 4.6km.
Historic minerals and waste sites	An active building stone and Magnesian limestone quarry exists on site. A non-hazardous landfill site (Brotherton Ings Ash Disposal) lies circa 750m west, inert and landfill and material recycling facility lies slightly outside the search area at 2.5km north. A Nationally Significant Infrastructure Projects (Ferrybridge Multi-fuel power station) and Knottingley Power Plant) lies within 2km and a further NSIP (Knottingley Power Plant) is 3.29km south-east. Five authorised landfill sites lie within 2km, all to the north-west.
Traffic	As the site lies in close proximity to a number of other developments including minerals and waste operations there is potential for cumulative traffic impacts, including on the adjacent A162 which also receives traffic to the existing quarry. This cumulative impact is considered to be negligible given current traffic volumes.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	

Mitigation requirements identified through Site Assessment process

- A geological / petrographical survey should be carried out prior to any potential change of land use, and should there be viable resource available, the site should be safeguarded.
- Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on Byram Park SINC and protected species including measures to address and control of invasive species
- Design to minimise the irreversible loss of best and most versatile agricultural land and to protect high quality soil resources
- Design of development and landscaping of site to mitigate impact on: Listed Buildings undesignated designed landscape, Green Belt, and their respective settings and local landscape features
- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate
- Suitable arrangements for access onto A162 and local roads
- Appropriate arrangements for the prevention, control of and mitigation of the effects of noise and dust
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt

WJP22 – Land on Former Pollington Airfield

Site Name	WJP22 Former Pollington Airfield, Heck and Pollington Lane, Heck, DN14 0BZ (XY 460237 421044)
Current Use	Processing plant to create wood biomass fuel and processing plant to create waste wood pellets..
Nature of Planning Proposal	Import of waste wood for wood pellet production. Additional infrastructure associated with wood processing such as site access, waste wood fuel processing building, chip dryer and storage areas.
Size	12.83ha
Proposed life of site	2040
Notes	Planning permission (12.04.09.04/32C) has been granted to construct the biomass energy plant in the East Riding of Yorkshire Council area, but it has yet to be built. The permission area includes the WJP22 site and some land adjacent to the north-eastern boundary. Restoration: Not specified at this time.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	<p>Proximity of international / national and local designations and key features Natura 2000: 10km south-east: Thorne Moor SAC / SPA; 10km north-east: River Derwent SAC; 14km east: Humber Estuary SAC / SPA / Ramsar. SSSI: Went Ings Meadows 4.63km south-east.</p> <p>SINC: 4 SINC's within 2km: Sand Quarry, Great Heck (deleted SINC) adjacent to northern area of the site to the west, Disused Railway Line (deleted SINC, SE51-02) 850m west; Balne Moor Ponds (ratified SINC, SE51-07) 1.4km south-west, Ditch West of Balne Moor Ponds (pre-existing SINC, SE51-18). The site is</p>		✓	✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>1.3km from an East Riding Candidate or Designate Local Wildlife Site.</p> <p>UK Priority Habitat: 3 areas of priority habitat within 200m (all deciduous woodland). Slight overlap with one area to north (may be mapping anomaly). Another area is 100m to south-west and 190m west.</p> <p>The site appears to comprise arable land (southern section) and an existing biomass / processing facility (northern, middle sections). The site photos show the middle section to include areas of rough grassland, scattered / dense scrub, hedges, bare ground and a modern building.</p> <p>Local effects Although it is not stated which part of the site additional infrastructure would be placed in, there is a risk protected species could be affected (including bats (if building affected) and nesting birds). However, there are also areas of bare ground or hard standing where there would be no effect.</p> <p>Site visit revealed no woodland on site. Hedgerows are partial along north side of area to south of Heck & Pollington Lane. Aerial photos also show no woodland or mature standalone trees on or adjacent to site. Scrub and hedgerow can be found within middle section and also along Heck and Pollington Lane.</p> <p>This equates to possible impacts to protected species in the short term through construction works, though beyond that there would be little impact. There are opportunities in the long term to integrate biodiversity with this development.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 or SSSI sites.</p>					?		
2. To enhance or maintain water quality	<p>Proximity of water quality / quantity receptors Site is in a NVZ (surface and groundwater). It is also in Groundwater SPZ 3, which is for a groundwater abstraction used for public drinking water.</p>		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and improve efficiency of water use	<p>Humber RBMP - Nearest section of river is 'New Fleet Drain from Source to River Went' adjacent to southern area of site (ecological quality is moderate potential, chemical quality is 'does not require assessment', overall potential is moderate, status objective is 'good ecological potential by 2027'). No RBMP lakes present. In terms of groundwater site is in Aire and Don Sherwood Sandstone water body - good quantitative quality / poor chemical quality, current overall status: poor, overall status objective 'good by 2027'.</p> <p>Northern part of this site is in Aire and Calder CAMS (Lower Aire Area) with the relevant assessment point (AP6). Here surface water may be available for licensing, though because this AP is discharge rich, license applications will be considered on a case by case basis. For groundwater abstraction, site is in an area of Sherwood Sandstone Aquifer where no new groundwater licenses will be granted.</p> <p>CAMS: Site is in 2 areas where surface water is available for licensing at least 95 per cent of the time.</p> <p>Local effects The additional infrastructure proposed for this site could without controls, have minor effects on the status of water bodies. However, it is assumed that these features would be integrated with the existing routine site management controls so no significant effect is predicted (though this would need to be further investigated). The reduction of throughput to the biomass plant would also presumably help reduce risks to water (as there would be less material from which leachate could arise).</p> <p>Plan level/ regional/ wider effects There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by the environmental permitting system during operation.</p>					?	?	?
3. To reduce transport miles and associated	<p>Proximity of transport receptors Site is close to Junction 34 of M62 with reasonable access to potential non-hazardous waste sources. Access: Existing at site onto Heck and Pollington Lane (C340) approximately 490m east of East Coast Mainline railway; Light vehicles: 38 (based on scale up of</p>		✓	✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
emissions from transport and encourage the use of sustainable modes of transportation	<p>application details NY/2009/0113/FUL); HGV vehicles: 118 (based on scale up of application details NY/2009/0113/FUL)</p> <p>Net change in daily trip generations: Light vehicles: 2; HGVs: 8.</p> <p>PRoW: See objective 14 below.</p> <p>Rail: 200m from track and 600m from railhead at MJP44; Strategic Road: M62 is 700m north. Junction 35 is circa 7km north-west depending on route taken; Canal / Freight waterway: adjacent to Aire and Calder navigation.</p> <p>Local effects The site includes a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway, though HGV usage is deemed acceptable on road. No travel plan is required. Most of the vehicle movement is associated with the existing site, which will remain operational, with a relatively insignificant number of HGVs (8) generated additional to extant HGV numbers. The traffic assessment reports that “given that the traffic generations of the site are only slightly increasing on a route which is already used by a large number of HGVs, the traffic impacts of submission WJP22 are likely to be minimal and not significant”.</p> <p>This site already enjoys good access to the Aire and Calder Navigation and approved plans at the site already utilises the Navigation to ship in waste wood. If also applied here this would constitute a significant contribution to sustainable travel. Similarly, the proposal includes a reduction in throughput and output at the biomass facility which would presumably lessen some traffic, though lorries are still expected to arrive. Neutral with some uncertainty.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?
4. To protect and improve air quality	<p>Proximity of air quality receptors Nearest AQMA is Wakefield Council M62 AQMA for NO₂ which lies 7.2km west. Not within a Hazardous Substances Consultation Zone.</p> <p>No health centres or clinics with 1km. Closest residential property is Heck Hall Farm 150m south-west, with</p>		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>East Farm 420m north-west. Some development south of site in East Riding (appears to be industrial estate). Assessment of air quality in relation to the biomass facility predicts the impact on the local community from air pollution and dust is, with controls in place acceptable, with breaches in air quality objectives or significant impacts on habitat critical loads.</p> <p>Local effects Dust may be produced at the site depending on processes used (without mitigation). However, it is assumed that barge and vehicle movements are already accounted for from existing consents on the site (and thus part of the baseline). However, the site is generally remote from all but a few small scale receptors. The proposal is also to reduce the throughput of the biomass plant which would presumably lessen some air quality impacts from this. Similarly restoration (if implemented) to solar panels may have an indirect minor benefit in the long term.</p> <p>Plan level / regional / wider effects None noted.</p>							
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors ALC Grade 3. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area</p> <p>Local effects As the northern and middle sections appear to already be in use there is no impact here. Remainder of site is shown as ALC Grade 3. However, these are plans for development already in this area that have come through the existing bio-energy park application, so it is assumed that this land would be under landscaping and not farmed. However, the infrastructure proposed (where it is not on existing hard standing) may still have a land take as it reduces the functionality of that land. However this impact on the objective overall is considered to be neutral.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change 3 areas of priority habitat within 200m (all deciduous woodland). Slight overlap with one area to north (may be mapping anomaly). Other area 100m to south-west and 190m west.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects No predicted loss of any significant carbon storage, particularly as site already has extant and planned development on it. The additional infrastructure for processing waste wood would presumably make the site better able to produce high quality wood chips which would benefit climate change. However, the reduction of throughput at the biomass plant would lessen the benefit that is already predicted through the baseline. This leads to an uncertain assessment.</p>		✓	✓	✓	?	?	+
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁹³ of a site No noted ecological networks. This site is almost entirely within Flood Zone 1 but with the very south western boundary lying in Flood Zones 2 and 3. There are small areas of surface flood risk within the site. One low risk (1:1000 (0.1%)) to the north east and low risk (1:1000 (0.1%)) to high risk (1:30 (3.33%)) areas to the south west.</p> <p>ALC Grade 3. As the northern and middle sections appear to already be in use there is no impact here.</p> <p>CAMS: Site is in 2 areas where surface water is available for licensing at least 95 per cent of the time.</p> <p>Local effects Flooding is expected to be of insignificant to minor significance as patches of surface water flooding are likely to be small enough to avoid. The extent and depth of flooding associated with both Flood Zones 2 and 3 is likely to increase with climate change. Therefore these are likely to encroach further in to the site over the Plan period with Flood Zone 1 currently adjacent to Flood Zone 2 becoming Flood Zone 2 and current day Flood Zone 2 becoming Flood Zone 3. Current day Flood Zone 3 is likely to increase in</p>					0	0	0

⁹³ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>flood depth. More generally, the existing Flood Risk Assessment for the planned site states that “surface water run-off from the main site is intended to be utilised within the site’s various processes’ via a designed drainage system. While adjustment may need to be made to the drainage system, flood management from any development resulting from this potential application would be expected to be integrated with that on the wider site. Therefore effects are considered insignificant.</p> <p>Plan level / regional / wider effects None noted.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects Allocating this site would recognise the potential future development of this site which will effectively help offset fossil fuel use so performs well against this SA Objective.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>		✓		✓	m +	m +	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy No spatial factors identified</p> <p>Local effects Allocating this site would recognise the potential future development of this site, which will effectively help derive energy from waste wood, which is better than landfilling it.</p> <p>Plan level / regional / wider effects None noted.</p>	✓		✓		m +	m +	0
10. To conserve or enhance the	<p>Proximity of historic environment receptors No designated constraints apart from Listed buildings (within 1km): There are 2 listed buildings within 1km at Gowdall Broach Farm (790m east) - Both Grade II (Gowdall Broach Farmhouse and 'Barn approximately 30 metres west of Gowdall Broach Farmhouse’).</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
historic environment and its setting, cultural heritage and character	<p>Named Designed Landscapes (within 2km): None within Plan area or in search area within East Riding.</p> <p>There are a number of Protected Military Remains of aircraft crash sites within the allocation site. However, as the airfield remained active at the time of the crashes, the potential for remains of aircraft to be present is low to nil.</p> <p>There are no currently recorded archaeological sites within the allocation area. However, from evidence for the surrounding area, archaeological potential can be inferred, given the identification from aerial photographs of a number of possible settlement sites comprising of ditched enclosures and linear boundaries and track ways, likely to date from the later Iron Age/Romano-British periods.</p> <p>The North Yorkshire HLC Project database records number HNY708 identifies this site allocation as an area which has seen a large degree of boundary loss leading to the creation of medium sized fields in the 20th century period. This has been created from a variety of different field systems including crofts and parliamentary enclosure. However, as this allocation site is a small part at the edge of a larger area of similar character type, the proposed development is unlikely therefore to have a major impact upon the historic landscape character of the immediately surrounding area. This effect is not considered to be significant due to the high percentage of modern improved fields across the county.</p> <p>Local effects Although the site has not been archaeologically evaluated, it is assumed that allocating this site would be likely to cause the loss of any archaeological remains in the areas where new infrastructure is additional to that which is already extant or planned and which may be achieved by below ground construction works, if the site is developed without mitigation. However it is expected that investigation works required by the Joint Plan Policy D08 (Historic Environment) – <i>‘mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.’</i> would result in an overall minor negative effect. As much of the site has already been developed effects will be neutral to minor negative with some uncertainty (because there is no evidence from prior archaeological evaluation to enable an informed assessment).</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, Heritage Coast or AONBs within 10km. No ITE land within 5km. No locally protected landscapes within 5km in Plan area however site lies partly within East Riding. According to the East Riding Local Plan submission policies map, no district level landscape designations lie within 5km of the site in East Riding.</p> <p>North Yorkshire and York LCA: site is defined as 'Levels Farmland (Farmed, Lowland and Valley Landscapes)' - High visual sensitivity as a result of the predominantly open character and flat landform; Low ecological sensitivity, resulting from the fact that much of this Landscape Character Type encompasses improved agricultural land; Moderate landscape and cultural sensitivity as a result of the presence of a patchwork of historic drainage features moated sites and grange sites. At a district level the site is in Selby LCA as 'River Aire Corridor (Open Fringe Farmland)'. This covers c.50% of the site that lies within Plan area. East Riding LCA covers the south eastern and North eastern area of the site. Here the site lies within character area 8C 'M62 Corridor Hook to Pollington'.</p> <p>Local effects Although the setting of designated landscapes will not be affected the proposed uses would have additional adverse visual impacts on the residents of Great Heck as they move around the locality but the Landscape and Visual Impact Assessment for the current bioenergy plant planning permission establishes that there would be little direct impact on the settlement, though some peripheral properties could be affected. The baseline for Great Heck is a disturbed, degraded and modified landscape setting of low quality, which needs enhancement.</p> <p>The landscape may be vulnerable to the significant change brought about through the allocation without mitigation since although the majority of the site is already disturbed or developed, there would be cumulative impacts with other existing and proposed developments which would lead to further deterioration in landscape quality. The site crosses the boundary with East Riding. However, the site already has extant development and a further planning consent on it. The existing landscape is semi-</p>	✓	✓	✓	✓	--	--	--

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>industrialised with previous features lost and much man-made modification, with unsightly ad hoc development.⁹⁴.</p> <p>The site may increase visual intrusion without mitigation depending on the size and height of the processing plant. The location itself is not high or prominent. Light pollution in this area is moderately high. Similarly there may be noise impacts from this and other noisy developments in this area. For instance, traffic noise may affect perceptions of character in Heck and at Pollington Lane. Generally the development in this area gives a poor impression of the area and the sites are visible from the M62 and the east. Although these effects are cumulative with other development, the additional impacts of WJP22 should be slight to minor.</p> <p>There is some screening in views from the North Yorkshire/Selby direction to the west, but the landscape is generally very open (as the site is largely located on a former airfield) and it would be more visible from the East Riding direction (the WJP22 site is visible from the M62 and the east). A bund along the M62 currently blocks low level views from the north.</p> <p>Without mitigation there could be significant negative effects on landscape. In the long term. Much depends on the nature of the proposals and the degree of mitigation provided. Offsite mitigation would be beneficial to improve integration into the surrounding area. In terms of onsite mitigation, green bunding is needed to prevent this development being seen from visual receptors.</p> <p>A landscape regeneration strategy would be beneficial for the wider landscape. This could cover a wider area including East Riding.</p> <p>Plan level / regional / wider effects None noted.</p>							

⁹⁴ The Landscape and Visual Impact Assessment for the current bioenergy plant discusses landscape character guidance for the wider character area within which it is sited though this is not specific to the airfield. Generally, restoration of hedgerows, trees and woodland is advocated (there are none remaining on the site), and there is an emphasis on the need for mitigation in connection with development that contributes to landscape character and biodiversity enhancement.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Site is close to Junction 34 of M62 with reasonable access to potential fuel sources.</p> <p><u>Local effects</u> Site would employ people and provide a usable product for otherwise low value waste wood. It would also indirectly help supply energy, contributing to energy security.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					+	+	+
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> Area of site in NYCC area- IMD Rank:18,303, not in most deprived 20%. Both Hensall and Great Heck are 'Secondary Villages with Defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10'. SP4 allows various types of small scale residential development within settlement limits in Secondary Villages. Selby Sites and Policies Local Plan is still in development with an initial consultation underway at the time of writing.</p> <p>The south eastern and north eastern parts of the site lies in East Riding and therefore the 5km buffer applied around WJP22 includes an area of East Riding. This takes in the settlements of Gowdall, Pollington, Snaith and West Cowick. Snaith is a rural service centre that must accommodate an additional 170 dwellings by 2028 (according to the Proposed East Riding submission Local Plan). Pollington, Gowdall and West Cowick are too small to feature in the settlement hierarchy (and are classed as countryside). Residential allocations run adjacent to the edge of Snaith (nearest allocated residential site c. 3km east of site).</p> <p><u>Local effects</u> There are few tourist receptors in communities in this area, and settlements are largely distant enough to avoid significant impacts on their vitality and growth. The area surrounding the site, as well as on the site itself, is already an area with significant industrial development.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects None noted.							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A local footpath is marked on OS mapping as running along the northern boundary. A further footpath also crosses into the site from the west (although this route was diverted when the current site was developed, and was in any case severed by the M62), with a permissive route along the Aire and Calder Navigation. No national or regional routes are marked within 500m. No draft common land within 500m in the Plan area (part of the site and 500m buffer lies within East Riding for which data is not currently available).</p> <p>Local effects The environmental statement for the bioenergy park that has consent in the same area of land concluded that impacts on rights of way and recreational receptors was generally low to none with only the nearest paths impacted at a moderate level, because of visibility of the upper storeys of main buildings and upper stories of the stack⁹⁵. No future buildings in this site are expected to be higher than those on site or planned already. There is a footpath through this site so this would need a diversion to be put in place. In addition, a canal towpath that coincides with the southern boundary of this site could be impacted where access is restricted. Sustainable travel to workplaces surrounding this site may be limited to a minor extent by an increase in HGVs.</p> <p>Restoration to solar panels would be at a low height, probably largely screened and largely in keeping (or enhancing) the sider collection of buildings likely to be visible. Insignificant impacts are predicted.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	-	-	-
15. To protect and improve the wellbeing,	Proximity to population / community receptors / factors relevant to health and wellbeing Several farm properties and what appears to be an industrial estate lie within 1km.		✓	✓	✓	0	0	0

⁹⁵ Dalkia Ltd. Pollington Application for Consent Electricity Act 1989. Environmental Statement.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
health and safety of local communities	<p>Local effects The Health Impact Assessment for the current planned site identified vehicle movements, fire and dust as the key hazards of the planned site to the public, to be managed with appropriate site management systems and designed safety features as well as via a liaison committee with local residents. It is anticipated that, while the health impacts would need to be further assessed, the likelihood is that management of effects would be integrated with existing procedures for the new elements of the site.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1. Small patches of medium risk (1/100) surface water flooding affect southern part of site.</p> <p>Local effects Flooding is expected to be insignificant as patches of surface water flooding are likely to be small enough to avoid. More generally, the existing Flood Risk Assessment for the planned site states that “surface water run-off from the main site is intended to be utilised within the site’s various processes’ via a designed drainage system. While adjustment may need to be made to the drainage system, flood management from any development resulting from this potential application would be expected to be integrated with that on the wider site. Therefore effects are considered insignificant.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans (though there was some overlap with WJP07 which is withdrawn).</p> <p>Local effects Activity on Site will contribute to energy security, an important requirement for a changing population. However, the situation is uncertain as the reduction of throughput at the biomass plant may work against energy security.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		?	?	?

Cumulative / Synergistic effects⁹⁶	
Planning context	Site is adjacent to MJP44. See MJP44 assessment for planning context.
Other Minerals and Waste Joint Plan Sites	Other Joint Minerals and Waste Plan Sites: Within 5km of WJP22 lie another 3 MWJP sites, all of which are close together between Great Heck and Hensall (MJP44 lies adjacent to the west, MJP54 lies 1.2km to the west, MJP22 lies 1.6km north-west). East Riding's Joint Minerals Plan has reached the preferred approach stage. At that stage the site lies partly within a Sand and Gravel Mineral Safeguarding Area (see site information folder for map indicating the extent of this) and in close proximity to an Area of Search for sand and crushed rock at Pollington.
Historic minerals and waste sites	Historic Minerals and Waste Sites: Site is adjacent to MJP44. See MJP44 assessment for historic context.
Landscape	Objective 11 identified that the landscape may be vulnerable to the significant change brought about through the allocation without mitigation since although the majority of the site is already disturbed or developed, there would be cumulative impacts, including traffic and noise, with other existing and proposed developments which would lead to further deterioration in landscape quality.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues • Design to mitigate impact on best and most versatile agricultural land • Design of development and landscaping of site to mitigate impact on archaeological remains and local landscape features • Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate • Design to ensure protection of the aquifer; proposals should be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level • Maintenance of appropriate access to local roads • Appropriate arrangements for control of and mitigation of the effects of noise and dust, and impact on users of right of way, etc. 	

⁹⁶ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

WJP03 Southmoor Energy Centre, Former Kellingley Colliery

Site Name	WJP03 Southmoor Energy Centre, Former Kellingley Colliery (XY 452496 423758)
Current Use	Former coal mine
Nature of Planning Proposal	Energy from Waste facility
Size	12.9ha
Proposed life of site	Permanent
Notes	<p>Planning application (NY/2013/0128/ENV) for this development was granted planning permission in February 2015</p> <p>No extra capacity is proposed as part of this submission in addition to that already permitted</p> <p>Estimated date of commencement - February 2020 (based on requirement for implementation specified in decision notice for planning application NY/2013/0128/ENV)</p>

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

THIS SITE ALREADY HAS PLANNING PERMISSION, SO UNLIKE OTHER ASSESSMENTS WHICH ARE ASSESSED BEFORE MITIGATION, HERE WE HAVE INCLUDED MITIGATION MEASURES IN THE OVERALL SCORING, ASSUMING THAT THEY WILL BE ENACTED. WE HAVE, THEREFORE, ONLY REPORTED THE RESIDUAL EFFECTS AFTER MITIGATION.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve	<p>Proximity of international / national and local designations and key features Natura 2000 sites: None within 5km; Site of Special Scientific Interest (SSSI): None within 2km.</p> <p>Sites of Importance for Nature Conservation (SINC): 2 potential SINC's (not ratified) within 2km; Priority Habitat: Patch of deciduous woodland overlays the north of this site, further patches of mixed priority habitat lie to west within 1km; Networks: Living Landscape area has slight overlap with</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
habitat connectivity	<p>northern tip of site.</p> <p>Natural England were consulted on application NY/2013/0128/ENV but had no specific comments on this allocation.</p> <p>Local Effects According to the Environmental Statement (ES) “<i>The Application Site supports a limited number of continually and highly disturbed habitats. These habitats have the potential to support bats, common frog and common toad, and breeding and wintering birds. During construction, due to the already low potential for fauna and flora within the Application Site, there will be negligible effects on species present especially with the range of mitigation suggested in the application, such as the implementation of the Construction Environment Management Plans. During operation the management and continued maintenance of all created, enhanced and retained habitats to create green corridors passing through and around the Application Site, will result in negligible long term effects on bats, amphibians and breeding/wintering birds</i>”⁹⁷.</p> <p>Plan level / regional / wider effects None noted.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity Nitrate Vulnerable Zones (NVZ): Site in NVZs for surface and groundwater; Source Protection Zones (SPZ): Not in a SPZ; River Basin Management Plan (RBMP): Site is partly in the ‘New Fleet Drain from Source to River Went’ catchment waterbody (currently moderate / objective is good by 2027) and partly in the ‘Aire from River Calder to River Ouse’ catchment water body (currently moderate / objective is good by 2027); Catchment Abstraction Management Strategy (CAMS): Site is split between the Aire and Calder and Don and Rother CAMS – Aire and Calder - surface water is available at low flows / no groundwater available, Don and Rother – no surface water available / no groundwater available.</p> <p>Local effects The ES highlights the potential for mobilisation of sediments from the site during construction which may affect the achievement of water body objectives as well as the potential for</p>					0	0	0

⁹⁷ Barton Wilmore / Peel Environmental, 2013a. Southmoor Energy Centre: Environmental Statement Non-Technical Summary [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=8842>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>contaminants and suspended sediments in surface water to enter surrounding watercourses, particularly the Aire and Calder Navigation. However, through installing a range of mitigation measures, such as a new industry best practice surface water drainage system with suitable treatment and effectively capping what would have been coal dust with new areas of hard standing, would bring moderate benefits to local water body objectives. The development will also increase demand for potable water, though this is considered a negligible effect.</p> <p>Plan level / regional / wider effects None noted.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Access to market: Site is just north of the M62, and adjacent to the A645 (which connects to the A19) giving good links to York / Selby, as well as Doncaster and West Yorkshire; Rail: Adjacent to railway line and encompasses railhead for Kellingley Colliery; Canal / Freight waterway: Site lies on the Aire and Calder Navigation; Railhead / Wharfe: Site encompasses rail and wharfage facilities (though not mapped)</p> <p>Access: New access onto A645 Weeland Road in accordance with decision notice for planning application NY/2013/0128/ENV.</p> <p>Daily High Goods Vehicle (HGVs): 66 (in) 66 (out); Light vehicles: 16 (in) 16 (out). Net change in two way trips: +132 HGV / +32 staff.</p> <p>Public Right of way (PRoW): Site not affected by PRoW</p> <p>Local effects During construction HGVs would be up to 100 two way HGV movements per day, with up to 350 two way movements of light vehicles. However, receiving road levels show that that increase would be significantly less than 10% across the network of routes used. For operational phases, traffic impacts would be similarly below the Institute of Environmental Assessment (IEA)</p>					m-	m-	m-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>thresholds used in the assessment in most cases, but on the A645 in particular may be above the 10% thresholds used⁹⁸. However, further analysis of issues such as driver delay potential, impact on pedestrian amenity, severance and road safety, and taking into account mitigation, such as a construction traffic management plan and travel management initiatives revealed the residual effects to be negligible⁹⁹.</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors Air Quality Management Areas (AQMAs) or Hazardous Substances Consents Sites: Site not in an AQMA but close to M62 AQMA. Site lies in inner and outer zones of Hazardous Substances Consent Zone (and may therefore need to consult HSE).</p> <p>Local effects The Non-Technical Summary that accompanies the ES for this site states:</p> <p>“During construction the main effect will be as a result of dust emissions and the potential to cause dust annoyance, risk to human health and harm to ecological receptors. However providing suitable mitigation measures are implemented, including the CEMP which will outline best practice control measures, the dust arising will be controlled to a suitable level resulting in negligible effects.</p> <p>During the operational phase, the main effect will be as a result of emissions from the proposed Energy Centre. However the stack height has been chosen to provide adequate dispersion whilst also minimising the visual impact thereby resulting in negligible effects on all sensitive human and ecological receptors”¹⁰⁰.</p>					-	-	-

⁹⁸ Guidance with respect to IEA Rule 2 (10% threshold) identifies that the assessor should consider the inclusion of any other locations or network links where a 10% change in traffic demand is predicted in specific environmentally ‘sensitive’ areas.

⁹⁹ Barton Wilmore / Peel Environmental, 2013b. Southmoor Energy Centre: Environmental Statement [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=8842>]

¹⁰⁰ Barton Wilmore / Peel Environmental, 2013a

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>A net increase in vehicles using the site is expected to result in a minor negative effect.</p> <p>Plan level / regional / wider effects None noted.</p>							
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Agricultural Land Classification (ALC): Grade 3 (though site is mostly hard standing / former industrial land); Contaminated Land: <i>“Due to the industrial past and present land uses within the Application Site there is the potential for contamination hotspots to be present”¹⁰¹</i>.</p> <p>Local effects While the agricultural grade of the land is not significant on this site, the environmental assessment of this planning application focused on ground contamination. According to the Non-Technical Summary <i>“During construction, excavations to create foundations and bunkers may encounter some contamination (such as oils, fuels or coal residues) in the ground or groundwater. The CEMP will contain the following measures to minimise effects if hotspots are located: use of appropriate personal protective equipment (PPE); remediation of contamination hotspots, if encountered; segregation of contaminated waste types for appropriate off-site disposal; implementation of the proposed temporary drainage network to prevent untreated surface runoff from the leaving the Application Site or entering surface water drains; controlled and covered waste storage areas. These measures will reduce the effects on water quality and human health to</i></p>		✓	✓		-	-	-

¹⁰¹ Ibid

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>negligible significance</i>".</p> <p>Plan level / regional / wider effects The ES also identified specific on-site risks from Asbestos Containing Materials (ACM) within buildings to be demolished and the potential for ground gas to occur within coal seams and migrate to the surface. Mitigation, such as survey and removal of ACM by licensed staff, or ground gas monitoring, will be put in place for both, with residual effects assessed as being an impact of low magnitude and negligible significance for both ACM and ground gas during the construction phase. Ground gas continues to be an issue that will be mitigated for in the operation phase with low magnitude / negligible significance effects¹⁰². As magnitude has been identified as low (defined as "<i>a discernible adverse effect that is however unlikely to significantly alter human health</i>"¹⁰³ according to the ES) we have rated this as minor negative with uncertain effect in this assessment.</p>					?	?	?

¹⁰² Barton Wilmore / Peel Environmental, 2013b

¹⁰³ Barton Wilmore / Peel Environmental, 2013b

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Habitats: Patch of deciduous woodland overlays the north of this site, further patches of mixed priority habitat lie to west within 1km; Carbon in vegetation: low – site lies in a square with estimated 1.09 tC/HA; Carbon in soils: low - site lies in a square with estimated 49.67 tC/HA (however figures do not reflect former industrial use / hard standing on site).</p> <p>Local effects See wider effects below.</p> <p>Plan level / regional / wider effects The Carbon Assessment tested a number of scenarios for generating energy from waste to arrive at a 'carbon output per annum'. Even when using a scenario with a higher fossil content in waste, a net benefit of 72,755 tCO₂e/pa would be gained from producing energy from C and I waste and 99,540 tonnes CO₂e/pa would be gained from deriving energy from Municipal Solid Waste. This figure takes account of transporting the waste up to 155km.</p> <p>Soil carbon is low and much of the site is hard surfacing. While the embodied carbon in buildings is not assessed, the benefit is still considered to be very positive¹⁰⁴.</p>	✓		✓		m+	m+	m+
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹⁰⁵ of a site Flooding: <5% of this site to the north west is located in Flood Zone 2¹⁰⁶ / <5% of the site is also subject to medium risk (1:100 (1%)) surface water flooding. Low risk (1:1000 (0.1%)) affects a further 5% of the site. Catchment Flood Management Plan (CFMP): Site in Lower Aire CFMP catchment – Policy 6 - 'areas of low to moderate flood risk where we will take action with others to store water or manage run-off on</p>		✓	✓		+	+	+

¹⁰⁴ Barton Wilmore / Peel Environmental / Fitchner, 2013. Sustainability Appraisal inc. Carbon Assessment and Heat Plan [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=8842>]

¹⁰⁵ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

¹⁰⁶ Flood defences are also evident beyond the north-west corner of the site, though the area is not shown as an area benefiting from flood defences and the standard of protection is not clear.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>locations that provide overall flood risk reduction or environmental benefits'.</p> <p>ALC Grade 3 (though site is mostly hard standing / former industrial land).</p> <p>Local effects This is a permanent site and integration of ecological networks into the site is positive, while the site is at a generally low risk of flooding.</p> <p>Plan level / regional / wider effects Positive effect mainly due to the nature of the planning proposal and use of the site i.e. reduction of our carbon footprint¹⁰⁷.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors noted.</p> <p>Local effects In terms of resource use the scheme generates energy from waste, including electricity and heat (offsetting the need to generate energy from primary non-renewable sources elsewhere). This is highly positive.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		m+	m+	m+
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors noted.</p> <p>Local effects This development moves waste one step up the waste hierarchy, producing heat and electricity.</p>		✓	✓		+	+	+

¹⁰⁷ The methane produced during the process of recovering energy from waste is burned as fuel, and therefore releases CO₂ into the atmosphere. Because it comes from biomass, this does not contribute to climate change. However, if the same waste was left to degrade in a landfill, the methane produced could escape into the atmosphere: methane has a global warming potential 23 times larger than that of CO₂. Therefore, harvesting and using methane from biomass can help to prevent climate change.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
practicable	<u>Plan level / regional / wider effects</u> None noted.							
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> Conservation Areas: None within 1km; Listed Buildings: None within 1km; Scheduled Monuments: None within 2km; Registered Parks and Gardens: None within 2km; Named Designed Landscapes: Site is 200m north of what was once Cridling Park Deer Park, though much of the area is now relatively intensively farmed; Registered Battlefields: None within 2km; World Heritage Sites: None within 2km.</p> <p><u>Local effects</u> The Environmental Statement states “The extent of previous effects within the Application Site is such that any archaeological remains within the Application Site are likely to have been completely removed during the 20th century”. It also concludes that “The potential effect of the Proposed Development upon the setting of designated heritage assets within 2.5km of the Application Site was undertaken in accordance with English Heritage guidance. Following this assessment, it is considered that the Proposed Development will have no perceptible effect upon the overall value of designated heritage assets in the vicinity of the Application Site”¹⁰⁸.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
11. To protect and enhance the quality and character of landscapes and	<p><u>Proximity of landscape / townscape receptors and summary of character</u> National Park / Areas of Outstanding Natural Beauty (AONB) / Heritage Coast: None within 5km; Inheritance Tax Exempt land: None within 5km; District level landscape designations: A Locally Important Landscape Area (identified in the Selby Core Strategy) lies about 1.6km south.</p>		✓	✓		-	0	0

¹⁰⁸ Barton Wilmore / Peel Environmental, 2013b

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
townscapes	<p>National Character Area (NCA): Western half of site is in Southern Magnesian Limestone NCA / Eastern half of site is in Humberhead levels NCA; NYLCA: Site is in 'Levels Farmland' landscape character type (high visual sensitivity / low ecological sensitivity / moderate landscape and cultural sensitivity); District LCA: defined as 'River Aire Corridor' in Selby LCA.</p> <p>Intrusion: site is in a 'disturbed' area; Light Pollution: relatively high light pollution (in an area with 6-20 radiance).</p> <p>Local effects The Addendum to the Non-Technical Summary considers that during construction effects will be "offset by an enhanced programme of landscape management for the retained woodland within and outside the Application Site (within the wider Colliery) and new tree planting. Overall the effects on landscape fabric of the Application Site will not be significant". In addition, "there will be cranes present on the Application Site which will be visible for some distance due to their height. However views of the cranes will be in the context of the existing structures at the Wider Colliery Site and other tall structures in the surrounding area and, as such, the influence of the cranes upon views will be limited and will not be significant (moderate adverse at worst). Furthermore there will be lighting during construction to ensure the health, safety and welfare of those on site but the effects will not be significant". So in the short term this appraisal assigns a moderate negative effect to represent the worst case scenario.</p> <p>During operation "the implementation of the landscape design will create a minor to moderate beneficial effect on the landscape fabric once the new planting has matured as it will help balance out the loss of the woodland" and "Views of the main Energy Centre facility would be largely screened from view, with the proposed stack only remaining visible above the bund. All views of the Proposed Development would be in the context of the views of the existing colliery structures, which would remain visible through the trees to the south-east. It is considered that visual effects would be likely to be significant and would be considered beneficial as views south into the Wider Colliery Site,</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>including views of the Proposed Development would be largely screened</i>'.</p> <p>Cumulative effects on landscape character and views were also considered non-significant¹⁰⁹¹¹⁰. The context for this site is rapidly changing as permission has been granted for a gas turbine power station (Knottingley Power Plant) immediately to the south-west, whilst Kellingley Colliery which acted as a constraint to land available has closed. Two new multi-fuel power stations are being built at Ferrybridge while the coal-fired power stations at Ferrybridge and Eggborough have closed or will be closed (by May 2017) and the land is likely to be redeveloped. There are cumulative landscape impacts which have not been updated. The development of the Knottingley Power Plant will largely remove the existing green gap between Kellingley and Knottingley.</p> <p>Overall the permanent allocation of this site is considered to have a minor negative cumulative effect, with a neutral effect in the medium and long term following closure of the site.</p> <p>Plan level / regional / wider effects Effects are reported above.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Market accessibility: Site is just north of the M62, and adjacent to the A645 (which connects to the A19) giving good links to York / Selby, as well as Doncaster and West Yorkshire.</p> <p>Local effects According to the 'Sustainability Appraisal' that supported the planning application "The Proposed Development is anticipated to create around 375 gross temporary jobs during the construction period and 38 gross permanent jobs associated with the Energy Centre once it is operational. In addition to the direct employment generated during the construction and operational phases of the Proposed Development, there will be an increase in employment arising from indirect</p>	✓		✓	✓	m+	m+	m+

¹⁰⁹ Barton Willmore / Peel Environmental, 2014. Southmoor Energy Centre: Environmental Statement Addendum Non-Technical Summary [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=8842>]

¹¹⁰ It should be noted that the planning permission requires the submission of scheme for restoration and landscaping 6 months prior to the decommissioning of the Energy Centre

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>and induced effects of the construction activities through the use of local suppliers for construction and process materials, plant and equipment”. In addition “The Proposed Development will strengthen the energy and waste sector and support local and regional supply chains through for example the securing of waste contracts, sub-contracting of services including short term construction services, long term maintenance, repair and landscaping services and local businesses such as sandwich shops and petrol stations”¹¹¹.</p> <p>Plan level / regional / wider effects Effects are reported above.</p>							
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability Index Multiple Deprivation (IMD): Not in worst 20%; Nearest Settlements: Site is about 100m south of nearest houses in Kellingley; Knottingley is about 430m east.</p> <p>Local effects As noted above, numerous temporary and a limited number of permanent jobs would be created which would provide opportunities for local communities and may increase local spend. Traffic is not expected to significantly impact on local settlements. A Section 106 agreement will also secure the provision of funds to deliver green infrastructure to improve local environmental quality, as well as a fund to contribute towards improvements to pedestrian infrastructure along Weeland Road, Eggborough.</p> <p>Plan level / regional / wider effects None noted.</p>	✓	✓	✓		m+	m+	m+
14. To provide opportunities to enable recreation, leisure and	<p>Proximity to recreation, leisure and learning receptors Rights of Way: No right of way on site, nearest is a footpath in Kellingley about 330m north; Common land / village greens: None noted with 1km. The towpath along the Aire & Calder Navigation, which lies on the southern boundary of the site, follows the northern bank of the canal but access was closed where it runs within the Kellingley Colliery site. This route needs to be re-opened if at all possible in conjunction with proposals for Kellingley Colliery regeneration. A possible Sustrans route following the canal corridor has been</p>					0	0	0

¹¹¹ Barton Wilmore / Peel Environmental / Fitchner, 2013

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
learning	<p>discussed in the past.</p> <p>Local effects According to the ‘Sustainability Appraisal’ “<i>There are no Public Rights of Way within the Application Site that would be affected and therefore adverse effects on public access would be avoided</i>”¹¹². A Section 106 agreement will also secure the provision of funds to deliver green infrastructure to improve local environmental quality.</p> <p>Plan level / regional / wider effects None noted.</p>							
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing</p> <p>Receptors (properties / settlements / schools / healthcare): Occasional buildings / properties lie north and west within 1km; Properties in Kellingley are also very close at 100m north; No healthcare facilities within 1km; Noise: nearest Noise Action Planning Area is at Junction 34 on M62. An overhead power line crosses the western part of the site.</p> <p>Local effects Air quality risks, after obtaining an Environmental Permit and implementing a Construction Environmental Management Plan, are not seen as significant, while controls to deal with contaminated land and ACM in buildings to be demolished will be put in place. Meanwhile, the putting in place of a section 106 agreement that includes green infrastructure will bring some benefits. Minor negative effects (reflecting that there may still be a very low risk from on-site accidents and contamination issues either during clean up or operation).</p> <p>Plan level / regional / wider effects Controls to deal with contaminated land and ACM in buildings to be demolished will be put in place and are considered of national significance.</p>		✓	✓		-	-	-
						?	?	?

¹¹² Barton Wilmore / Peel Environmental / Fitchner, 2013

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Flooding: <5% of this site to the north west is located in Flood Zone 2. Flood defences are also evident beyond the north-west corner of the site, though the area is not shown as an area benefiting from flood defences and the standard of protection is not clear.</p> <p><5% of the site is also subject to medium risk (1:100 (1%)) surface water flooding. Low risk (1:1000 (0.1%)) affects a further 5% of the site. <5% of the site is also subject to medium risk (1:100 (1%)) surface water flooding. Low risk (1:1000 (0.1%)) affects a further 5% of the site.</p> <p>Strategic groundwater flooding maps show that most of the site lies in a 1km square where between >25% to <50% of the area has conditions that might support superficial deposits groundwater flooding. The very western site area lies in a 1km square where >75% of the area has conditions that might support superficial deposits groundwater flooding.</p> <p>This site is not at risk from the 1:20 (5%) flood event.</p> <p>CFMP: Site in Lower Aire CFMP catchment – Policy 6 - ‘areas of low to moderate flood risk where we will take action with others to store water or manage run-off in locations that provide overall flood risk reduction or environmental benefits’.</p> <p>Local effects The SFRA Sequential Test undertaken for the site concluded that this site would ‘Pass’. The site is at a generally low risk of flooding. The Flood Risk Assessment for the site identifies that no development is proposed within the area of Flood Zone 2, while a potential risk of surface water flooding is identified along the south eastern boundary and a rail siding. However, finished site levels will avoid flood risk, and attenuation storage will be provided to deal with run off.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> Site does not conflict with other allocations.</p> <p><u>Local effects</u> The site will manage waste and provide energy, which is essential for a changing population.</p> <p><u>Plan level / regional / wider effects</u> None noted</p>		✓	✓	✓	m+	m+	m+

Cumulative / Synergistic effects ¹¹³	
Planning context	Kellingley Colliery is a Secondary Village in the Selby Core Strategy. "Secondary Villages' are generally much smaller and less sustainable or else have no opportunities for continued growth owing to a combination of flood risk and environmental constraints. Consequently further planned growth would not be appropriate in these settlements, although some housing development inside Development Limits such as conversions, replacement dwellings, and redevelopment of previously developed land, may take place where it will enhance or maintain the vitality of rural communities. Other than filling small gaps in built up frontages and the conversion/redevelopment of farmsteads (which are currently classed as greenfield), development on greenfield land will not be acceptable" ¹¹⁴ . This would suggest there are unlikely to be significant cumulative effects from housing or employment nearby.
Other Minerals and Waste Joint Plan Sites	Other Minerals and Waste Plan Sites: WJP21, MJP24 and WJP25 are within 5km but all relatively distant (over 2km). No cumulative effects are predicted.
Historic minerals and	Historic minerals and waste sites: Although there are historic landfill sites in the vicinity, as well as the Gale Ash Disposal Site (2.3km south)

¹¹³ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

¹¹⁴ Selby District Council, 2013. Selby District Local Plan [URL: http://www.selby.gov.uk/sites/default/files/Documents/CS_Adoption_Ver_OCT_2013_REDUCED.pdf]

waste sites	no cumulative effects are noted. While the site is in a PEDL License area, no applications have yet come forward in this area.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design Mitigation measures during construction are identified within the Environmental Statement for this proposal to be delivered via a Construction Environmental Management Plan 	

WJP25 Former ARBRE Power Station, Eggborough

Site Name	WJP25 Former ARBRE Power Station, Eggborough (XY 456785 424198)
Current Use	Redundant former Arable Biomass Renewable Energy (ARBRE) facility
Nature of Planning Proposal	Energy Recovery facility with Advanced Thermal Treatment (ATT)
Size	4.2ha
Proposed life of site	Initial 25 years, extendable to 40 years
Notes	Planning application (NY/2014/0292/ENV) for this development was granted planning permission (C8/53/125F/PA) in May 2015. A subsequent planning application (NY/2016/0052/ENV) to vary some of the terms of the original permission was granted planning permission (C8/2016/0347/CPO) in May 2016

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

THIS SITE ALREADY HAS PLANNING PERMISSION, SO UNLIKE OTHER ASSESSMENTS WHICH ARE ASSESSED BEFORE MITIGATION, HERE WE HAVE INCLUDED MITIGATION MEASURES IN THE OVERALL SCORING, ASSUMING THAT THEY WILL BE ENACTED. WE HAVE, THEREFORE, ONLY REPORTED THE RESIDUAL EFFECTS AFTER MITIGATION.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000 sites: None within 5km; Site of Special Scientific Interest (SSSI): None within 2km (no relevant SSSI Impact Risk Zones (IRZs)).</p> <p>Site of Importance for Nature Conservation (SINC): None within 1km; Priority Habitat: Patches / blocks of woodland habitat approximately 50m east, patches of woodland approximately 970m west; Ecological Network: None.</p> <p>Local effects This site has few biodiversity constraints and adjacent habitat is at the other side of the A19 and bordered by Eggborough Power station, so species using such habitats may well be</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>habitualised to noise and dust from vehicles, and light pollution (and there is already lighting on this site). Other than possible impacts on protected species that could result from the loss of on-site habitats (such as plantation woodland), effects are likely to be negligible. This is confirmed within the Environmental Statement alongside the planning application (NY/2016/0052/ENV) for the site¹¹⁵.</p> <p>Plan level / regional / wider effects There are no predicted effects on nationally designated sites or other constraints of wider than local importance.</p> <p>As this site already has planning permission it is assumed that mitigation is inherent to the proposal so there will be no significant effects.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity Nitrate Vulnerable Zones (NVZ): Site is within a surface water NVZ; Source Protection Zones (SPZ): Edge of site is within SPZ 3 / not Zone 1 or 2; Aquifer: Sherwood Sandstone – status objective: good by 2027; River Basin Management Plan (RBMP): Site is in Aire from River Calder to River Ouse catchment water body – current overall status is moderate / objective is good by 2015; Catchment Abstraction Management Strategy (CAMS): In Aire and Calder CAMS – surface water is available at very low flows (Q95) / No groundwater available.</p> <p>Local effects While the handling of wastes prior to thermal treatment could potentially impact on water bodies, for instance through runoff of leachate, generally such issues are dealt with through on site controls. This is confirmed to an extent by the Environmental Statement that accompanied the planning application for the site, in which flood risk and drainage were ‘scoped out’ on account of those issues not leading to significant environmental effects¹¹⁶.</p> <p>Plan level / regional / wider effects Although a very small corner of the site falls within the outer</p>					0	0	0

¹¹⁵ See DRENL, Eggborough, 2014. Ecological Appraisal [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=9430>]

¹¹⁶ See GPP Planning Ltd, 2014. Environmental Statement: Proposed change of use of biomass renewable energy facility to a waste management facility with integrated advanced thermal treatment facility including extension to existing buildings and amendments to existing site layout [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=9430>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>edge of SPZ 3, this zone represents the total catchment for an abstraction rather than a more sensitive zone, and in the layout for the proposed site is well away from built infrastructure and located in an area of landscaping.</p> <p>As this site already has planning permission it is assumed that mitigation is inherent to the proposal so there will be no significant effects.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Access to market: Site is adjacent to A19 giving good access to M62 for West Yorkshire and East Yorkshire / Hull and Doncaster as well as Selby and York to the north; Rail: The site is about 200m west of Eggborough Power Station which has a rail depot and 1.6km north of Whitley Bridge Station; Canal / Freight waterway: Site is 1.7km North of the Aire and Calder Navigation; Railhead / Wharfe: None mapped, but Eggborough rail depot close by.</p> <p>Access: Existing access onto Selby Road (C410) approximately 125m off the A19.</p> <p>HGVs: 88 two way movements per day (Application details NY/2014/0292/ENV). Light vehicles: 84 two way movements per day (Application details NY/2014/0292/ENV). Net change in two way trips: +88 HGV / +84 light vehicles.</p> <p>Public Right of Way (PRoW): None on site / footpath at other site of A19.</p>		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects The non-technical summary of the Environmental Impact Assessment (EIA) for this site considers both the impact of the proposal and the residual effect once mitigation is in place. This states that “<i>The assessment of traffic has considered the potential for the proposal to combine with existing developments in the locality and has concluded that no unacceptable cumulative effects are likely to arise. The assessment has also considered the potential for the Southmoor Energy Centre (Kellingley Colliery) proposal to combine with the proposed development to give rise to unacceptable traffic impacts. It is concluded that the combined peak hour traffic with both site’s operational would not represent a material change in highway conditions. No unacceptable cumulative traffic impacts are therefore to arise</i>”.</p> <p>Although effects are insignificant, in this plan we must also consider that there is the potential for sites WJP02 and WJP06 to also contribute to this cumulative effect, as both are also situated off the A19. It is felt that taken together the effect would be (222 two way HGV vehicles journeys / 206 light vehicles per day), of which this site would have contributed a not insignificant portion. This assessment suggests that this might raise the effect of this site to minor negative for a short stretch of the A19 to Junction 34 of the M62. However, as a planning application is already in place and approved, further site based mitigation aimed at this site is not possible. Rather the Plan should require a traffic survey to be carried out should variations to the permission, or new planning applications come forward during the Plan period.</p> <p>Plan level / regional / wider effects None noted.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors Air Quality Management Areas (AQMA) or Hazardous Substances Consents Sites: No AQMA close by (within 2km), though M62 AQMA is about 4km south-west. A Hazardous Substances Consent Zone lies about 800m east to outer zone, but none on site.</p> <p>Local effects The Environmental Statement (ES) concludes that <i>'the plant will require an Environmental Permit from the Environment Agency and the gasification process must meet strict limits on air emissions specified in the Environmental Permit. This includes a need to agree the proposed abatement technology to minimise air emissions before the site can operate and confirmation that the Best Available Technology (BAT) has been employed. Therefore, local air quality will not be adversely affected by the proposals'</i>. Although air pollution would be generated by the vehicles using this site and the advanced thermal treatment that would take place, the results of air quality modelling at the site show that the ATT facility would not result in exceedances of the objective limits within the Air Quality Regulations, and cumulative with other local pollution sources impacts would be low. While this assessment also considers traffic as a potential pollution source, it is not expected that this site would compromise actions associated with any AQMA. There is a slight concern that if site WJP02 and WJP06 were also approved and existing traffic is also considered, there could be a low level cumulative effect relating to pollution from traffic between the site and Junction 34 of the M62, though there are only a limited number of residential receptors en route, so effects could only be considered to be insignificant to minor negative at worst.</p> <p>Plan level / regional / wider effects There were no potential air quality impacts identified at a regional level within the ES.</p>		✓	✓		-	-	-
						?	?	?
5. To use soil and land efficiently and safeguard or enhance their	<p>Proximity of soil and land receptors Agricultural Land Classification (ALC): The majority of the land within the site is ALC Grade 3; Contaminated land: Not known, but former industrial site so may require investigation.</p> <p>Local effects Much of this site is hard standing, with relatively areas of landscaping. Proposals at</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
quality	<p>the site also allow for landscaping across similar areas. As there would not be a significant loss of soil and there no potential ground contamination sources were identified the proposal has been scored as neutral and is not expected to have an effect on the SA objective.</p> <p>Plan level / regional / wider effects Considered the same as local effects – neutral.</p>							
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Habitats: Priority Habitat: Patches / blocks of woodland habitat from about 50m east, patches of woodland from around 970m west; Carbon in vegetation: Low – site lies in a square with estimated 0.65 tC/Ha; carbon in soils: Low - site lies in a square with estimated 49.67 tC/HA (however figures do not reflect former industrial use / hard standing on site).</p> <p>Local effects This site is located in an area with low carbon soils and vegetation on what is largely the existing site footprint. In addition, much of the redundant infrastructure will be utilised, which is a carbon efficient way of developing a site. However, a large number of vehicles will use the site.</p> <p>Plan level / regional / wider effects According to the Non-Technical Summary of the site’s Environmental Statement “<i>The proposed Waste Management Facility (WMF) will take in Biomass, Commercial & Industrial and Municipal Solid Waste materials and, upon recovery of the recyclables, the residual unrecyclable biogenic materials will be passed through an ATT Facility to produce renewable electricity. The Facility is expected to produce 10MW of electrical power for export to the national grid (equivalent to the demand of approximately 18,000 homes)</i>”. Producing energy from waste materials is clearly more climate friendly than allowing that waste to be landfilled, though not as climate friendly as displacing the need for new products through recycling. Converting biomass to energy is also a relatively carbon neutral mode of energy generation, though 88 HGVs movements and 84 light vehicle movements would still be generated. Overall effects are considered minor positive.</p>	✓		✓	✓	+	+	+
								?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹¹⁷ of a site Flooding: Site is in Flood Zone 1/ <5% of the site is at low risk (1:1000 (0.1%)) of surface water flooding. Catchment Flooding Management Plan (CFMP): Site in Lower Aire CFMP catchment – Policy 6 - ‘areas of low to moderate flood risk where we will take action with others to store water or manage run-off on locations that provide overall flood risk reduction or environmental benefits’.</p> <p>ALC Grade 3. Much of this site is a redundant former Arable Biomass Renewable Energy (ARBRE) facility.</p> <p>Local effects The site is not particularly prone to flooding and would make an insignificant impact on local ecological networks. Climate change to river flood risk is unlikely to affect the site in the latter part of the Plan period. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively, and therefore uncertainty is attached to the proposed allocations ability to respond and adapt to climate change in a long term.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
								?
8. To minimise the use of resources and encourage their re-use and	<p>Proximity of factors relevant to the resource usage of a site No spatial factors noted.</p> <p>Local effects The buildings at the site are highly resource efficient as use is made of existing redundant buildings. ATT of waste is also more resource efficient than landfill, as energy is derived from what otherwise would be waste material. However, ultimately materials are lost, so generating</p>		✓	✓	✓	+	+	+

¹¹⁷ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
safeguarding	<p>energy from waste would not contribute to the circular economy (though an argument could be made that utilising biomass, as this site also does, is a circular and resource efficient process). Over the short and medium term a minor positive effect is noted. The proposed life of the site is 25 years, extendable to 40 years, hence the uncertainty score in the long term.</p> <p>Plan level / regional / wider effects Considered the same as local effects.</p>							?
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors noted.</p> <p>Local effects See plan level effects below.</p> <p>Plan level / regional / wider effects This site would move waste one step up the waste hierarchy, from 'disposal' to 'other recovery' and would also minimise waste during the construction process by utilising existing buildings. Over the short and medium term a moderate positive effect is noted. The proposed life of the site is 25 years, extendable to 40 years, hence the uncertainty score in the long term..</p>	✓	✓	✓		m +	m +	m +
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors Conservation Areas: None within 1km; Listed Buildings: 1 listed building within 1km, 340m north; Scheduled Monuments: 1 within 2km, 550m north (Roman fort); Registered Parks and Gardens: None within 2km; Named Designed Landscapes: Roall Hall (350m north), Whitley Lodge 19th century Garden and Pleasure Ground c 2km south); Registered Battlefields: None within 2km; World Heritage Sites: None within 2km.</p> <p>Local effects The scoping stage of EIA for this site considered that archaeology and cultural heritage should be scoped out the assessment as it was considered that the site would not give rise to significant effects on this topic¹¹⁸. During the consideration of this site for planning permission,</p>					0	0	0

¹¹⁸ GPP Planning Ltd, 2014.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>North Yorkshire County Council's Development Management Archaeologist wrote that '<i>the proposed development has no known archaeological constraint</i>'¹¹⁹.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character National Park / Areas of Outstanding Natural Beauty (AONB) / Heritage Coast: None within 5km; Inheritance Tax Exempt land: None within 2km; District level landscape designations: None within 2km; Greenbelt: none within 1km.</p> <p>National Character Area (NCA): Site is in Humber head Levels NCA; North Yorkshire Landscape Character Assessment (LCA): Site is in 'Levels Farmland' landscape character type (high visual sensitivity / low ecological sensitivity / moderate landscape and cultural sensitivity); District LCA: Defined in Selby LCA as 'River Aire Corridor'.</p> <p>Intrusion: Site is in a 'disturbed' area; Light Pollution: Site is quite highly light polluted (in an area with 3 to 6 radiance).</p> <p>Local effects A Landscape and Visual Impact Assessment (LVIA) was carried out on the site which concluded that "<i>The Appraisal indicates that the proposed development will be similar in character to that of the existing facility on the Application Site. The design and scale of the proposed building extensions and associated infrastructure will be in keeping with the existing structures, and of a scale appropriate to the Application Site. Landscape mitigation in the form of an area of new tree and shrub planting has been proposed, along with on-going maintenance of existing vegetation with the Application Site. As a result, the proposed development will have a minor to negligible impact on the</i></p>					0	0	0

¹¹⁹ Letter to North Yorkshire County Council, dated 13 October, 2014 Application No: NY/2014/0292/ENV from NYCC Development Management Archaeologist.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>local landscape character, landscape of the Application Site and visual amenity of the surrounding area</i>¹²⁰. Given that a planning condition is that “Prior to the commencement of the development, a detailed Landscape and Habitat Management Plan shall be submitted to and approved in writing by the County Planning Authority”¹²¹ effects are not considered to be significant.</p> <p>Plan level / regional / wider effects The landscape context for the site is changing since it is understood that nearby Eggborough Power Station will close by May 2017 and will subsequently be demolished and the site redeveloped. The relative visual importance of the ARBRE development is therefore likely to change.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Market accessibility: Site is adjacent to A19 giving good access to M62 for West Yorkshire and East Yorkshire / Hull and Doncaster as well as Selby and York to the north.</p> <p>Local effects According to the ES, once operational the site will generate 40 full time jobs and 200 jobs would be created for construction and site preparation, plus a number of indirect or induced jobs would be created.</p> <p>Plan level / regional / wider effects In addition, the provision of electricity from energy from waste will help meet the energy needs, which is critical for a successful economy.</p>		✓	✓	✓	m +	m +	m +
13. Maintain and enhance the viability and	<p>Proximity of factors relevant to community vitality / viability Index Multiple Deprivation (IMD): not in the lowest 20% of the IMD. Nearest Settlements: Eggborough / Hut Green are about 500m</p>		✓		✓	+	+	+

¹²⁰ GPP, 2014. Landscape and Visual Appraisal [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=9430>]

¹²¹ North Yorkshire County Council, 2015. Notice of Decision of Planning Authority on Application for Permission to Carry out Development [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=9430>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
vitality of local communities	<p>south, Kellington is circa 1.3km west; Hensall is 2.1km west.</p> <p>Local effects As this site has direct access to the A19, traffic would be unlikely to route through the centre of Eggborough. Jobs will be provided which could be drawn from surrounding communities. In addition, the site's proximity to the rail station at Eggborough may draw some employees into the village en route to and from work, which may help to increase revenues at local businesses by a small amount.. Over the short and medium term a minor positive effect is noted. The proposed life of the site is 25 years, extendable to 40 years, hence the uncertainty score in the long term.</p> <p>Plan level / regional / wider effects None noted.</p>							?
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors Public Rights of Way (PRoW): None on site, though a footpath terminates at the other side of the road (A19) from the site; Common land / village greens: None within 1km.</p> <p>Local effects The site is unlikely to significantly affect rights of way as there are none on site, and views from those nearby are unlikely to be significantly affected given that this site makes use of existing built infrastructure to a large degree and is adjacent to the highly visible Eggborough Power Station.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
15. To protect and improve the wellbeing, health and safety of local	<p>Proximity to population / community receptors / factors relevant to health and wellbeing</p> <p>Receptors (properties / settlements / schools / healthcare): Nearest houses are about 530m south. Occasional individual properties also found within 1km, mostly to the north-west. No health centres or hospitals noted within 2km. A school lies about 1.5km west in Kellington; Noise: No nearby Noise Important Areas (NIAs) / nearest is Junction 34 circa 2km south; Pipeline: Overhead power lines lie</p>		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
communities	<p>about 20m north / a substation lies 430m east.</p> <p>Local effects There may be a minor elevation in air pollution from traffic if this site combines with pollution from other sites in the Joint Plan. Noise from traffic was judged to be insignificant in the Environmental Statement for this site, while other sources of noise, such as from operation of the development were rated as neutral to minor adverse, apart from for construction noise where a short term residual effect was noted after mitigation that was well within acceptable levels and thus negligible to minor adverse¹²². In addition, planning conditions restrict operational times that should help minimise effects.</p> <p>The NIAs at Junction 34 may also experience a minor elevation in noise, but not at a particularly significant level given that far greater noise will come from existing traffic at the junction and on the M62. No NIAs is yet in place for this area. However, while the plan cannot mitigate for approved planning conditions, a recommendation is that the SA, through its monitoring requirements, should monitor the status of NIAs as well as the actions identified for specific noise action planning areas. Should these identify a need to implement specific measures at Junction 34 (or other locations) the SEA may take the opportunity to review the efficacy of development management policies dealing with noise in the Plan.</p> <p>Plan level / regional / wider effects None noted.</p>							?
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Flooding: Site is in Flood Zone 1; Surface water flooding: <5% of the site is at low risk (1:1000 (0.1%)) of surface water flooding; Site is in a 1km squares that are used to access the likelihood of groundwater flooding. <25% of the area of land is susceptible to Clearwater flooding. However, no additional risk factors are noted and this development is above ground so is likely to be at a lower risk. This site is not at risk from the 1:20 (5%) flood event; CFMP: Site in Lower</p>					0	0	0

¹²² Noise Vibration Consultants, 2014. Noise Impact Assessment For Proposed Change of Use of Biomass Renewable Energy to Waste Management Facility with an Integrated Advanced Thermal Treatment Plant [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=9430>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Aire CFMP catchment – Policy 6 - ‘areas of low to moderate flood risk where we will take action with others to store water or manage run-off on locations that provide overall flood risk reduction or environmental benefits’.</p> <p>Local effects The site produced a Flood Risk Assessment which was submitted with the planning application and found that “<i>The proposed development complies with the requirements of the Sequential Test, and there are no identified serious risks of flooding. The existing drainage system will ensure that the Application Site and surrounding areas are protected from surface water run-off generated by the proposed development</i>”¹²³.</p> <p>An additional Strategic Flood Risk Assessment (SFRA) Sequential Test¹²⁴ undertaken alongside the development of the Joint Plan has also concluded that this site would ‘Pass’.</p> <p>Plan level / regional / wider effects None noted.</p>							
17. To address the needs of a changing population in a sustainable and	<p>Proximity to factors relevant to the needs of a changing population Site does not conflict with other allocations.</p> <p>Local effects Provision of this ATT plant will help manage waste and provide energy needs. However, the waste management proposed is at a relatively low level of the waste hierarchy so is not</p>					+	+	+

¹²³ GPP Planning Ltd, 2014. Proposed Change of Use of Biomass Renewable Energy Facility to a Waste Management Facility with an Integrated Advanced Thermal Treatment Plant Including Extension [URL: <https://onlineplanningregister.northyorks.gov.uk/register/PlanAppDisp.aspx?recno=9430>]

¹²⁴ The Sequential Test approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (Flood Zones 2 and 3) and other areas affected by other sources of flooding where possible.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
inclusive manner	<p>as beneficial to the long term needs of the population as say recycling, or re-use. Over the short and medium term a minor positive effect is noted. The proposed life of the site is 25 years, extendable to 40 years, hence the uncertainty score in the long term.</p> <p>Plan level / regional / wider effects See local needs above.</p>							?
Cumulative / Synergistic effects¹²⁵								
Planning	Aside from being in the Joint Plan, the site is also in the adopted Selby Core Strategy (Site and Policies Local Plan in production). Eggborough / Whitley is a Designated Service Village. Policy SP2 applies: "The following Designated Service Villages have some scope for additional residential and small-scale employment growth to support rural sustainability ... Eggborough / Whitley". This is unlikely to lead to significant additional cumulative effects.							
Other Minerals and Waste Plan Sites	There is a slight concern that if site WJP02 (already approved) and WJP06 add to existing traffic, there could be a low level cumulative effect relating to pollution from traffic between the site and Junction 34, though there are only a limited number of residential receptors en route, so effects on the traffic, air pollution and health SA objectives are considered to be in the range of insignificant to minor negative at worst. Further sites nearby include MJP54, MJP44 and WJP03, but no cumulative effects are predicted from these sites.							
Historic minerals and waste sites	A number of historic landfill sites are within 5km. The site is in a Petroleum Exploration and Development Licence (PEDL) license area, but no applications have yet come forward in this area. No cumulative effects.							
Limitations / data gaps								
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.								

¹²⁵ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Mitigation requirements identified through Site Assessment process

- Mitigation measures during construction are identified within the Environmental Statement for this proposal to be delivered via a Construction Environmental Management Plan.
- The NIAs at Junction 34 may also experience a minor elevation in noise, but not a particularly significant level given that far greater noise will come from existing traffic at the junction and on the M62. No noise action plan is yet in place for this area. However, while the plan cannot mitigate for approved planning conditions, a recommendation is that the SA, through its monitoring requirements, should monitor the status of noise action plans as well as the actions identified for specific noise action planning areas. Should these identify a need to implement specific measures at Junction 34 (or other locations) the SEA may take the opportunity to review the efficacy of development management policies dealing with noise in the Plan.

MJP23 – Jackdaw Crag, Stutton (East of Crag Wood)

Site Name	MJP23 Jackdaw Crag Quarry, Moor Lane, Stutton, Tadcaster (XY 446735 441350)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of Magnesian limestone as proposed extension to existing quarry
Size	6.2ha
Proposed life of site	Unknown at present
Notes	The excluded area of MJP23 is the parcel of land to the east of Crag Wood; the allocated area of MJP23 is located south of Crag Wood – for information about the allocated area of MJP23 see Appendix 1 to the Minerals and Waste Joint Plan. Possible restoration: No detailed design yet, but would be low level restoration to agriculture similar to adjacent existing quarry approved scheme. A planning application (Reference: NY/2009/0523/ENV) for an allocated area (MJP23) south-west of this excluded area has been granted planning permission in September 2016.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Note: This assessment relates to the excluded area of land east of Crag Wood, and does not include an assessment of the MJP23 allocated area (please see Appendix 1 for this assessment). Vehicles movements are assumed to be the same as the allocated area of MJP23.

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	Proximity of international / national and local designations and key features 11km north-west lies Kirk Deighton Special Area of Conservation (SAC). The site is located approximately 1.4km from Stutton Ings Special Sites of Scientific Interest (SSSI) (south-east of the site). In terms of SINC sites 1 SINC – SE44-15 Crag Wood is adjacent to the western boundary of the site. This SINC is currently un-surveyed. There are also further SINC Sites within 2km including Lords Quarry (SE44-	✓	✓	✓	✓	-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>14) 840m north and a deleted SINC – Wood near Wingate Hill Farm (SE44-16) 420m south east. Further east (all over 1 km) lie 8 further SINC Sites (SE44-07, SE44-17, SE44-09, SE44-21, SE44-05, SE44-11, SE44-04 and SE44-18) while to the south lie SE43-22, SE44-19 and potential SINC SE43-27 each over 1km away. Crag Wood, a patch of the priority habitat deciduous woodland is immediately adjacent to the west of the site. Areas of deciduous woodland are also located 120m east, 190m north and 250m south-east. The site is within regional Green Infrastructure (GI) corridor S19 'Limestone Ridge', which is supported by policy SP12 in Selby Core Strategy.</p> <p>Four private airfield consultation zones affect this site as well as one Ministry of Defence (MOD) 13km consultation buffer (although this site is at the outer edge of that buffer).</p> <p>Local effects This site is within the SSSI Impact Risk Zone (IRZ) for Stutton Ings. However, Stutton Ings is not connected to this site by any water courses or floodplain and the undulating terrain between the site and the SSSI is likely to prevent impacts such as dust and noise to a large degree. Crag Wood SINC is likely to become isolated from surrounding habitats if this site goes ahead as it has been left elevated with sheer cliffs on three sides (to the immediate north, south and west) that make connectivity for species very difficult. From an ecological point of view the value of the site as an isolated unit is uncertain. There will also be the loss of hedgerows and features of importance to farmland birds, foraging bats and badger from the excavation of this site.</p> <p>The site is within a regional GI corridor, so it is possible that restoration to green infrastructure might help consolidate a strategic network. A core woodland patch of the England Habitat Network has been identified as overlaying the north-west corner of the eastern area of the site (next to Crag Wood), which could indicate that further woodland development through restoration may be beneficial.</p> <p>Impacts from this quarry site could be cumulative with the existing Jackdaw Quarry site and an allocated site to the south-east, particularly on Crag Wood (though through co-ordinated restoration there could be long term benefits). In the short term impacts would be most associated with the loss of on-site habitats, while in the medium term impacts upon Crag Wood SINC are expected.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>A return to low level agriculture is expected to have a minor positive effect with uncertainty noted as detailed design is not yet available.</p> <p>There may be some potential to create a 'bridge' across quarried areas to Crag Wood to leave it less isolated ecologically. Elsewhere, restoration to calcareous grassland with thin soils would be preferable to more difficult restoration to arable.</p> <p>Plan level / regional / wider effects Considering the source of any impacts, as well as potential pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites in the wider area.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors Site is in a Nitrate Vulnerable Zone (NVZ) (groundwater and surface water). About three quarters of the site (including all of the southern part) lies in Source Protection Zone (SPZ 1), with the remainder in SPZ 2.</p> <p>According to the Humber River Basin Management Plan (RBMP) the nearest section of river is 'Cock Beck Catchment (tributary of River Wharfe). This has moderate ecological status. However, there is no visible connectivity with between the site and this watercourse. In terms of groundwater the site lies in a groundwater unit called 'Wharfe Magnesian Limestone' which has an overall status of poor. The RBMP Groundwater Status Objective is good by 2027. The site is also in the Wharfe and Lower Ouse Catchment Abstraction Management Strategy (CAMS). Here water is available at low flows (at least 70% of the time), with Cock Beck having 'water available for licensing'. Site is not in an area of restricted or no groundwater availability.</p> <p>Local effects Although it is possible that quarrying could disrupt groundwater flow there is no restriction on groundwater availability. Parts of site are within groundwater SPZ 1 and SPZ 2, there</p>		✓	✓	✓	--	--	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>is the potential for the site to disrupt water flow to a water source. According to Environment Agency guidance¹²⁶, the Agency would object to quarries in SPZ 1, and object if there is an unacceptable risk in SPZ 2. Quarrying can deplete the aquifer, for instance by discharging groundwater to the surface during dewatering (though the fact that quarrying is likely to be above the saturated zone makes this unlikely) or depriving the aquifer of its protective layer. There is the risk of fuel spillage at the site, which are potentially manageable through mitigation, monitoring and permitting. There may also be issues with materials used to restore the site. Limitations and mitigation requirements will be greatest in SPZ 1 which may require that extraction only be allowed above the saturated zone.</p> <p>Traditionally there have been some reservations about quarrying in this area due to potential contamination of groundwater which may affect the brewing industry, though the fact that quarrying is likely to be above the saturated zone mitigates this issue to a degree.</p> <p>In summary, without mitigation impacts are major negative in the short and medium term and neutral with uncertainty in the longer term. Mitigation would be required so that any pathways for migration of pollutants might be reduced.</p> <p>Plan level / regional / wider effects There is potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>							
3. To reduce transport miles and associated emissions from transport and	<p>Proximity of transport receptors Site is reasonably proximal to a number of settlements / markets (e.g. Tadcaster 1km, York 12km, Wetherby 8km, Leeds 10km). Access: the existing Jackdaw Crag quarry access onto Moor Lane (C305), approximately 35m south of the bridge over the A64 which leads to the A659 and the A64; Light vehicles: Confirmed that six two-way movements (as sourced from Application details NY/2009/0523/ENV); Heavy Goods Vehicles (HGV): Confirmed that 90 to</p>		✓		✓	m	m	0

¹²⁶ Environment Agency (2013). Groundwater protection: Principles and practice (GP3).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
encourage the use of sustainable modes of transportation	<p>334 two-way movements (as sourced from Application details NY/2009/0523/ENV).¹²⁷</p> <p>Net change in daily vehicle trip generation: Light vehicles: 0; HGVs: 0. Transport assessment rating: yellow. Summary <i>“Pending any further comments by NYCC Highways on the current planning application, it is understood that there are concerns relating to visibility at the site entrance and HGV parking with appropriate mitigation measures required. Traffic heading east from the site does need to pass through the centre of Tadcaster however the volume of HGVs making this movement is not expected to change and thus the traffic impacts as the site are expected to remain similar”.</i></p> <p>Public Right of Way (PRoW): Access is not affected by a registered right of way. Rail: Nearest rail line 5.6km east (Ulleskelf station) / nearest railhead is 11.3km south; Strategic Road: A64 adjacent / A64 is agreed timber route; Canal / Freight Waterway: Selby Canal is 17km south-east.</p> <p>Local effects The site would generate up to 340 vehicle movements per day, albeit that HGV movement is acceptable onto highway and markets are reasonably accessible via the nearby A64. This assessment, however, recognises that while traffic may be at the same level as exists at the site, the effect of this traffic would be extended into the future.</p> <p>The site does include a sufficient frontage to enable an access of acceptable standards to be formed onto the public highway. Concerns have been highlighted over visibility at the site entrance. There is no identified local sustainable transport option for this site</p> <p>Plan level / regional / wider effects As traffic would continue to head into Tadcaster for a longer period of time, and there are current concerns with visibility at the site entrance, on-going effects are expected to be minor negative for the duration of this site.</p>							?
	<p>¹²⁷ Planning Application NY/2009/0523/ENV is for the development of the allocated area of MJP23. However, vehicle movements to the site are assumed to be the same as those assessed for the allocated area of MJP23 and the existing quarry site i.e. there would be no net change in vehicle movements from the existing situation.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within an Air Quality Management Area (AQMA), the closest is Wakefield Council M62 AQMA 7.2km west which has been declared for NO₂ exceedances. No hazardous substances consent sites nearby. Some farm properties adjacent to possible access roads.</p> <p>Local effects Traffic would be generated by the site. Possible air pollution impacts from this could result from traffic fumes and the generation and deposition of dust. It is assumed that as dust suppression is currently used at the existing site, this management would remain in place, and would mitigate dust from traffic. There are priority habitats near to the site, which are deciduous woodland (and previous investigations into potential quarrying in the vicinity have suggested no significant effect on the adjacent Crag Wood from dust¹²⁸). So such effects are considered to be negligible.</p> <p>Air pollution from transport may be raised by the major road (A64) in the vicinity to the site. It is anticipated that 50% of the traffic from this site may also travel through Tadcaster. The existing quarry already sees transport movement by HGV and the site will likely extend that impact through extending the life of the quarry. An environmental statement reported that properties are unlikely to be significantly affected.</p> <p>Plan level / regional / wider effects The Joint Plan traffic assessment states there is a “<i>routing restriction which requires all HGVs to approach and depart from the site by turning left out of the site, left on Garnet Lane and existing onto the A659 at the crossroads junction opposite the grounds of Tadcaster Grammar School. Once on the A659 westbound traffic can continue to join the A64 and subsequently Junction 44 of the A1M</i>” while “<i>eastbound traffic would need to pass through the centre of Tadcaster and onto the A64</i>”. There are some isolated farms and a school lies around 500m from route along the A659, though it is expected that pollution levels will be reduced at this</p>		✓	✓	✓	m -	m -	? -

¹²⁸ Turley Associates, 2009. Darrington Quarries Ltd – southern extension to Jackdaw Crag Quarry, Environmental Statement.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	distance. There are a number of receptors in Tadcaster.							
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Land within the site is Agricultural Land Classification (ALC) Grade 2. In terms of land stability development does not lie within or adjacent to a Coal Board development high risk area.</p> <p>Local effects Potentially 6.2ha of Grade 2 (very good quality) agricultural land will be lost. Assuming soil would be retained (and correctly stored / looked after) for restoration, ultimately this land could be restored to its previous quality (at an unspecified, and thus uncertain date).</p> <p>Plan level / regional / wider effects The loss of very good agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development¹²⁹ but could have a small scale effect on national food production capacity.</p>		✓	✓		m -	m -	0
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Woodland lies adjacent to site. Hedgerows on site.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Woodland would not be lost, though this quarry is expected to extend vehicle movements to the site. The site has relatively good access to the strategic road network and the site is moderately proximal to key settlements. Minor to negative effects are predicted, with uncertainty about when they will end.</p>		✓		✓	m -	m -	0

¹²⁹ 6.2ha across the unknown at present life of the site. There was 2365ha of agricultural land was lost to development in 2014/15 across England.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹³⁰ of a site The site is in Flood Zone 1. CAMS: water is available at low flows (at least 70% of the time), with Cock Beck having 'water available for licensing'. Site is not in an area of restricted or no groundwater availability.</p> <p>Land is ALC Grade 2.</p> <p>Local effects Woodland close to the site is already isolated from other woodland patches so this site is unlikely to fragment ecological networks. Flooding risk is seen as negligible at this site which is classified as 'less vulnerable' in terms of its flood risk vulnerability classification.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>					0	0	0
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will contribute to the need for limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted it may to a degree offset recycled materials that could potentially replace them. This site will permanently extract a key natural resource, this is considered to have a high negative effect in relation to this SA objective.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓			✓	--	--	0

¹³⁰ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> Indirectly the site may allow for continued extraction of primary resources, thus decreasing the opportunity for recycled and secondary aggregates to replace them (and reduce waste) there is still likely to be demand for primary aggregates and stone (so this effect can only be considered by considering all limestone extraction together and cannot be attributed to a single site).</p> <p><u>Plan level / regional / wider effects</u> The site may have an indirect negative impact on the prioritising the management of waste down the waste hierarchy as a result of providing limestone and reducing the need to recycle limestone from other locations.</p>		✓		✓	-	-	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> No conservation areas within 1km; Bramham Park Registered Parks and Garden is 3.4km west; Battle of Towton Registered Battlefield is 1.1km south-east; there are no scheduled monuments within 2km, a Roman Road near Hazelwood Castle (ID1,003,685) is just over 2km south-west; two listed buildings within 1km – located north-east of Headley Bar (Grade II) and south-west of Tadcaster (Grade II). There are two Grade II Listed Buildings located in Stutton (1.1km), there are several Listed Buildings around Hazelwood Castle (1.6km to the south-west) including the Grade I Hazelwood Castle and Roman Catholic Chapel of St Leonard.</p> <p>Archaeological remains within the allocation site revealed by evaluation include features dating from the later Iron Age and early-mid Roman period, suggestive of an agricultural landscape with settlement / activity foci. This included a burial, trackway, enclosures and field system. To the north the course of the Roman Road between York and Tadcaster passes close to or through the western most allocation area.</p> <p>The North Yorkshire Historic Landscape Characterisation (HLC) project (database record HNY</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>5154) records the western segment of this allocation site as being within a much larger area of modern improved fields. It consists of large irregular fields defined by erratic hedgerow boundaries. Previous HLC types in this larger area include some areas of strip fields, piecemeal and planned enclosure. As this allocation site is a smaller part of a larger area of similar character type, the proposed extraction is unlikely therefore to have a major impact upon the HLC of the immediately surrounding area, although it is acknowledged that within the site the HLC will become invisible as development will replace an earlier field system.</p> <p>The HLC project (database record HNY 5396) also records the central segment of this allocation site as being within a wider area of planned enclosure which consists of medium-sized semi-irregular fields defined by straight hedgerows. This has partial legibility with some boundary loss but is probably part of the Stutton or Hazelwood enclosure awards. Here, the proposed extraction is unlikely to have a major impact upon the HLC of the immediately surrounding area, although it is acknowledged that within the site the HLC will become invisible as development will replace an earlier field system.</p> <p>Database record HNY 5479 records the eastern segment of this allocation site as being part of a much larger area of planned enclosure which consists of irregular medium sized fields defined by regular external and straight internal hedgerows. As this allocation site is a smaller part of a larger area of similar character type, of which the legibility is partial, the proposed extraction is unlikely to have a major impact upon the HLC of the immediately surrounding area, although it is acknowledged that within the site the HLC will become invisible as development will replace an earlier field system.</p> <p>Local effects The impact upon HLC is not felt to be significant. However, the registered battlefield (Battle of Towton) is just over 1km away and a may be affected by this site. It is anticipated that Warren House Farm is visible from the battlefield (the designated extent of which is being extended and lies to the south of Cock Beck). It is possible this quarry site may have been the location of skirmishes etc. associated with this significant battle.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>There is high archaeological potential for the survival of archaeological remains within the site from the later prehistoric period onwards, therefore allocating this site would be likely to cause the loss of these archaeological remains if the site is excavated without mitigation. It is assumed that investigation and extraction would be in line with Joint Plan Policy D08 (Historic Environment) <i>'mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.'</i>, and therefore a negative effect no greater than minor is expected.</p> <p>It is assumed that in the longer term, through restoration impacts will cease, and while restoration might conceivably seek to emulate historic character. Nonetheless, new impacts will not be likely to fall in this period (acknowledging there may be some uncertainty over the end date for operations).</p> <p>Some designated assets could be affected by the proposed extension of the existing quarry onto this site, these include the Registered Battlefield at Towton and Listed Buildings around Hazelwood Castle including Grade I Listed Hazelwood Castle and the Roman Catholic Chapel at St Leonard. The expansion needs to consider any potential impact on the setting of these designated heritage assets, including the longer distance views and wider landscape settings in which these assets are appreciated, together with the need for appropriate archaeological mitigation.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, Area of Outstanding Natural Beauty (AONBs) or Heritage Coast within 10km. No Inheritance Tax Exemption land within 5km. Site is within Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by Policy SP18: 'The high quality and local distinctiveness of the natural and man-made environment will be sustained by:....identifying, protecting and enhancing locally distinctive landscapes' Para 7.72 of supporting text states: ' designations of specific areas such as landscape character assessments will be considered in future local plan documents and shown on the proposals map. Until such time, sites identified in the adopted Selby District Local</p>	✓		✓		--	--	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Plan will continue to afforded protection'. The Site is in Green Belt for West Yorkshire. In terms of tranquillity the site is 'disturbed'.</p> <p>The relevant National Character Area (NCA) is Southern Magnesian Limestone. NY&Y Landscape Character Assessment (LCA) lists site as Magnesian Limestone Ridge: Moderate to high visual sensitivity (as a result of the prominent nature of the ridge and inter-visibility with adjacent Vale Farmland with Dispersed Settlements and Vale Farmland with Plantation Woodland Landscape Character Types'); High ecological sensitivity (as a result of the presence of nationally important, species rich limestone grassland, several pockets of semi-natural ancient woodland scattered along the ridge, and SSSIs which encompass habitats sensitive to changes in land management) and High landscape and cultural sensitivity as a result of the nationally significant Neolithic and Bronze Age monuments, in addition to the predominantly intact landscape pattern which is sensitive to changes in land management.</p> <p>The site is in the 'limestone ridge' local landscape designation.</p> <p>Local effects Although the site is in the Green Belt it would be likely to be compatible with the purposes of the Green Belt designation provided restoration was compatible. The site is also close to the A64, although other parts of the existing quarry are already visible (the southern extension of this site is subject to a planning permission but is getting near to the skyline / horizon which would make it visible from the A659 road). The visibility from the A64 will lead to a negative assessment, particularly as this may affect tourist impressions of Yorkshire.</p> <p>The elevated position of this site may make it more visible, particularly from the A659. Lighting disturbance is also an issue (particularly from the A64). While the northern / western parts of the site are already compromised by the A64 (though would add to the impact on the A64 as a visual receptor), the southern part of the site is less disturbed, so there is potential for a more significant impact.</p> <p>There may be cumulative effects on the landscape from this and other quarries in the vicinity.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Mitigation for this site should include a buffer between it and the A64. However, it is difficult to mitigate because of its location. In terms of restoration options may be limited to low level agricultural restoration or nature conservation. As this is a deeper quarry the steep sides would continue to be a concern. However, there may be some potential to terrace the sides of the quarry to reduce their steepness.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is reasonably proximal to a number of major settlements / markets (e.g. Tadcaster 1km, York 12km, Wetherby 8km and Leeds 10km).</p> <p>Local effects The site is reasonably proximal to possible markets so will help support growth there. Limited numbers of jobs will be supported, which may support a few workers in nearby areas (most likely existing workers at the parent site). The site does not represent low carbon development however as possible markets are relatively spread out, which could increase the carbon footprint of building. The effect overall is minor positive in the short and medium term.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	+	+	0
								?
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD Area is Tadcaster West. Not within lowest 20%. Nearest significant communities: The site is around 1km from the south-western edge of Tadcaster. Both Towton (2.2km away) and Stutton (900m away) are 'Secondary Villages with defined Development Limits'. These are covered by Policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10"</p> <p>Local effects As traffic from these sites is likely to avoid settlements there is likely to be little effect. Similarly, at around 900m from Stutton the site is likely to be towards the outer limit of dust or noise</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>impacts which would also be likely to be negated by intervening topography. Although the site might support small numbers of jobs in nearby communities the overall effect is considered to be negligible.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A public right of way (Bridleway 35.24/4/1) runs from the road 320m to the south of this site but does not enter the site. Claimed route R7 / 63B runs along a track that passes Warren House Farm and at its nearest point is circa 90m south.</p> <p>Local effects In terms of access, a bridleway passes the site to the south (along Chantry Lane). There may be a potential noise issue in terms of this receptor, so screening may be required (though at the nearest point the site is still 320m away from the path). There may be also some minor disturbance to users of this route who at certain points may be more likely to see these extensions than the existing site. However, the fact that topography from the footpath slopes downward means the site would be less visible. Users of Old London Road, further east may also catch glimpses of this site though MJP53 may be more of a detractor depending on the outcome of that site. Negligible to minor negative.</p> <p>There may be some potential to, in the future, make the track past Warren House Farm a bridleway (there is an existing claim for this).</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	-	-	-
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing Two farms circa 350m east. One farm 360m north. High Moor and Manor Farm are both circa 800m of the site, while Brick House Farm is circa 300m north. A school lies just outside the 1km search area to the north (though possibly only 500m west of a possible access route). The village of Stutton (residential) lies 980m east. Warren House Farm is immediately adjacent to the south while White</p>		✓	✓	✓	m -	m -	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Quarry Farm is 750m south. High Moor Grange Farm is 900m to north-west.</p> <p>An overhead power line lies to the 200m west of the site and High Pressure Gas Pipeline Feeder 7 crosses the site. A Gas Site (Towton) lies 420m west.</p> <p>Local effects Traffic on roads is likely to continue to be experienced beyond the current quarry as a result of these extensions. However, the western access route does not go near settlements or footpaths and the very small number of farm houses near this road suggests few pedestrian users (though there may also be cyclists on the route). The eastbound route would go through Tadcaster bringing it within range of a number of receptors (see Objective 3). However, these are extended / continuity effects so wellbeing effects won't perceptibly be worse, though it will be extended for longer into the future. There is some uncertainty over the impacts of noise and dust on nearby Stutton (downwind of site when prevailing westerly winds are accounted for), though intervening topography would lessen the likelihood of any effect.</p> <p>The presence of energy infrastructure across the site is noted and arrangements to mitigate for this (e.g. by liaising with energy distributors) will be a prime consideration.</p> <p>Any blasting at the site may be an issue for the nearby Warren House Farm (noise and vibration) and other more distant properties (noise) and possibly the Towton Gas Site.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1.</p> <p>Local effects Flooding risk is seen as negligible at this site which is classified as 'less vulnerable' in terms of its flood risk vulnerability classification</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> The site would make a small contribution to self-sufficiency in the supply of Magnesian limestone.</p> <p><u>Plan level / regional / wider effects</u> The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>¹³¹</p> <p><u>Planning Context:</u> The site is around 1km from the south-western edge of Tadcaster. Tadcaster is a Local Service Centre. Both Towton (2.2km away) and Stutton (900m away) are ‘Secondary Villages with defined Development Limits’. These are covered by policy SP2 in the Selby Core Strategy: “Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities and which conform to the provisions of Policy SP4 and Policy SP10’. Site does not conflict with any allocations.</p> <p><u>Other Joint Minerals and Waste Plan Sites:</u> Site MJP23 allocated area is located 120 south-west.</p> <p><u>Historic Minerals and Waste Sites:</u> There are historic granted applications (extraction) associated with the Jackdaw Crag quarry site adjacent. High Moor active building stone site is 1.3km north-west, Hargreaves Tip (historic landfill) is 1.8km north. To the south there are a number of historic granted applications associated with Old London Road (extraction and landfill). There are 3 further historic landfill applications to the east within 2km.</p> <p><u>Traffic:</u> In terms of cumulative effects it is possible that freight traffic from the other developments could combine to increase traffic on access roads to the A64 or through Tadcaster. This might amplify effects, but would not lift them above minor negative, particularly as they are an extension of existing effects.</p>							

¹³¹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Sustainability Objective	Key Observations on Significance					Score			
		P	T	D	I	S	M	L	
	There may be cumulative effects on the landscape from this and other quarries in the vicinity.								
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.								
Mitigation requirements identified through Site Assessment process									
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including impact on Stutton Ings SSSI, Crag Wood SINC, and protected species and habitats. • Any proposals for the development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. • Design to ensure protection of the aquifer, with particular consideration to the SPZ 1 constraint at the site. • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise and dust. • Design to mitigate impact on heritage assets, landscape features and rights of way. • Design to include suitable arrangements for retention or diversion of gas pipeline (as appropriate). • Design to mitigate impact on very good quality agricultural land and to protect high quality soil resources. • Specific proposals would need to demonstrate consistency with Green Belt policy, including maintaining openness and not conflicting with the purpose of Green Belt designation. • Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt. 									

MJP31 – Old London Road Quarry, Stutton

Site Name	MJP31 Old London Road, Stutton, Selby (XY 447108 440321)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of Magnesian limestone from a new extraction site adjacent to former quarry and import of construction and excavation waste for the use in forming proposed restoration landform
Size	9ha
Proposed life of site	11 years (based on annual output of 200,000 tonnes)
Notes	<p>The restoration would be a bowl shape extended from WJP04 with pasture on the bowl floor and grassland and woodland on the sloping sides</p> <p>The stone will be removed to 15.2m above ordnance datum (AOD) from a surface level of 57 metres AOD.</p> <p>270,000 tonnes of quarry fines would be transported from MJP31 to site MJP58 for temporary storage pending use in restoration of MJP31 site.</p> <p>Infilling starts at the quarry in 2019, with the import of 600,000 cubic metres of inert construction and excavation waste, and other inert material such as glass and ceramics to mix with excavation waste for restoration purposes, the floor will be filled to provide a 2m soil thickness and the faces filled against to provide the slope. The slope will start at 17m AOD and rise to the surface, crest of the face which will be at 57 to 60m AOD.</p>

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and	<p>Proximity of international / national and local designations and key features The site is 12km north-west of Kirk Deighton SAC. In terms of SSSIs, Stutton Ings is 600m south-west. Tadcaster Mere (geological SSSI – former lake) is 3.1km north-east. Kirkby Wharfe 3.4km east.</p> <p>Within 2km the following SINC Sites are observed: SINC: SE44-16 (Wood near Wingate Hill Farm) deleted</p>	✓		✓		-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
improve habitat connectivity	<p>SINC is circa 55m north. SE44-17 (Grassland by Cock Beck) (unsurveyed) is 420m east. SE44-09 (Seavey Carr Wood - ratified SINC) is 460m north-east. SE44-11 (area around Cock Beck, Mill Lane - deleted SINC) is 900m north-east. SE44-18 (Lower and Upper Woods deleted SINC) is 880m north-east. SE44-04 (Willow Carr, Cock Bridge - deleted SINC) is 1.5km north-east. SE44-05 (Stutton Railway Track - ratified SINC) is 600m SE. SE44-19 Renshaw Wood, Womersley (pre-existing SINC) is 550m SE43-02 Renshaw Wood deleted SINC is 1.75km south. SE43-26 (Mawfield Spring - potential SINC, does not qualify) is 1.73km south-west. SE43-27 (Harper Rash Wood, potential SINC, does not qualify) is 1.63km south-west. SE43-22 (Scrub South West of Low Park Farm, pre-existing SINC, not yet surveyed) is 1.36km south-west. SE44-14 (Lords Quarry, pre-existing SINC, un-surveyed) is 1.5km north-west.</p> <p>Priority Habitats: Patch of deciduous woodland 55m north. Further patches of deciduous woodland 30m, 150m and 192m north-north-west. Patch of deciduous woodland 180m south. No ancient woodland on site or adjacent. Closest is 600m to the south and 750m to the north-east.</p> <p>Four private airfield consultation zones affect this site as well as one MOD 13km consultation buffer (although this site is at the outer edge of that buffer).</p> <p>Local effects Impacts on SSSIs are most likely to be associated with dust deposition, though nearest SSSI is 600m away so a significant impact is unlikely. There are unlikely to be any direct impacts or impacts associated with changes in hydrology / hydrogeology as the site will probably be dry worked.</p> <p>The site itself is currently mainly arable site with boundary hedgerows and trees. However, the loss of a large section of hedgerow is possible, with associated impacts upon protected species. Trees also occur within boundary hedgerows, some of which are likely to be lost.</p> <p>In the short term there are likely to be minor impacts upon local habitats and species from destruction of hedgerows and trees and dust deposition on habitats with some continued disturbance though dust deposition in the medium to long term. Restoration is to grassland and woodland, which is a positive effect in the medium to long term. Calcareous grassland and woodland/scrub will be biodiversity priorities here.</p> <p>Plan level / regional / wider effects There are unlikely to be impacts on upon Natura 2000 sites due to</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	proximity and type of development.							
2. To enhance or maintain water quality and improve efficiency of water use	<p><u>Proximity of water quality / quantity receptors</u> Site is in a NVZ (groundwater and surface water) and is located in Groundwater SPZ 2.</p> <p>Site is in the Humber River Basin Management District - nearest section of river is 'Cock Beck Catchment (tributary of River Wharfe) circa 420m away and possibly connected by steep continuous downward slope - moderate ecological status / 'does not require assessment' for chemical status. Overall status is moderate. Overall status objective is good by 2027. No RBMP lakes present. RBMP Groundwater: Site is in Wharfe Magnesian Limestone (poor quantitative quality / good chemical quality), overall status = poor. Groundwater Status Objective = good by 2027.</p> <p>Site is in Wharfe and Lower Ouse CAMS. Here water is available at low flows (at least 70% of time), with Cock Beck having 'water available for licensing'. Site is not in an area of restricted or no groundwater availability.</p> <p><u>Local effects</u> The coincidence of this site with Groundwater SPZ 2 means that there is the potential for the site to disrupt water flow to a water source (important to the local brewing industry). According to Environment Agency GP3 guidance the Agency would object to quarries in SPZ 1, and object if an unacceptable risk in SPZ 2. Quarrying can deprive the aquifer of its protective layer if dry worked. Fuel spills, even above the saturated zone, could contaminate the aquifer.</p> <p>Unless further processing of the mineral occurs risk will be confined to aquifer depletion if material is worked below the saturated zone (recent proposals suggest that elsewhere in the site working is dry so this is unlikely to be an issue), possible mobilisation of pollutants from overburden and the risk from spillages, which are potentially manageable through mitigation, monitoring and permitting. There may also be issues with materials used to restore the site. Run off from, for instance overburden stored at the site may also find its way to surface water. However these impacts are likely to be manageable through good site management. In summary, without mitigation impacts are moderate negative in the short and medium term,</p>		✓		✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>and neutral in the long term.</p> <p>Plan level / regional / wider effects There is potential that pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors The site is close to A64 giving reasonably good access to York, Leeds and Harrogate (12.5km, 12km and 19.5km respectively). Access: via an existing access to WJP04 (east) site area onto Old London Road bridleway and route would be then north on the bridleway onto unclassified U796 at Stutton and then via Moor Lane (C305) across the bridge over A64 which leads to A659 and A64.</p> <p>Light vehicles: estimate of seven two-way movements (estimate agreed by submitter). HGV vehicles: estimate of 48 two-way movements (estimate agreed by submitter).</p> <p>PRoW: this site is affected by a registered public right of way which must be kept clear of any obstruction until such time as an alternate route has been provided and confirmed by order.</p> <p>Rail: 4.3km east (to station at Ulleskelf) / nearest railhead 10.4km south-east; Strategic Road: junction at A64 circa 1.7km north-west; Canal / Freight waterway: 10km east</p> <p>Local effects Site would generate approximately 48 two way HGV movements per day which according to Highways Assessment is acceptable in terms of impact on the existing transport network.</p> <p>The site does not include a direct connection / frontage to a public highway. Given the proposed access on Old London Road mitigation such as passing places may be required. Sustainable travel modes are not likely to contribute to the site, and other users may be discouraged from using Old London Road (bridleway) as a result of increased quarry traffic and loss of amenity. Minor negative impact as a limited number of probably relatively short, though not insignificant, distance journeys are likely to be made. Traffic may be cumulative with other sites in the vicinity.</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors Site is not within a hazardous substances consultation zone or near to an AQMA. The nearest significant settlement is Stutton 270m north, and Cocksford lies 440m south. White Quarry Farm and Warren House Farm and other unnamed buildings are also reasonably nearby, between 80 and 250m away. Sensitive habitats include a patch of deciduous woodland 55m north. Further patches of deciduous woodland 28m, 150m and 192m north-north-west. Patch of deciduous woodland 180m south.</p> <p>Local effects Dust and traffic fumes will be the main inputs to air. Stutton, Cocksford, and the nearby farms / buildings may be with range of lower order dust emission, though woodland between the site and Stutton would shield most of that settlement (including the nearer parts). However, the priority woodland to the north and nearby SINC sites may experience dust deposition. Dust management would however be a priority for this site. Traffic from the site would largely be able to avoid receptors other than a small number of farm houses. The effect may however be cumulative with MJP23 and other sites which could raise dust levels either side of the road without mitigation.</p> <p>Plan level / regional / wider effects There are no air quality effects expected to the wider area.</p>		✓	✓		-	-	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Site is on Grade 2 ALC. In terms of land stability development does not lie within or adjacent to a Coal Board development high risk area.</p> <p>Local effects A potential 9ha of ALC Grade 2 (very good quality) land would be lost. This would represent a minor negative impact on farming and livestock. This land would be restored to grassland and woodland which is essentially a return to the baseline.</p> <p>Plan level / regional / wider effects The loss of very good agricultural land cumulatively could have an</p>	✓		✓		m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development ¹³² but could have a small scale effect on national food production capacity.							
6. Reduce the causes of climate change	<p><u>Proximity of factors relevant to exacerbating climate change</u> Patch of deciduous woodland 55m north. Further patches of deciduous woodland 30m, 150m and 190m north-north-west. Patch of deciduous woodland 180m south.</p> <p><u>Local effects</u> As climate change is a global issue, effects are reported in wider effects below.</p> <p><u>Plan level / regional / wider effects</u> There would be some loss of vegetation including hedgerows and trees from the site, while dust impacts on nearby woodland may reduce its productivity. However, these impacts are small scale and likely to be insignificant. The site would generate an estimated seven daily two-way light vehicle movements, and 48 HGVs daily two-way movements. The site is reasonably proximal to the strategic road network and a number of markets. Minor effect on the SA objective. Some positive effects are noted through restoration which includes woodland, which will offset some of the carbon released in the long term.</p>	✓			✓	-	-	+
7. To respond and adapt to the effects of climate change	<p><u>Proximity of factors relevant to the adaptive capacity¹³³ of a site</u> The site is in Flood Zone 1. Surface water flooding does not affect this site. Patch of EHN borders the northern edge of the site. Site is in Wharfe and Lower Ouse CAMS. Here water is available at low flows (at least 70% of time), with Cock Beck having 'water available for licensing'.</p> <p>Site is on ALC Grade 2 land.</p>					-	-	?

¹³² 9ha annualised across the 11 year life of the site would be an annual 0.8ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.8ha loss would represent a 0.03% contribution to this category of soil loss across England for each year of the site.

¹³³ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects Flooding is not a risk, and although there is an opportunity for sites working together to link the identified patch of EHN to a wider network to the east, there is no predicted detrimental effect without such mitigation (only a missed opportunity).</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will contribute to the need for limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted it may to a degree offset recycled materials that could potentially replace them. This works against the SA objective, so it is scored negatively.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		--	--	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects The site will import inert construction, demolition and excavation waste (approximately 600,000 cubic metres) to restore the site. The imported waste will be used in forming the proposed restoration landforms. The recovery of waste for infilling the site is considered a minor positive in the long term as it would divert this waste from landfill.</p> <p>Plan level / regional / wider effects The site may have an indirect negative effects in the short and medium term on the prioritising the management of waste down the waste hierarchy as a result of providing limestone and reducing the need to recycle limestone from other locations.</p>		✓		✓	-	-	+
10. To conserve or	<p>Proximity of historic environment receptors No Conservation Areas within 1km. Bramham Park (ID1,001,546) Grade I Registered Park and Garden is 4.4km west. Lotherton Hall Grade II is just outside</p>	✓		✓	✓	--	--	--

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
enhance the historic environment and its setting, cultural heritage and character	<p>search area at 5.1km south-west. No World Heritage Sites within 5km (may be some outside of Plan area as border is 2.3km west). London Road is noted as a historic route. Registered Battlefield: Battle of Towton, 390m south.</p> <p>Listed buildings: two listed buildings within 1km (two Grade II listed buildings at Stutton 640m north-east). Just outside of search area is Grade II listed windmill just south of Tadcaster (1.1km north). Grimston Lodge Grade II and 'Entrance Lodge, gates, piers and walls to south East of Grimston Lodge' Grade II (1.2km west).</p> <p>Named designated landscapes: Grimston Park 1.4km east (HNY5415 - Designed landscape - unidentified parkland). Just outside of search area at 2.1km south-west is Hazelwood Castle and Park HNY5481 designed landscape - country estate.</p> <p>There are recorded archaeological sites within the allocation area, nor does there appear to have been any archaeological work carried out prior to any of the quarrying taking place to the south. However, from evidence for the surrounding area, archaeological potential can be inferred, given the identification from aerial photographs of a number of possible settlement sites comprising of ditched enclosures and linear boundaries and trackways, likely to date from the later Iron Age / Romano-British periods. Furthermore, there may also be evidence within the topsoil of artefactual finds associated with the Battle of Towton, AD 1461. Such finds may be considered as nationally significant.</p> <p>The North Yorkshire HLC Project database identified that this allocation site is part of a larger area of planned enclosure which consists of irregular medium sized fields defined by regular external and straight internal hedgerows. This area has partial legibility due to about 50% boundary loss since the first edition. Some of the fields have been subdivided into much smaller units; however the overall change has been towards boundary loss.</p> <p>Local effects As this allocation site is a small part at the edge of a much larger area of similar character type, the proposed extraction is unlikely therefore to have a major impact upon the HLC.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>However, there could be impacts upon elements which contribute to the significance of the registered battlefield, which is a site of national significance and importance. For instance, example elevated noise, and increased traffic may impair the experience of a visitor to the Battle of Towton Registered Battlefield. The infrastructure associated with extraction processes may also have a visual effect upon the site. Historic England¹³⁴ would consider this a showstopper due to proximity and the potential visibility of the site. Any proposed site here would need further investigation to establish if the constraint could be overcome. The initial impression is that the site would have the potential to harm the significance of battlefield. To overcome this constraint there would need to be a satisfactory outcome to a robust assessment from the submitter of the contribution this site makes to the understanding, appreciation and enjoyment of the battlefield site. Hazelwood Castle (Grade I) is probably sufficiently distant to exclude effects, but needs to be evaluated from the perspective of its views and setting (including the parkland estate).</p> <p>An archaeological impact will occur throughout the duration of extraction. It is assumed that excavation will result in the total destruction of the archaeological remains. As archaeology is a finite, irreplaceable resource, the impact will therefore be significant. However, it is expected that investigation/ excavation works required by the Joint Plan Policy D08 (Historic Environment) – <i>'mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.'</i> would result in an effect of no greater than minor negative.</p> <p>However, it is acknowledged that there is a level of uncertainty about this effect because there is no evidence from prior archaeological evaluation.</p> <p>There may not be any way of fully mitigating historic environment impacts in the more sensitive locations.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							
	<p>¹³⁴ National policy guidance indicates that Registered Battlefields are regarded as being in the category of designated heritage assets of the highest significance where substantial harm to their significance should be wholly exceptional.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> No National Parks, AONBs or Heritage Coast within 10km. No ITE land within 5km.</p> <p>Site is In Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by policy SP18: 'The high quality and local distinctiveness of the natural and man-made environment will be sustained by: identifying, protecting and enhancing locally distinctive landscapes'</p> <p>North Yorkshire LCA: Magnesian Limestone Ridge: Moderate to high visual sensitivity (as a result of the prominent nature of the ridge and inter-visibility with adjacent Vale Farmland with Dispersed Settlements and Vale Farmland with Plantation Woodland Landscape Character Types'); High ecological sensitivity (as a result of the presence of nationally important habitats sensitive to changes in land management). High landscape and cultural sensitivity as a result of the nationally significant Neolithic and Bronze Age monuments, in addition to the predominantly intact landscape pattern and several designed estates which are sensitive to changes in land management. In Selby LCA the Site is in 'West Selby Ridge' LCA / LCA type 'Rolling Wooded Farmland'.</p> <p>Site is in the Green Belt for West Yorkshire. In terms of tranquillity the area is disturbed.</p> <p><u>Local effects</u> Site would be compatible with Green Belt if restored to appropriate after use. The site is higher in the landscape than the existing Old London Road quarry, and it extends almost to the top of a local ridge, Wingate Hill. This may make it visible from receptors such as the undesignated Grimston Park estate (which unmitigated may warrant a landscape objection). It would also bring the site very close to the Jackdaw Crag operation.</p> <p>It is unlikely to be possible to fully mitigate views of the operational area. The site is partly screened. It will be screened from the north by the wooded ridge of Wingate Hill. It may be largely screened from the east by topography and woodland. However it would be open to the south-east, south and south-west, including potentially views from the A162 to the east.</p> <p>Vehicles from Jackdaw Crag Quarry do not pass this way (though they may both go north to access the</p>	✓	✓	✓	✓	m-	m-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>A64) – the only nearby roads are very minor so greater disturbance to tranquillity may occur.</p> <p>The landscape is increasingly one of artificial landforms in an area of smooth / convex slopes. In this area there is the potential to improve existing quarries, but the preference would be to avoid significantly more new quarries.</p> <p>On site buildings would also need to be screened.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to A64 giving reasonably good access to York, Leeds and Harrogate (12.5km, 12km and 19.5km respectively)</p> <p>Local effects This site is expected to provide 2.25 million tonnes of limestone to the market. This would make a significant contribution to the building sector by helping to boost supply of a key building material (aggregate or building stone). It would also directly support jobs in extraction and freight. The effect overall is considered to be positive in the short and medium term and neutral in the long term as a result to positive of restoration plans.</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD Tadcaster West - not in most deprived 20%. Stutton is the nearest Settlement 480m north-east. Tadcaster is 1.3km north. Towton is 1.4km south.</p> <p>In Selby Core Strategy Towton and Stutton are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "<i>Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities</i>". Tadcaster is a 'Local Service Centre' in the Selby Core Strategy, for which policy SP2 allows further housing, employment, retail, commercial and leisure growth 'appropriate to the size and role of each settlement'.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects Stutton is largely screened from the site and most other communities are too distant to experience significant amenity impacts that may impact on tourism etc. and the sites proximity to the A64 generally avoids community receptors. The site will provide some job opportunities for local communities.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A public right of way (Bridleway 35.63/9/3) runs immediately adjacent to the western edge of this site. Further to the west lies the adjoining Bridleway 35.63/6/3). To the (208m north) north lies bridleway 35/63/10/1 which leads to Stutton.</p> <p>Local effects The bridleway immediately adjacent to this site will potentially see the view change from open fields to a void, and dust and noise are likely to be issues for users. The bridleway to the north is screened through the bridleway to the west may become a more distant visual receptor for this site. Footpaths are likely to be used predominantly by local users.</p> <p>Access would be onto the Old London Road bridleway and route would be north on the bridleway onto unclassified U796. There would be potential negative impacts for users of the bridleway including increased traffic impacts and loss of amenity (noise and dust).</p> <p>In relation to leisure and access, mitigation would need to come in the form of alternative bridleways / access tracks and screening. But very little that could be done to fully mitigate / compensate the impact on public rights of way. HGVs should avoid sharing bridleway space with other users.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	m-	m-	0
15. To protect and improve the wellbeing, health and safety of local	<p>Proximity to population / community receptors / factors relevant to health and wellbeing No schools or health centres within 1km. Nearest settlement is Stutton 270m to the north east. High Pressure Gas Pipeline Feeder 7 crosses this site.</p> <p>Local effects There is some uncertainty as to whether Stutton would experience noise impacts from this site, and there is also a small risk of dust. Vibration from vehicles may also affect properties along the</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
communities	<p>access route. A further concern is the right of way that runs along the edge of this site which could encourage trespass onto the site putting individuals at risk without mitigation. Traffic from this site may combine with other sites to raise accident levels.</p> <p>The presence of energy infrastructure across the site is noted and arrangements to mitigate for this (e.g. by liaising with energy distributors) will be a prime consideration.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1. Surface water flooding does not affect this site.</p> <p>Local effects Flooding is not a significant issue.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a significant contribution to self-sufficiency in the supply of Magnesian limestone.</p> <p>Plan level / regional / wider effects The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>¹³⁵</p> <p><u>Planning Context</u>: Stutton is the nearest Settlement 480m north-east. Tadcaster is 1.3km north. Towton is 1.4km south.</p> <p>In Selby Core Strategy Towton and Stutton are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities'. Tadcaster is a 'Local Service Centre' in the Selby Core Strategy, for which policy SP2 allows further housing, employment, retail, commercial and leisure growth 'appropriate to the size and role of each settlement'. No allocations with this site (though Green Belt and Locally Important Landscape Area policies apply (see objective 11).</p> <p><u>Joint Minerals and Waste Plan Sites</u>: Discounted sites MJP53 and WJP04 lie adjacent to the west and south. MJP58 is 230m south, MJP23 is 630m north-west.</p> <p><u>Historic Minerals and Waste Sites</u>: There are historic granted applications (extraction) associated with the Jackdaw Crag quarry site 630m northwest. Adjacent there are a number of historic granted applications associated with Old London Road (extraction and landfill). There are 3 further historic landfill applications to the east within 2km.</p> <p><u>Transport</u>: Traffic from this site may combine with other sites en route to the A64 which could increase dust, noise, pollution and accident levels either side of the road without mitigation. Receptors in this area are limited.</p>							
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however (particularly effects on the Registered Battlefield). This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including protected species and habitats. • Any proposals for the development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. 								

¹³⁵ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

- Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise, dust, fumes, vibration and cumulative impact of quarry in the area
- Design to mitigate impacts to heritage assets, landscape features and rights of way.
- Design to mitigate impact on very good quality agricultural land and to protect high quality soil resources.
- Specific proposals would need to demonstrate consistency with Green Belt policy, including maintaining openness and not conflicting with the purpose of Green Belt designation.
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt.

MJP53 – Land to North of Old London Road Quarry, Stutton

Site Name	MJP53 Land to the north of Old London Road Quarry, Stutton, Selby (XY 446963 440600)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of Magnesian limestone and import of construction and excavation waste for use in forming proposed restoration landform
Size	18ha
Proposed life of site	20 years (extraction)
Notes	<p>Restoration: No detailed design yet, but would be to a bowl shape with pasture in the base of the bowl, with sloping sides formed from imported material (which would be restored to grassland and woodland).</p> <p>The stone will be removed to 15.2m AOD from a surface level of 57m AOD.</p> <p>Up to 600,000 tonnes of quarry fines from MJP53 would be transported to the site WJP04 from temporary storage pending use (by placement over the imported waste) in restoration of MJP53 site.</p> <p>Once infilling starts at the quarry in 2026, by import of 1,000,000 cubic metres of construction and excavation waste the floor will be filled to provide the 2m soil thickness for pasture in the base of the bowl and the faces will be filled against to provide the slopes. The slopes will start at 17m AOD and rise to the surface, crest of the face which will be at the 57m to 60m AOD.</p>

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and	<p>Proximity of international / national and local designations and key features Natura 2000: The site is 11.5km north-west of Kirk Deighton SAC. Three SSSIs within 5km: Stutton Ings 800m east, Tadcaster Mere 3.3km north-east and Kirkby Wharfe 3.5km east.</p> <p>There are 16 SINCS within 2km with two within 500m: Wood near Wingate Hill Farm (SE44-16, deleted</p>	✓		✓		-	-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
improve habitat connectivity	<p>SINC) 50m north-east and Renshaw Wood, Womersley (SE44-19, pre-existing SINC) 375m south-east.</p> <p>Priority Habitats: an area of deciduous woodland lies adjacent to the site to the north. Six further areas lie to the north-east, east and south-east within 200m. No ancient woodland on site or adjacent.</p> <p>Local effects Impacts on SSSIs are most likely to be associated with dust deposition, though the nearest SSSI is 800m away and significant impact is unlikely. The site itself is currently arable farmland with boundary hedgerows and trees. However, the loss of hedgerows and trees is likely, with potential impacts upon associated species such as foraging bats, badger, brown hare, farmland birds and hedgerow birds.</p> <p>In the short term there are likely to be minor impacts upon local habitats and species from destruction of hedgerows and trees and dust deposition on habitats with some continued disturbance though dust deposition in the medium to long term. Restoration to pasture / grassland / woodland has the potential to lead to positive impacts in relation to biodiversity through sympathetic restoration, including creation of priority habitats which will link with other semi natural habitats and a commitment to long term management. Calcareous grassland and woodland / scrub will be biodiversity priorities here.</p> <p>There is also a possible cumulative effect from mitigation, where the adjacent sites, if co-ordinated with MJP53 in terms of restoration, could contribute to the EHN.</p> <p>Plan level / regional / wider effects There are unlikely to be impacts on upon Natura 2000 sites due to proximity and type of development.</p>							?
2. To enhance or maintain water quality and improve efficiency of	<p>Proximity of water quality / quantity receptors The site is in a NVZ (groundwater and surface water) and the northernmost 10% of the site lies in SPZ 1, the central 70% lies in SPZ 2 and the southern 20% lies in SPZ 3.</p> <p>The site is in the Humber River Basin Management District, with the nearest section of river 'Cock Beck</p>	✓	✓	✓	✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
water use	<p>Catchment (tributary of River Wharfe) approximately 330m and possibly connected by steep continuous downward slope – moderate ecological status / 'does not require assessment' for chemical status. Overall status is moderate. Overall status objective is good by 2027. No RBMP lakes present. RBMP Groundwater: Wharfe Magnesian Limestone (poor quantitative quality / good chemical quality), overall status: poor. Groundwater Status Objective: good by 2027.</p> <p>Site is in Wharfe and Lower Ouse CAMS. Here water is available at low flows (at least 70% of time).</p> <p>Local effects Although this site contains a small area of SPZ 1 (associated with brewing industry), which would be a major constraint if it were quarried, it should be possible to quarry around this small area.</p> <p>Elsewhere on site quarrying can deplete the aquifer, for instance by discharging groundwater to the surface during dewatering (if quarrying is in the saturated zone occurs) or if dry worked, quarrying can deprive the aquifer of its protective layer making it vulnerable to fuel spills. Such risks are potentially manageable through mitigation, monitoring and permitting. There may also be issues with materials used to restore the site. Run off from, for instance overburden stored at the site may also find its way to surface water. However, these impacts are also likely to be manageable through good site management, though surface drainage patterns may change permanently In summary, without mitigation impacts are major negative in the short, medium and long term.</p> <p>Plan level / regional / wider effects There is potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>							?
3. To reduce transport miles and associated emissions from transport and encourage the use of	<p>Proximity of transport receptors The site is close to A64 giving reasonably good access to York, Leeds and Harrogate (15km, 14km and 20km respectively). Access: exact location of access not known yet, but likely to be in the south east corner of the site onto the Old London Road (bridleway), or Chantry Lane (bridleway), and then onto the unclassified U796 at Stutton, and then onto Moor Lane (C305) in the direction of the bridge over A64, which leads to A659 and A64.</p> <p>Light vehicles: seven two-way daily movements (estimate); HGVs: 48 two-way daily movements</p>		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
sustainable modes of transportation	<p>(estimate).</p> <p>PRoW: this site is bordered by registered public rights of way along Chantry Lane and Old London Road, these must be kept clear of any obstruction until such time as an alternate route has been provided and confirmed by order.</p> <p>Rail: 4.3km east (to station at Ulleskelf) / nearest railhead 10.4km south-east. Strategic Road: Junction at A64 approximately 1.3km north-west (direct) Canal / Freight waterway: 10km east.</p> <p>Local effects The site would generate approximately 48 two way HGV movements per day which according to Highways Assessment is acceptable in terms of impact on the existing transport network.</p> <p>The site does not include a direct connection / frontage to a public highway. Given the proposed access by HGV traffic along Old London Road passing places may be required. Sustainable travel modes are not likely to contribute to the site, and other users may be discouraged from using Old London Road (bridleway) as a result of increased quarry traffic and loss of amenity. Negligible to minor negative impact as a limited number of probably relatively short, though not insignificant, distance journeys are likely to be made. Traffic may be cumulative with other sites in the vicinity.</p> <p>Plan level / regional / wider effects A travel assessment is required. This site is not likely to generate significant travel demand.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is not within a hazardous substances consultation zone or near to an AQMA. The nearest settlement is Stutton (800m north-east). Sugar Hill Farm (330m north-east), Wingatehill Farm (280m north-east), Warren House Farm (310m north-west) and White Quarry Farm (380m south-west) all lie in close proximity. Sensitive habitats include an area of deciduous woodland adjacent to the site to the north and six further areas to the north-east, east and south-east</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>within 200m.</p> <p>Local effects Dust and traffic fumes will be the main inputs to air. Stutton and the nearby farms may be within range of lower order dust emission (though woodland between the site and Stutton and Sugar Hill Farm would shield most of those receptors). However, the priority woodland to the north may suffer from dust deposition on leaves and ground flora during dry spells (though this may not be significant). Dust management would however be a priority for this site. Traffic from the site would pass by a number of farm houses close to the site and through an area of Tadcaster to reach the strategic road network. The effect may be cumulative with MJP23 (part of this site is allocated, and part excluded), MJP31 (discounted site), MJP58 (discounted site) and other sites which could raise dust / noise / vibration levels without mitigation.</p> <p>Plan level / regional / wider effects There are no air quality effects expected to the wider area.</p>							?
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Majority of site lies in Grade 2 ALC (very good quality), northern tip of site lies in Grade 3 (good to moderate). In terms of land stability development does not lie within or adjacent to a Coal Board development high risk area.</p> <p>Currently Selby Council have no sites determined as 'contaminated' as defined under the Environmental Protection Act 1990. Greenfield site – no known risk factors for contaminated land.</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects A potential 18ha of ALC Grade 2 and 3¹³⁶ land would be lost. This would represent a moderate negative impact.</p> <p>Plan level / regional / wider effects The loss of very good agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development¹³⁷ but could have a small scale effect on national food production capacity.</p>							?
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change There is an area of deciduous woodland adjacent to the site to the north and six further areas to the north-east, east and south-east within 200m. Hedgerows and trees are also present onsite.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects There would be some loss of vegetation including hedgerows and trees from the site, while dust impacts on nearby woodland may reduce its productivity. An annual output of up to 200,000 to 300,000 tonnes per year¹³⁸ would significantly and permanently add to greenhouse gas emissions due to the energy required to extract and transport these primary materials. Traffic from the site; estimated to be seven two-way daily light vehicle movements and 48 two-way daily HGV movements. The site is reasonably proximal to the strategic road network and a number of markets</p>	✓			✓	m-	m-	0

¹³⁶ ALC Grade 3 land is sub-divided into Grade 3a and 3b, with the best and most versatile agricultural land ALC Grade 1 to 3a. Without further investigation it is not known whether Grade 3 land at this site is 3a or 3b and best and most versatile. For the purposes of this SA the precautionary principle approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

¹³⁷ 18ha annualised across the 20 year life of the site would be an annual 0.9ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.9ha loss would represent a 0.04% contribution to this category of soil loss across England for each year of the site.

¹³⁸ Proposals for new mineral extraction at a rate in excess of 75,000 tonnes per annum should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has been applied also to minerals output for the purposes of Development Management, Policy D11.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	(though these are relatively dispersed). In the short and medium term a moderate negative effect is expected, while this would be neutral in the long term following restoration.							
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹³⁹ of a site The site is in Flood Zone 1. Surface water flooding does not affect this site. An area of EHN habitat lies adjacent to the northern edge of the site. The site is located within S19 Limestone Ridge sub-regional Green Infrastructure network.</p> <p>Site is in Wharfe and Lower Ouse CAMS. Here water is available at low flows (at least 70% of time).</p> <p>Majority of the site lies in Grade 2 ALC land (very good quality), northern tip of site lies in Grade 3 (good to moderate quality).</p> <p>Local effects Flooding is not a significant risk, and although there is an opportunity for sites working together to link the identified patch of EHN to a wider network to the east, there is no predicted detrimental effect without such mitigation. Benefits are expected in the long term with the creation of habitats – grassland and woodland.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to</p>		✓	✓		-	-	+

¹³⁹ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p><u>Proximity of factors relevant to the resource usage of a site</u> No spatial factors identified.</p> <p><u>Local effects</u> This site will contribute to the need for limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted it may to a degree offset recycled materials that could potentially replace them. However, this impact can only be considered at the plan level rather than in relation to an individual site. This works against the SA Objective, so it is scored negatively.</p> <p><u>Plan level / regional / wider effects</u> Considered to be the same as local effects.</p>	✓		✓		--	--	--
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to managing waste higher up the waste hierarchy</u> No spatial factors identified.</p> <p><u>Local effects</u> The site will import inert construction, demolition and excavation waste to restore the site. The imported waste will be used in forming the proposed restoration landforms. The recovery of waste for infilling the site is considered a minor positive in the long term as it would divert this waste from landfill.</p> <p><u>Plan level / regional / wider effects</u> The site may have an indirect negative effects in the short and medium term on the prioritising the management of waste down the waste hierarchy as a result of providing limestone and reducing the need to recycle limestone from other locations.</p>		✓		✓	-	-	+
10. To conserve or enhance the	<p><u>Proximity of historic environment receptors</u> No Conservation Areas within 1km. Bramham Park (ID1,001,546) Grade I Registered Park and Garden is 3.9km west. Lotherton Hall Grade II Registered Park and Garden lies 4.6km south-west. Battle of Towton Registered Battlefield lies 350m south. No</p>	✓		✓	✓	--	--	--

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
historic environment and its setting, cultural heritage and character	<p>World Heritage Sites within 5km.</p> <p>Listed buildings: two listed buildings within 1km (two Grade II listed buildings at Stutton 880m north-east). Several Listed Buildings lie around Hazelwood Castle 2km to the west, including Grade I Listed Hazelwood Castle and Roman Catholic Chapel of St Leonard.</p> <p>Named designated landscapes: Grimston Park 1.6km east (HNY5415 – Designed landscape – unidentified parkland), Hazelwood Castle and Park HNY5481 (designed landscape – country estate) 1.5km south-west.</p> <p>There are no currently recorded archaeological sites within the allocation area, nor does there appear to have been any archaeological work carried out prior to any of the quarrying taking place to the east and south. However, from evidence for the surrounding area, archaeological potential can be inferred.</p> <p>The North Yorkshire HLC project records this area (database record number HNY5154) as part of a larger area of modern improved fields which has resulted in a large degree of boundary loss over this area. It consists of large irregular fields defined by erratic hedgerow boundaries. These include some areas of strip fields, piecemeal and planned enclosure. The legibility attribute value of this HLC type is classed as fragmentary, a term which is employed where the previous historic character is only slightly visible within the landscape.</p> <p>Local effects As this allocation site is a small part at the edge of a much larger area of similar character type, the proposed extraction is unlikely to have a major impact upon the HLC of the immediately surrounding area although it is acknowledged that within the site the HLC will become invisible as development will replace an earlier field system. As 20% of the HLC project area has been identified as modern improved fields, this effect is not considered to be significant.</p> <p>There could also be impacts upon elements which contribute to the significance of the Registered Battlefield, which is a site of national significance¹⁴⁰ and importance such as elevated noise, and increased traffic from the extraction and transportation of materials. The infrastructure associated with</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>extraction processes may also have a visual effect upon the site which may be detrimental to its setting. The size of this site and its slope towards the Registered Battlefield means that the relationship with the Battlefield site is likely to result in a major negative effect.</p> <p>An archaeological impact may occur during the operation of the site. It is assumed that excavation will result in the total destruction of the archaeological remains. As archaeology is a finite, irreplaceable resource, the impact will therefore be significant. However, it is expected that investigation/ excavation works required by the Joint Plan Policy D08 (Historic Environment) '<i>mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>' would result in an effect of no greater than minor negative.</p> <p>It is also acknowledged that there is a level of uncertainty about this effect because there is no evidence from prior archaeological evaluation.</p> <p>Plan level / regional / wider effects None noted.</p>							
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, AONBs or Heritage Coast within 10km. No ITE land within 5km.</p> <p>Site is in the Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by policy SP18: '<i>The high quality and local distinctiveness of the natural and man-made environment will be sustained by: identifying, protecting and enhancing locally distinctive landscapes.</i>'.</p> <p>North Yorkshire LCA: Magnesian Limestone Ridge: Moderate to high visual sensitivity / high ecological sensitivity / high landscape and cultural sensitivity. In Selby LCA Site is in 'West Selby Ridge' Landscape</p>	✓	✓	✓	✓	m-	m-	m-

¹⁴⁰ National policy guidance indicates that Registered Battlefields are regarded as being in the category of designated heritage assets of the highest significance where substantial harm to their significance should be wholly exceptional.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Character Area / LCA type 'Rolling Wooded Farmland'.</p> <p>Site is in Green Belt for West Yorkshire. In terms of tranquillity the area is disturbed.</p> <p>The site lies on sloping ground within a hilly part of the Magnesian Limestone Ridge, and in the north it reaches the top of Wingate Hill, the highest point in the ridge dividing it from Jackdaw Crag quarry (300m north-west). The site is in an open area with partial screening to the north however it is unlikely to be possible to fully mitigate views of the operational area and the site is currently visible from the south and east. There is only one field between this site and Jackdaw Crag Quarry, and its position on a slope makes the site highly visible.</p> <p>Local effects The site would be compatible with Green Belt if restored to appropriate after uses.</p> <p>Vehicles from Jackdaw Crag Quarry do not pass this way (though they may both go north to access the A64) – the only nearby roads are very minor so greater disturbance to tranquillity may occur. Effects are predicted to be moderate negative depending upon the phasing and location of working as soil stripping, storage and movement of plant can be visually intrusive. The final effects following extraction would be difficult to mitigate, (though a steep-sided void is avoided due to imported material being used to create sloping sides) and will result in low level restoration, which would be difficult to integrate into the surrounding countryside. There would be a loss of productive Grade 2 and 3 farmland which is currently in HLC (so recent conservation gains may, through this site, ultimately be lost). The effects would be cumulative with nearby and adjoining quarries.</p> <p>Plan level / regional / wider effects None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to A64 giving reasonably good access to York, Leeds, Harrogate and Selby (15km, 14km, 20km and 17km respectively).</p> <p>Local effects This site is estimated to deliver five million tonnes of limestone to the market. This would make a significant contribution to the building sector by helping to boost supply of a key building material. It would also directly support jobs in extraction and freight. The long term effect includes a neutral impact which is anticipated if the site is restored to agriculture and natural areas.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD rank – 15% of the site is within Saxton and Ulleskelf, 85% is within Tadcaster West – with neither within the most deprived 20%.</p> <p>Local effects Stutton is largely screened from the site and most other communities are too distant to experience significant amenity impacts that may impact on tourism etc. and the site's proximity to the A64 generally avoids community receptors. The site will provide some job opportunities for local communities.</p> <p>Plan level / regional / wider effects Not applicable to this site.</p>		✓	✓		0	0	0
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors A bridleway runs along the eastern (35.44/5/1) and western boundary (35.63/6/3) of the site along Old London Road and Chantry Lane. To the north east (215m) lies bridleway 35/63/10/1 which leads to Stutton.</p> <p>Local effects The bridleway immediately adjacent to this site to the east will form the access track to the site and bridleway to the north-east could be affected by vehicles using the site. The experience of users of both the bridleways is likely to be disrupted by the presence of the quarry and associated traffic, noise, dust and landscape impacts. Bridleways are likely to be used predominantly by local users and therefore the effect is considered to be moderate negative during the operational period of the quarry.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> There are no schools or health centres within 1km. Nearest settlement is Stutton (800m) to the north-east.</p> <p><u>Local effects</u> There is some uncertainty as to whether Stutton would experience noise impacts from this site, and there is also a small risk of dust. A number of individual properties lie within 500m of the site and access routes and although some screening is in place to reduce visual impacts, dust and noise may still be elevated at these receptors. A further concern is the rights of way that run along the edge of this site which could encourage trespass or road traffic risk onto the site putting individuals at risk without mitigation.</p> <p>A high pressure gas pipeline crosses this site so this may need to be diverted.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓	✓	-	-	0
16. To minimise flood risk and reduce the impact of flooding	<p><u>Proximity to flood zones</u> The Site is in Flood Zone 1. Surface water flooding does not affect this site.</p> <p><u>Local effects</u> Flooding is not a significant issue.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> The site would make a contribution to self-sufficiency in the supply of Magnesian limestone.</p> <p><u>Plan level / regional / wider effects</u> The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>¹⁴¹</p> <p><u>Planning Context</u>: Stutton is the nearest Settlement 480m north-east. Tadcaster is 1.3km north. Towton is 1.4km south.</p> <p>In Selby Core Strategy Towton and Stutton are 'Secondary Villages with defined Development Limits'. These are covered by policy SP2 in the Selby Core Strategy: "<i>Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities</i>". Tadcaster is a 'Local Service Centre' in the Selby Core Strategy, for which policy SP2 allows further housing, employment, retail, commercial and leisure growth 'appropriate to the size and role of each settlement'. No allocations with this site (though Green Belt and Locally Important Landscape Area policies apply (see objective 11).</p> <p><u>Joint Minerals and Waste Plan Sites</u>: Discounted Sites: Site MJP23 (Excluded area) is 250m north, MJP31 is adjacent to Old London Road to the east. Allocated site MJP23 is 300m north-west.</p> <p><u>Historic Minerals and Waste Sites</u>: There are historic granted applications (extraction) associated with the Jackdaw Crag quarry site 630m northwest. Adjacent there are a number of historic granted applications associated with Old London Road (extraction and landfill). There are 3 further historic landfill applications to the east within 2km.</p> <p><u>Transport</u>: Traffic from this site may combine with other sites en route to the A64 which could increase dust, noise, pollution and accident levels either side of the road without mitigation. Receptors in this area are limited.</p>							
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however (particularly effects on the Registered Battlefield). This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including protected species and habitats. • Any proposals for the development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. 								

¹⁴¹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Mitigation requirements identified through Site Assessment process

- Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise, dust, fumes, vibration and cumulative impact of quarry in the area
- Design to mitigate impacts to heritage assets, landscape features and rights of way.
- Design to mitigate impact on very good quality agricultural land and to protect high quality soil resources.
- Specific proposals would need to demonstrate consistency with Green Belt policy, including maintaining openness and not conflicting with the purpose of Green Belt designation.
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt.

MJP58 – Old London Road, Stutton

Site Name	MJP58 Old London Road Recycling, Stutton, Selby (XY 447108 440321)
Current Use	Former quarry and landfill
Nature of Planning Proposal	Extraction of Magnesian limestone, secondary aggregate recycling, storage of mineral fines and partial infilling with imported mineral fines material.
Size	3.0ha
Proposed life of site	6 years
Notes	Restoration: Site to be restored to pasture and woodland using imported materials (300,000 tonnes) by grading into slopes to meet the original ground levels on the west, north and east sides of the site.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Natura 2000 sites: 12km north-west – Kirk Deighton SAC. There are three SSSIs within 5km – Stutton Ings 480m east, Tadcaster Mere 3.5km north-east, Kirkby Wharfe 3.1km east.</p> <p>SINC: 19 SINCS within 2km. Of these three lie within 500m: Renshaw Wood, Womersley (SE44-19, pre-existing SINC) 20m south-east, Stutton Railway Track (SE44-05, ratified SINC) 470m east, Wood near Wingate Hill Farm (SE44-16, deleted SINC) 495m north.</p> <p>UK Priority Habitats: A small area of deciduous woodland covers the eastern corner of the site (approximately 3% of site – this may be a mapping anomaly). One further area of deciduous woodland lies within 200m of the site (area 140m to the north-east). An area of ancient replanted woodland (PAWS) lies approximately 200m south of the site.</p>	✓		✓		m-	m-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Networks: circa 5% of site covered by EHN (core woodland) in eastern edge of site. Circa 30% of site lies within NY27 Wharfe-Ouse 'Living Landscape' Corridor. Site lies entirely within Limestone Ridge sub-regional GI corridor (recognised as a sub-regional GI corridor in the Selby Core Strategy (SP12).</p> <p>The site is a former quarry and the habitats that may have regenerated or been restored on site need to be assessed, but given the site conditions at the time of site visit and surrounding habitats it is likely to contain grassland, scrub, and various small trees. There also appears to be small water bodies onsite. This site therefore has the potential to support priority habitats of calcareous grassland and scrub and shallow wetlands. Associated species could include foraging bats, nesting birds, great crested newt, butterflies and dragon flies. There is the possibility that Cock Beck supports otter and water vole so any works in the southern part of the site may have an impact on these species.</p> <p>Local effects There are links from the site to the Stutton Ings SSSI via Cock Beck. Possible risks come from dust deposition and water discharge / run off from the site.</p> <p>No invasive species are known at this site, although the hydrological link with Cock Beck means that there is the potential for invasive species that are present to be spread.</p> <p>Any work on this site would require further information to understand the implications for the biodiversity that is now likely to be present.</p> <p>Overall, in the short and medium term moderate negative effects could occur due to links to the Stutton Ings SSSI with minor negative effects due to loss of habitat and disturbance of species on site. In the long term, there is the possibility for benefits as the site is restored to pasture and woodland (provided this is sympathetic to biodiversity and long term management is agreed.</p> <p>Plan level / regional / wider effects It is considered unlikely that there will be any significant effect on Natura 2000 sites due to the proximity and type of development.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is in NVZ (groundwater and surface water). Site lies in SPZ 3.</p> <p>In the Humber River Basin Management Plan the nearest section of river is 'Cock Beck Catchment (tributary of River Wharfe) adjacent to the site – moderate ecological status / 'does not require assessment' for chemical status. Overall status is moderate. Overall status objective is good by 2027. No RBMP lakes present. RBMP Groundwater unit is Wharfe Magnesian Limestone (poor quantitative quality / good chemical quality), overall status: poor. Groundwater Status Objective: good by 2027. Site is in Wharfe and Lower Ouse CAMS. Here water is available at low flows (at least 70% of the time), with Cock Beck having 'water available for licensing'. Site is not in an area of restricted or no groundwater availability.</p> <p>Local effects The location of the site adjacent to a water body of moderate status ('Cock Beck') is likely to result in heightened possibility for contamination to the water environment. Run-off from stored secondary aggregate materials onsite could be an issue without mitigation in place. The location of the site in SPZ 3 also means that pollution incidents such as fuel spills, even above the saturated zone, could contaminate the aquifer (important for the brewing industry) without appropriate mitigation.</p> <p>Overall risk to the water environment is considered to be low, though some additional mitigation may be needed to deal with any risk to Cock Beck and the SPZ. As Cock Beck is a main river it will be important to maintain the appropriate standoff to the watercourse without permission from the Environment Agency. Effects are neutral following restoration.</p> <p>Plan level / regional / wider effects There is potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>		✓	✓	✓	-	-	0
3. To reduce transport miles and associated emissions from transport and	<p>Proximity of transport receptors The site is close to A64 giving reasonably good access to York, Leeds and Harrogate (15km, 18km and 20km respectively); Access: access road over bridleway into former Old London Road (east) Quarry and then via the existing Old London Road (east) Quarry access (which is near the north-east corner of that site) onto the tarmacked surfaced part of the Old London Road bridleway. In the long-term (medium term in this assessment) the existing former access road in north</p>		✓		✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
encourage the use of sustainable modes of transportation	<p>east corner of the Old London Road (west) Quarry would be used once the area had been in-filled to enable the link to the tarmacked surfaced part of the Old London Road bridleway to be reinstated. Route would then be from the bridleway onto the unclassified U796 at Stutton and onto Moor Lane (C305) towards the bridge over A64 which leads to A659 and A64. In the long-term the existing former access in north-east corner of the Old London Road (west) Quarry would be used once the area had been filled in to enable the link to the tarmacked surfaced part of the Old London Road bridleway to be reinstated.</p> <p>Light Vehicles: seven two-way movements (estimate); HGV vehicles: 50 two-way movements (sourced from screening opinion request NY/2013/0165/SCR).</p> <p>PRoW: the site is accessed via a bridleway in short term and going into the medium term via a shorter section of bridleway.</p> <p>Rail: 4.2km east (to Ulleskelf station) / nearest known railhead: circa 10km south. Strategic Road: A64 is 1.2km north, A162 is 1.3km east (both timber routes); Canal / Freight waterway: River Ouse is 10km east.</p> <p>Local effects The site would generate 50 two way HGV daily movements and seven daily two way light vehicle movements which would be on to a bridleway (although this route may be familiar with vehicle movements due to its former use as a quarry), with efforts to reinstate a section of the bridleway in the medium term. The Highways Assessment concludes that the site has no direct connection / frontage on to a highway maintainable at the public expense, though HGV use on access roads is acceptable and no travel plan would be required. Sustainable transport would be unlikely to contribute. The route goes near to Stutton and out along a road that is likely to be used by other quarries, so a cumulative impact is likely (e.g. could cause congestion). Moderate negative impact. Cumulative risk needs greater examination for this group of sites.</p> <p>Alternative routes and mitigation (e.g. passing places) could be considered for this site, for instance the route past White Quarry Farm.</p> <p>Plan level / regional / wider effects None noted.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors Not within a hazardous substances consultation zone or AQMA.</p> <p>Local effects The nearest settlement is Stutton approximately 1km north-east. Willow Farm (250m south), White Quarry Farm (650m west) and a property circa 600m east are also in close proximity. The estimated annual tonnage of waste import is 100,000 tonnes while 15,000 tonnes would be extracted and 50,000 tonnes recycled, which could lead to direct dust emissions. It is also considered that traffic to site could generate dust along the access track and could combine with traffic to the A64 from other sites close by to generate raised dust and emissions. This is expected to have minor impacts due to limited human receptors and the limited / insignificant sensitivity of woodland receptors.</p> <p>Plan level / regional / wider effects There are no air quality effects expected to the wider area.</p>		✓	✓	✓	-	-	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors The northern part of the site is ALC Grade 2 (very good) and southern part of the site is ALC Grade 3 (good to moderate). However, this land has already been quarried and a formal restoration scheme does not appear to have been implemented (it appears that the land has been left to re-vegetate naturally). In terms of land stability development does not lie within or adjacent to a Coal Board development high risk area.</p> <p>Local effects Potentially 3ha of Grade 2 and 3¹⁴² land would be lost. This would represent a negative impact. Following restoration there would be positive impacts upon soil quality and land use. However there is some uncertainty in this assessment as details of the restoration scheme are currently unclear as to what the balance between productive land and other habitats would be.</p> <p>Plan level / regional / wider effects The loss of very good agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is</p>	✓		✓		-	-	0

¹⁴² ALC Grade 3 land is sub-divided into Grade 3a and 3b, with the best and most versatile agricultural land ALC Grade 1 to 3a. Without further investigation it is not known whether Grade 3 land at this site is 3a or 3b and best and most versatile. For the purposes of this SA the precautionary principle approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	considered to be a small in relation to the overall agricultural land lost in England per annum to development ¹⁴³ but could have a small scale effect on national food production capacity.							
6. Reduce the causes of climate change	<p><u>Proximity of factors relevant to exacerbating climate change</u> See SA Objective 1 for a description of woodland in the vicinity of site.</p> <p><u>Local effects</u> As climate change is a global issue, effects are reported in wider effects below.</p> <p><u>Plan level / regional / wider effects</u> Dust may be generated by vehicles arriving at and leaving the site (affecting the productivity of small patches of woodland).</p> <p>Although the site is close to the A64, giving it good access to sources of secondary aggregate waste, these sources are quite spread out. This may lead to CO₂ generation from vehicles. The site is proposed for a purpose that would move material up the waste hierarchy thereby potentially offsetting some emissions that would have arisen from transport and minerals extraction (though the site itself would still involve 15,000 tonnes of extraction annually). On balance, impacts are considered to be minor negative as some of this material would be used as inert fill for restoration and some material would be extracted. Impacts following restoration would be neutral to positive, depending in the amount of woodland planted in the restoration scheme.</p>	✓			✓	-	-	+
7. To respond and adapt to the effects of climate change	<p><u>Proximity of factors relevant to the adaptive capacity¹⁴⁴ of a site</u> The site is in Flood Zone 1. South-eastern area of the site lies in Flood Zone 3 (approximately 10% of site) and Flood Zone 2 (approximately 5% of site). Surface water flooding only affects the southern fringes of the site (low to medium risk). EHN on / adjacent to southern boundary.</p>					-	-	?

¹⁴³ 3ha annualised across the 6 year life of the site would be an annual 0.5ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.5ha loss would represent a 0.02% contribution to this category of soil loss across England for each year of the site.

¹⁴⁴ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Site is in Wharfe and Lower Ouse CAMS. Here water is available at low flows (at least 70% of time).</p> <p>Northern part of the site is ALC Grade 2 (very good quality) and southern part of the site is ALC Grade 3 (good to moderate quality).</p> <p>Local effects Effects on flooding are low risk and it is considered that the proposed land use is likely to constitute less vulnerable development. Through restoration to woodland and pasture, the England Habitat Network may be enhanced.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will contribute to the need for limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted it may to a degree offset recycled materials. The site would also be allocated for a purpose that would facilitate the recycling of minerals and / or waste and would facilitate the movement of waste up the waste hierarchy (indirectly reducing demand for future virgin materials). However, much of this would simply be used for the restoration of the site making positive effects minor. In addition, 15,000 tonnes of material would be quarried, which would negatively contribute this objective.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>		✓		✓	-	-	0
9. To minimise waste generation and prioritise management of waste as	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects It is considered that the allocation of the site would help in minimising waste generation and moving the management of waste up the waste hierarchy. The allocation is therefore considered to contribute towards this objective (the effect is considered to be permanent). However, much of this would</p>	✓		✓		m +	m +	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
high up the waste hierarchy as practicable	<p>simply be used for the restoration of the site making positive effects moderate.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> Conservation areas and Listed Buildings: None within 1km. Registered Parks and Gardens: Bramham Park (Grade I, ID 1,000,546) 4.4km west, Lotherton Hall (Grade II, ID 1,001,223) 4.5km south-west.</p> <p>Registered Battlefields: Battle of Towton overlaps very slightly with south eastern area of site (may be due to digitising of boundaries) and lies adjacent to the south-east. Scheduled Monuments: 'Lord Dacre's Cross or Towton Cross on the west side of the B1217, 1km south-west of Towton' (ID 1,011,967) is 1.6km south (monument is unlikely to be visible from this site).</p> <p>Named designed landscapes: Hazelwood Castle and Park Country Estate 1.9km west, Grimston Park 1.4km east.</p> <p>There are no currently recorded archaeological sites within the former quarry areas, nor does there appear to have been any archaeological work carried out prior to any of the quarrying taking place. However, from evidence for the surrounding area, archaeological potential can be inferred, given the identification from aerial photographs of a number of ditched enclosures and linear boundaries and track-ways, likely to date from the later Iron Age / Romano-British periods. Furthermore, if there are any areas of undisturbed ground, there may also be evidence within the topsoil of artefactual finds associated with the Battle of Towton, AD 1461. Such finds may be considered as nationally important.</p> <p>In terms of HLC, The North Yorkshire HLC project (database record number HNY6630) records this allocation site as part of a larger area of piecemeal enclosure which consists of medium sized irregular fields defined by regular hedgerows. This area has significant legibility, although to the north there has been a fair bit of woodland loss. It is early post medieval in character. There is part of this area which is the Towton Battlefield, however this is not recorded as a type as the battle itself is an event and has not</p>		✓	✓		--	--	--

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>physically shaped the historic character of this area. The legibility attribute value is classed as significant. There are many elements of the previous historic character within the landscape forming prominent landscape features.</p> <p>Local effects With regard to HLC, as the allocation site has previously been quarried the legibility within the area of former quarry is invisible as development has completely replaced an earlier field system. The proposed recycling development is unlikely therefore to change the historic landscape character of the site. However, the presence of a Registered Battlefield in close proximity to this site could mean that this site would generate a high negative impact on the character of that receptor. In the long term effects are uncertain as the details of the restoration scheme are not yet known, but at least some of the original levels will be restored.</p> <p>As with other sites in this area there needs to be evidence to demonstrate this site will not impact on setting of the Towton Battlefield. Although the temporary nature of the development is recognised, a strong case would need to be put forward that the Battlefield would not be affected. There is potential for restoration to a form that is more compatible with historic character.</p> <p>In below-ground archaeological terms, the effects within areas of former disturbance from quarrying will be no effect. If there are areas of undisturbed ground which preserve artefactual material associated with the battle, it is assumed that excavation without mitigation would result in the total destruction of archaeological evidence. However, it is expected that investigation/ excavation works required by the Joint Plan Policy D08 (Historic Environment) '<i>mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>' would result in an effect of no greater than minor negative.</p> <p>However, it is acknowledged that there is a level of uncertainty about this effect because there is no evidence from prior archaeological evaluation to enable an informed assessment of the archaeological potential of the site.</p> <p>Plan level / regional / wider effects None noted.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> No National Parks, AONBs, or Heritage Coast within 10km. No ITE within 5km. Site is in Southern Magnesian Limestone NCA.</p> <p>District level landscape: In Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by policy SP18: 'The high quality and local distinctiveness of the natural and man-made environment will be sustained by <i>'identifying, protecting and enhancing locally distinctive landscapes'</i>.</p> <p>North Yorkshire LCA: Magnesian Limestone Ridge: Moderate to high visual sensitivity / high ecological sensitivity / high landscape and cultural sensitivity. In Selby LCA Site is in 'West Selby Ridge' Landscape Character Area / LCA type 'Rolling Wooded Farmland' and West Selby Ridge (Local LCA type: Limestone Valley).</p> <p>Site is in the West Yorkshire Green Belt. Tranquillity is 'disturbed'.</p> <p><u>Local effects</u> The site currently has an artificial landform as it has never been fully restored. It is considered that the site is likely to affect the views of those using local public rights of way and minor roads. It is, however, not likely to directly affect the setting of Stutton and Towton due to likely screening by topography. However, this should be assessed further.</p> <p>The landscape may be able to accommodate the change predicted by this development, including any temporary built structures / plant, but only if restoration is appropriately executed and compatible with its local landscape designation and context.</p> <p>In the short term moderate negative effects are anticipated as the site would disrupt the existing regeneration of the site (which would enable the existing quarry to better fit into the surrounding landscape) in an area that is considered to be fairly sensitive particularly in relation to cumulative landscape impacts. Vegetation will be lost, tranquillity disturbed and infrastructure may be installed onsite that would have a visual impact. In the long term restoration would be likely to reduce impacts, although there is some uncertainty in this assessment. .</p> <p>Potential exists for positive effects in this extensively quarried area, if restoration to an after-use that is</p>	✓		✓	✓	m-	m-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>compatible with its local landscape context is implemented.</p> <p>Its location in the Green Belt means that specific proposals would need to demonstrate consistency with Green Belt policy, including maintaining openness and not conflicting with the purpose of Green Belt designation.</p> <p>Plan level / regional / wider effects None noted.</p>							
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth Site is close to A64 giving reasonably good access to York, Leeds and Harrogate (15km, 18km and 20km respectively).</p> <p>Local effects It is considered that the allocation of the site as a recycling facility would enable value to be added to otherwise waste products. In addition a short term income stream would be derived from the extraction of 15,000 tonnes of limestone. Limited jobs may be created as a result of the operation of the facility.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		+	+	0
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD – Saxton and Ulleskelf, not in most deprived 20%. Stutton is the nearest Settlement.</p> <p>In Selby Core Strategy Stutton is ‘Secondary Village with defined Development Limits’. These are covered by Policy SP2 in the Selby Core Strategy: “Limited amounts of residential development may be absorbed inside Development Limits of Secondary Villages where it will enhance or maintain the vitality of rural communities”.</p> <p>Local effects No significant community benefits identified, though local roads could get busier which may increase congestion between Stutton and the A64, particularly when considered along with other sites. Long term effects are likely to be positive as the site is being restored to countryside, though it is not known if there would be any access.</p>		✓	✓	✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<u>Plan level / regional / wider effects</u> Not applicable to this site.							
14. To provide opportunities to enable recreation, leisure and learning	<p><u>Proximity to recreation, leisure and learning receptors</u> A bridleway (35.44/5/1) runs along the eastern boundary of the site along Old London Road. It was noted from the site visit that site appears to be used by dog walkers and possibly by bicycles. Site is in a sub-regional GI corridor.</p> <p><u>Local effects</u> The experience of users along the bridleway adjacent to the site will be severely disrupted by noise and visual impacts particularly as this bridleway will be used/crossed as part of the site access arrangements (there is some concern that HGVs, as they share the same space as the adjacent bridleway, might be incompatible with typical bridleway traffic, such as horses).</p> <p>Informal use of the site for dog-walking, etc. is likely to be disrupted. In the longer term impacts are positive as restoration will restore the landscape to a degree making use of local bridleways a better experience.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		m-	m-	+
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> There are no schools or health centres within 1km. Nearest settlement is Stutton (1km) to the north-east. A bridleway runs adjacent to the site to the east and it is noted from a site visit that the site may be used for informal recreation such as dog walking.</p> <p><u>Local effects</u> Increased noise and dust may be experienced by local communities, individual properties and users of the bridleway. As the bridleway will be used and crossed as part of the site access arrangements, this will have safety implications for users (e.g. horses / cyclists). Traffic from all the sites in this cluster may work to increase risk to pedestrians and drivers between this site and the A64 (see cumulative effect below). Vibration from vehicles may also affect properties along the access route to the A64.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p><u>Proximity to flood zones</u> Majority of site in Flood Zone 1, south eastern area of the site lies in Flood Zone 3 (circa 10% of site) and Flood Zone 2 (circa 5% of site). Surface water flooding only affects the southern fringes of the site (low to medium risk).</p> <p><u>Local effects</u> Effects on flooding are low risk and it is considered that the proposed land use is likely to constitute less vulnerable development. Areas of Flood Zone 2, Flood Zone 3 and surface water flooding could possibly be avoided within the site. A site specific Flood Risk Assessment that considers drainage will be needed. However, the site will be subject to sequential testing as part of the SFRA. Impacts are uncertain pending the outcome of this assessment.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		-	-	0
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The allocation would conflict with site WJP04 also proposed as part of the MWJP as the boundaries of the two sites overlap.</p> <p><u>Local effects</u> The site may make a small contribution towards the supply of recycled aggregate in the Plan area, as well as the supply of primary aggregate. The allocation of this site would conflict with site WJP04.</p> <p><u>Plan level / regional / wider effects</u> The site may also support markets outside of the Plan area.</p>		✓	✓	✓	+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
Cumulative effects	<p><u>Cumulative / Synergistic effects</u>¹⁴⁵</p> <p><u>Planning Context:</u> As MJP31.</p> <p><u>Other Joint Minerals and Waste Plan Sites:</u> As MJP31, which is almost adjacent.</p> <p><u>Historic Minerals and Waste Sites:</u> As MJP31.</p> <p><u>Transport / Air:</u> Traffic from this site may combine with other sites en route to the A64 which could raise dust, noise, pollution and accident levels either side of the road without mitigation. It may also cause some congestion. This would affect a very limited number of receptors however. However, to fully estimate the magnitude of impacts further investigation is needed.</p>							
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, protected species and invasive species, and designated sites such as Stutton Ings SSSI. • Any proposals for the development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise, dust, vibration impact. • Design to mitigate heritage assets, landscape features and right of way. • Design to mitigate impact on very good quality / best and most versatile agricultural land and to protect high quality soil resources • Specific proposals would need to demonstrate consistency with Green Belt policy, including maintaining openness and not conflicting with the purpose of Green Belt designation. • Design to include a site specific flood risk assessment and to further investigate the extent of the functional floodplain; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and sustainable urban drainage as appropriate • Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt. 								

¹⁴⁵ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

WJP04 – Old London Road Quarry, Stutton

Site Name	WJP04 Old London Road Quarry, Old London Road, Stutton, Selby (XY 447367 440483)
Current Use	Two former quarry areas: <ul style="list-style-type: none"> WJP04 (western part), which is also covered by submission MJP58, is currently disused but has been partially landfilled, and; WJP04 (east) is currently grassland and some woodland.
Nature of Planning Proposal	Extraction of Magnesian limestone if site MJP31 developed; Temporary storage of mineral fines if sites MJP31 and MJP53 developed; and Recycling of waste from construction industry and landfill in WJP04 (to east and west of Old London Road) areas irrespective of development of sites MJP31 and MJP53
Size	14.8ha
Proposed life of site	If MJP31 and MJP53 areas are not allocated and developed for mineral extraction: 2022 for WJP04 (west) and 2024 for WJP04 (east) If MJP31 and MJP53 are allocated and developed for minerals extraction, then: 2022 for WJP04 (west) and 2046 for WJP04 (east)
Notes	No detailed design yet, but would be to grassland, woodland and agriculture to contours of surrounding land with benefits to nature conservation Recycling would cease on completion of the landfill. The area near Cock Beck would be left restored throughout the operation as a buffer zone to the operations proposed.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity	<u>Proximity of international / national and local designations and key features</u> Natura 2000: 2km north-west – Kirk Deighton SAC. SSSI: three SSSIs within 5km – Stutton Ings 370m east, Tadcaster Mere		✓	✓	✓	m	m-	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and geo-diversity and improve habitat connectivity	<p>(geological SSSI) 3.3km north-east, Kirkby Wharfe 3.1km east.</p> <p>SINC: 18 SINCS within 2km. Of these five lie within 500m – Renshaw Wood, Womersley (SE44-19, pre-existing SINC) 150m south; Stutton Railway Track (SE44-05, ratified SINC) 356m east, Wood near Wingate Hill Farm (SE44-16, deleted SINC) 275m north; Grassland by Cock Beck (SE44-17, pre-existing SINC) 479m north-west; (Land adjacent to Cock Beck (SE44-21 Ratified SINC) is 454m east. Possible connectivity to SINCS to east via functional floodplain.</p> <p>UK Priority Habitats: approximately 5% to 10% of site, inside western boundary, contains deciduous woodland. The western part of the site (southern boundary) also appears to intersect very slightly with deciduous woodland. Deciduous woodland also runs all the way along the southern boundary of the eastern site. There is also a patch of deciduous woodland 140m to south-west. Ancient Woodland: An area of ancient replanted woodland (PAWS) lies approximately 200m south of the site.</p> <p>Networks: EHN Woodland block runs along southern boundary. Very slight overlap, probably mapping anomaly. Circa 20% of site lies within NY27 Wharfe-Ouse 'Living Landscape' Corridor. Site lies entirely within Limestone Ridge sub-regional GI corridor which is recognised as a sub- regional GI corridor in the Selby Core Strategy (SP12).</p> <p>Local effects There are links from the site to the Stutton Ings SSSI via Cock Beck. Possible risks come from dust deposition and water discharge / run off from the site – especially as site is proposed for landfill / recycling of construction industry waste and possible temporary storage of fines.</p> <p>Given the site conditions at the time of site visit and surrounding habitats the site is likely to contain grassland, scrub, woodland and hedgerows. Therefore, the following species may use the site – foraging bats, badger, brown hare, farmland and hedgerow birds, invertebrates (associated with bare ground) and possibly great crested newt. There is the possibility that Cock Beck supports otter and water vole so any works in the southern part of the site may have an impact on these species. Given these possibilities more detailed ecological assessment is needed. Farmland adjacent to the site is also likely to be of ecological value.</p>						?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Opportunities exist through management of existing habitats and the creation of priority habitats to strengthen habitat networks in the local area. Priorities in this area include calcareous grassland, woodland/scrub, shallow water bodies and areas of bare ground. If agriculture is the intended after use then there is a need to accommodate and manage hedgerows, trees, and scrub and field margins. However, some opportunities may be lost to restore calcareous grassland if shallow soils and any exposed limestone are lost Future restoration may make a valuable contribution to the green infrastructure network.</p> <p>No invasive species are known at this site, although the hydrological link with Cock Beck means that there is the potential for invasive species that are present to be spread. Particularly as the site is proposed for landfill there is increased risk of material being brought onto site containing invasive plant material.</p> <p>In the short term negative effects could occur though loss of habitat (including possible calcareous grassland) and associated species on site.</p> <p>Overall, in the short and medium term moderate negative effects could occur due to links to the Stutton Ings SSSI with minor negative effects due to loss of habitat and disturbance of species on site. In the long term, there is the possibility for benefits as the site is restored to pasture and woodland (provided this is sympathetic to biodiversity and long term management is agreed.</p> <p>In the long term risks would subside, though some benefits would come through restoration. Uncertainty is noted in the long term due to the varying timescales involved.</p> <p><u>Plan level / regional / wider effects</u> It is considered unlikely that there will be any significant effect on Natura 2000 sites due to the proximity and type of development.</p>							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is in a NVZ. Most of the site is in SPZ 3. The northern third of eastern block is in SPZ 2.</p> <p>In the Humber River Basin Management Plan the nearest section of river is 'Cock Beck Catchment (tributary of River Wharfe) approximately 50m away and connected by Flood Zone 3 and 2 - moderate ecological status / 'does not require assessment' for chemical status. Overall status is moderate. Overall status objective is good by 2027. No RBMP lakes present. Groundwater unit is Wharfe Magnesian Limestone (poor quantitative quality / good chemical quality), overall status is poor. Groundwater Status Objective is good by 2027.</p> <p>Site is in Wharfe and Lower Ouse CAMS. Here water is available at low flows (at least 70% of the time), with Cock Beck having 'water available for licensing'. Site is not in an area of restricted or no groundwater availability.</p> <p>Local effects According to Environment Agency guidance ¹⁴⁶ 'groundwater can be at serious risk from landfill activities unless they are located in the right place and subject to the right operational controls'. However, waste from the construction sector and storage of fines will largely be inert which is a lower risk. Although the landfill is for inert material, which should significantly reduce any risk to water, the site is in a</p>	✓	✓	✓	✓	-	-	-

¹⁴⁶ Environment Agency (2013). Groundwater protection: Principles and practice (GP3).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>SPZ and the Environment Agency has would require a risk assessment would to assess quantity and nature of the waste on site. If any waste turns out not to be inert it is a risk long term.</p> <p>This site may ultimately be acceptable as waste / fines handled are likely to be inert. It is also likely to be located above the water table (though this would need to be confirmed if quarried further). The site appears to be close to a secondary aquifer, but not a principal aquifer. The southern boundary of the site is in Flood Zone 2 however, so an appropriate buffer or assessment may be needed to deal with the effects of climate change on this flood zone. In addition, the Cock Beck is a designated main river so details would be needed in order to understand the topography of the site relative to the river & the implications of the activity in the location. It is expected that risks from landfill discharge would be mitigated through the environmental permitting system.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p><u>Plan level / regional / wider effects</u> There is high potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>						?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors The site is close to A64 giving reasonably good access to Leeds 14km, York 15km and Tadcaster 1.5km; Access: the site would use the existing access onto Old London Road (bridleway) and then onto the unclassified U796 at Stutton, and then onto Moor Lane (C305) in the direction of the bridge over A64, which leads to A659 and A64.</p> <p>Light Vehicles: eight two-way daily movements (estimate agreed by submitter); HGVs: 50 two-way daily movements (submitter information).</p> <p>PRoW: although the site is not affected by a registered public right of way access is on to bridleway.</p> <p>Rail: 4.2km east (to Ulleskelf station) / nearest known railhead: circa 10km south. Strategic Road: A64 is 1.2km north, A162 is 1.3km east (both timber routes); Canal / Freight waterway: River Ouse is 10km east.</p> <p>Local effects Site would generate 58 two way daily movements onto a bridleway (although this route may be familiar with vehicle movements due to its former use as a quarry). The transport assessment concludes that the site has no direct connection / frontage on to a highway maintainable at the public expense, though HGV use on access roads is acceptable and no travel plan would be required. Sustainable transport would be unlikely to contribute. The route goes near to Stutton and out along a road that is likely to be used by other quarries, so a cumulative risk is likely. This could be a moderate negative impact when other sites are considered.</p> <p>Alternative routes and mitigation (e.g. passing places) could be considered for this site, for instance the route past White Quarry Farm.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects None noted.</p>		✓		✓	-	-	-
								?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors Not within a hazardous substances consultation zone or AQMA.</p> <p>Local effects The nearest settlement is Stutton (circa 480m north-east). White Quarry Farm (600m south-west) and Warren House Farm (650m north-west) are also close by. Sensitive habitats include deciduous woodland and local designated sites (see objective 1). The site will would generate 58 two way daily movements daily, which could generate dust along the access track to the site and could combine with traffic to the A64 from other sites close by to generate raised dust / particulate levels and fumes. This is expected to have minor impacts due to limited human receptors / limited sensitivity of woodland receptors / distance of other receptors.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects There are no air quality effects expected to the wider area.</p>		✓	✓	✓	-	-	-
							?	?
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Approximately two-thirds of the site (mostly in eastern site) is ALC Grade 2 (very good quality). The southern third ALC is Grade 3 (good to moderate quality). However, this land has already been quarried and the proposal is to fill it with landfill and then restore. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects There would be no effects on land until restoration commences. Landfilling and restoring will ultimately return the site to baseline conditions before (or represent a significant improvement in contrast to a baseline of a post extraction site). The effect would be positive as land would be restored to woodland, agriculture and grassland.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects Same as local effects, however, if restored to agriculture at original ground level, restoration the potential to contribute positively to soil in the wider Plan area.</p>	✓		✓		0	+	+
							?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change SA Objective 1 details woodland in the vicinity of site.</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Some dust may be generated by vehicles arriving at the site (affecting the productivity of small patches of woodland). Although the site is close to the A64, giving it good access to sources of construction waste, these sources are quite spread out (e.g. Leeds 14km, York 15km, and Tadcaster 1.5km). This may lead to CO₂ generation. However, recycling construction waste would also indirectly reduce the embodied energy of future construction projects (though much would likely go to restoration of the site). Quarrying and landfill is negative for climate change. Overall minor negative.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p>		✓	✓	✓	-	-	-
7. To respond and adapt to the effects of climate	<p>Proximity of factors relevant to the adaptive capacity¹⁴⁷ of a site The southern tip of the eastern site is Flood Zone 2. A small area in the western part of the site is in Flood Zone 2. Surface water flooding only affects the southern fringes of the site (low to medium risk). EHN adjacent to southern boundary.</p>	✓		✓		-	-	-

¹⁴⁷ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
change	<p>The site is in Wharfe and Lower Ouse CAMS. Here water is available at low flows (at least 70% of time).</p> <p>About two-thirds of the site is ALC Grade 2, a third is ALC Grade 3.</p> <p>Local effects There is some concern over the effect of climate change on Flood Zone 2, which could extend further into the site or behave more like Flood Zone 3 under climate change. Landfill may need to avoid a buffer around this area.</p> <p>Plan level / regional / wider effects Same as local effects.</p>					?	?	?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects The site is using construction waste to restore site levels. This is a positive effect as waste is used instead of primary materials.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects See local effects above.</p>		✓	✓	✓	+	+	+
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects The site is using construction waste to assist in reclamation of the site. Although landfill is at the bottom of the waste hierarchy this may be preferable to importing material to restore a site.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects See local effects above.</p>		✓	✓	✓	+	+	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors Conservation Areas: none within 1km. Registered Parks and Gardens: Bramham Park (Grade I) is 4.4km west. Registered Battlefields: Battle of Towton is adjacent to the southern edge of the site. Scheduled monuments: 'Lord Dacre's Cross or Towton Cross on the west side of the B1217, 1km south-west of Towton' (ID 1,011,967).</p> <p>Listed Buildings: two listed buildings with 1km: Grade II Listed Hare and Hounds is 750m north-east. Manor House (Grade II) is 0.87m north-east. Named designed landscapes: Grimston Park (Designed parkland - unidentified parkland) 1.26km east. Hazelwood Castle and Park in 1.97km west.</p> <p>There are no currently recorded archaeological sites within the former quarry areas, nor does there appear to have been any archaeological work carried out prior to any of the quarrying taking place. However, from evidence for the surrounding area, archaeological potential can be inferred, given the identification from aerial photographs of a number of potential settlements comprising of ditched enclosures and linear boundaries and trackways, likely to date from the later Iron Age/Romano-British periods. Furthermore, in any areas of undisturbed ground, there may also be evidence within the topsoil of artefactual finds associated with the Battle of Towton, AD 1461. Such finds may be considered as nationally important.</p> <p>The North Yorkshire HLC project (database record number HNY6630) records the south-western part of this allocation site as part of a larger area of piecemeal enclosure which consists of medium sized irregular fields defined by regular hedgerows. There is part of this area which is the Towton Battlefield, however this is not recorded as a type as the battle itself is an event and has not physically shaped the historic character of this area. As this part of the allocation site has previously been quarried the legibility within the area of former quarry is invisible as development has completely replaced an earlier field system. The north-eastern part of this allocation area is classed as a large area of modern improved fields which has resulted in a large degree of boundary loss over this area. These include some areas of strip fields, piecemeal and planned enclosure. However, as this part of the allocation site has previously been quarried the legibility within the area of former quarry is invisible as development has completely replaced an earlier field system. The proposed landfill development is unlikely therefore to change the HLC of this area.</p>	✓	✓	✓		--	--	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects In below-ground archaeological terms, it is assumed that in areas where previous quarrying has occurred that archaeological will have been disturbed and future works would have no effect. If there are areas of undisturbed ground which preserve artefactual material associated with the battle, it is assumed that excavation without mitigation would result in the total destruction of archaeological evidence. However, it is expected that investigation/ excavation works required by the Joint Plan Policy D08 (Historic Environment) '<i>mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>' would result in an effect of no greater than minor negative.</p> <p>It is acknowledged that there is a level of uncertainty about this effect because there is no evidence from prior archaeological evaluation to enable an informed assessment of the archaeological potential of the site.</p> <p>There could be impacts upon elements which contribute to the significance of the registered battlefield, which is a site of national significance and importance. As with other sites in this area there needs to be evidence to demonstrate this site will not impact on setting of the Towton Battlefield.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character No National Parks, AONBs, or Heritage Coast within 10km. No ITE land within 10km. Site is in Southern Magnesian Limestone NCA.</p> <p>District level landscape: In Selby District 'Locally Important Landscape area'. Recognised in Core Strategy by Policy SP18: 'The high quality and local distinctiveness of the natural and man-made environment will be sustained by: identifying, protecting and enhancing locally distinctive landscapes'.</p> <p>North Yorkshire LCA: Magnesian Limestone Ridge: Moderate to high visual sensitivity / high ecological sensitivity / high landscape and cultural sensitivity. In Selby LCA Site is in 'West Selby Ridge' Landscape Character Area / LCA type 'Rolling Wooded Farmland'. Southern part of sites (circa 40%) is in West Selby Ridge (Local LCA type: Limestone Valley)</p> <p>Site is in the West Yorkshire Green Belt. Tranquillity is 'disturbed'.</p> <p>Local effects The site is in a prominent location on sloping ground and is likely to affect the views of using local public rights of way and minor roads. It is, however, not likely to directly affect the setting of Stutton and Towton due to screening by topography. As with several other quarries in the vicinity there are currently mostly straight sides to the existing quarry, though there is some natural regeneration and some screening. Glimpses into the area of the eastern site were noted from Old London Road during site visits highlighting that this would need to be further assessed.</p> <p>The landscape is likely to be able to accommodate the change predicted by this development, but only if restoration at this and other quarries are appropriately executed. The site does have potential for restoration, however a lot of material would be required for this landfill so the quantity of trucks visiting the</p>	✓	✓	✓	✓	m -	m-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>site could disrupt the character of the area.</p> <p>In the short term regenerated vegetation will be lost and tranquillity disturbed. In the medium term restoration would reduce impacts, although it would take time for vegetation to mature. However there could still be disturbance from working within the quarry. In the long term restoration of original landform could benefit landscape in perpetuity, although retention of some features of the existing quarry would add visual interest e.g. exposed rock faces. Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Its location in the Green Belt means that specific proposals would need to demonstrate consistency with Green Belt policy, including maintaining openness and not conflicting with the purpose of Green Belt designation.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>						?	

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth The site is close to A64 giving reasonably good access to Leeds 14km, York 15km and Tadcaster 1.5km.</p> <p>Local effects Economic benefits include the restoration of the site as this would allow for disposal of construction waste, some of which, if disposed of more creatively, might generate usable products releasing value from a waste resource.</p> <p>Plan level / regional / wider effects None noted.</p>	✓			✓	+	+	+
							?	?
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability IMD area: Tadcaster West – not in most deprived 20%. Stutton is the nearest settlement.</p> <p>Local effects There are no significant community benefits identified, though local roads could get busier which may increase congestion between Stutton and the A64, particularly when considered along with other sites.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
14. To provide opportunities to enable	<p>Proximity to recreation, leisure and learning receptors Footpath 35.63/11/1 lies 330m west. A claimed PRoW lies 450m to the west. A bridleway (35.69/1/1) runs between the eastern and western sites. Site is in</p>		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
recreation, leisure and learning	<p>a sub-regional GI corridor (see objective 1).</p> <p>Local effects The experience of users along the bridleway on Old London Road crossing between the sites will be severely disrupted by noise and visual disamenity, however, they currently see former quarry areas so their view is already disturbed. There is currently no alternative route proposed to the use of the Old London Road bridleway for transport access to this site, or the potential for mitigation. Vehicles on the same route as a bridleway would cause problems due to the interaction of vehicles and horses. Outlying rights of way users may also experience noise and visual disturbance. These rights of way are likely to be of local importance. In the longer term the view will improve.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects None noted.</p>						?	?
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing No schools or health centres within 1km. Nearest settlement is Stutton (circa 520m) to the north-east. A bridleway (35.69/1/1) runs between the eastern and western sites.</p> <p>Local effects There is some uncertainty as to whether Stutton would experience noise / dust / odour impacts from this site. A further concern is the right of way that runs between the two parts of this site which could encourage trespass onto the site putting individuals at risk without mitigation. Traffic from all the sites in this cluster may work to increase risk to pedestrians and drivers between this site and the A64 (see cumulative effect below). Vibration from vehicles may also affect properties along the access route to the A64. When the site is restored it may encourage some people to access their local environment with fitness benefits.</p> <p>Uncertainty is noted in the medium to long term due to the varying timescales involved with this site.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	-	-	-
							?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p><u>Proximity to flood zones</u> Southern tip of eastern site is Flood Zone 2. Area in western part of site in Flood Zone 2 is negligible. Surface water flooding only affects the southern fringes of the site (low to medium risk).</p> <p><u>Local effects</u> Effects on flooding are low risk as although landfill is defined as more vulnerable Flood Zone 2 and surface water flooding could probably be avoided within the site. However, some uncertainty remains over the effect of climate change which could extend flooding further into the site or make Flood Zone 2 behave more like Flood Zone 3 (particularly if operations continue on the 2046 timescale).</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>	✓		✓		-	-	-
17. To address the needs of a changing population in a sustainable and inclusive manner	<p><u>Proximity to factors relevant to the needs of a changing population</u> The site does not conflict with any known allocations in other plans.</p> <p><u>Local effects</u> The site may make a small contribution towards the supply of recycled materials in the Plan area (though the site would lose its ability to supply building stone).</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓	✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
Cumulative effects	<p><u>Cumulative / Synergistic effects.</u></p> <p><u>Planning Context:</u> As MJP31.</p> <p><u>Other Joint Minerals and Waste Plan Sites:</u> As MJP31, which is adjacent.</p> <p><u>Historic Minerals and Waste Sites:</u> As MJP31.</p> <p><u>Transport / Air:</u> Traffic from this site may combine with other sites en route to the A64 which could raise dust, noise, pollution and accident levels either side of the road without mitigation. Operations on site may also cause dust It may also cause some congestion. This would affect a very limited number of receptors however. However, to fully estimate the magnitude of impacts further investigation is needed.</p> <p>Cumulative landscape impact is also an issue in this area and combined with other nearby development a major negative cumulative landscape impact is anticipated in the short and early medium term.</p>							
Limitations / data gaps	No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, protected species and invasive species, and designated sites such as Stutton Ings SSSI. • Any proposals for the development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise, dust, vibration impact. • Design to mitigate heritage assets, landscape features and right of way. • Design to mitigate impact on very good quality / best and most versatile agricultural land and to protect high quality soil resources • Specific proposals would need to demonstrate consistency with Green Belt policy, including maintaining openness and not conflicting with the purpose of Green Belt designation. • Design to include a site specific flood risk assessment and to further investigate the extent of the functional floodplain; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and sustainable urban drainage as appropriate • Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt. 								

**Appendix 3j: Assessment of Sites in the North York Moors National Park
Joint Minerals and Waste Plan**

Contents

ALLOCATED SITE			
Reference	Site Name	Type of site	Page
WJP19	Fairfield Road, Whitby	Recycling and transfer of municipal and commercial waste	4

DISCOUNTED SITES			
Reference	Site Name	Type of site	Page
MJP34	Land between Sandsend and Scarborough	Discounted	18
MJP59	Spikers Quarry, East Ayton	Discounted	19

Sustainability Appraisal Score

Score	Description
++	The Site option is predicted to have higher positive effects on the achievement of the SA objective. For example, this may include a highly significant contribution to issues or receptor of regional or wider significance, or to several issues or receptors of local significance.
m+	The Site option is predicted to have moderate positive effects on the achievement of the SA objective. For example, this may include a positive, but not highly positive contribution to issues or receptor of more than local significance, or to several issues or receptors of local significance.
+	The Site option is predicted to have minor positive effects on achievement of the SA objective. For example, this may include a significant contribution to an issue or receptor of more local significance.
0	The Site option will have no effect on the achievement of the SA objective ¹ .
-	The Site option is predicted to have minor negative effects on the achievement of the SA objective. For example, this may include a negative contribution to an issue or receptor of local significance.
m-	The Site option is predicted to have moderate negative effects on the achievement of the SA objective. For example, this may include a negative, but not highly negative contribution to an issue or receptor of more than local significance.
--	The Site option is predicted to have higher negative effects on the achievement of the SA objective. For example, this may include a significant negative contribution to an issue or receptor of more than local significance.
?	The impact of the Site option on the SA objective is uncertain.

¹ This includes where there is no clear link between the site SA objective and the site

WJP19 - Fairfield Road, Whitby

Site Name	WJP19 Whitby Waste Treatment and Transfer Facility, Fairfield Way, Whitby (XY: 490978 509580)
Current Use	Recycling and transfer of municipal and commercial waste
Nature of Planning Proposal	Proposed extension to area and changes to existing facility for recycling and transfer of municipal and commercial waste.
Size	1.25ha
Proposed life of site	Unknown at present
Notes	This is an existing facility. Restoration plans are unknown at present.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Assumptions: The site is an existing waste recycling and transfer facility however around 20-25% of the site currently appears to be grassland. It is assumed that the allocation may involve the development of the grassland areas in order to expand operations. Planning application NYM2010-0497-FL (consented) expanded the capacity of the site to deal with up to 32,700 tonnes per annum of waste. It is therefore assumed that this is the current level of waste import. This allocation would therefore enable the site to deal with an additional 19,000 tonnes per annum of waste. It is assumed that this is a permanent site.

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	<p>Proximity of international / national and local designations and key features Natura 2000: 4km south-west – North York Moors Special Area of Conservation (SAC) / Special Protection Area (SPA), 6.5km south-east – Beast Cliff – Whitby SAC. 3 Site of Special Scientific Interest (SSSI) within 5km – Whitby-Saltwick 1.25km north, Robin Hoods Bay: Maw Wyke to Beast Cliff 3.15km south-east and North York Moors 4.15km south.</p> <p>5 Sites of Interest for Nature Conservation (SINC)/Local Wildlife Sites (LWS) within 2km – Spital Vale,</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>Whitby (ratified, NZ91-01) 540m north-west, Larpool and Whitehall Woods-Esk Valley (ratified, NZ91-02) 900m west, Cock Mill and Larpool Wood- Stainsacre Beck (ratified, NZ90-01) 875m south, River Esk (pre-existing SINC, NZ80-04) 980m west, The Bats (ratified, NZ80-02) 1.6km west. Circa 70% of the site lies within North Yorkshire Moors Important Bird Area. In terms of Priority Habitat, 2 areas of deciduous woodland lie within 200m (10m north and 65m east).</p> <p>Ecological Networks: Very small area of the site (circa 2% in the north-east corner) is covered by core EHN (woodland).</p> <p>The site may support a number of protected species associated with woodland, hedgerows and farmland such as nesting birds and foraging bats. In terms of invasive species, there are currently no known problems in the local area,</p> <p>Local effects The proposal is not expected to impact any sites designated for biodiversity value as a result of the proximity of the site to these receptors. There are potential impacts to the grassland habitats and species on the site during the construction of the proposal, however it is assumed appropriate mitigation would be adopted prior to and during construction. Impacts are therefore considered to be neutral.</p> <p>There is potential for invasive species to be brought in with waste delivered to site and these could be spread if not dealt with appropriately.</p> <p>It is possible that through this allocation, there may exist an opportunity to make something better of the existing site in terms of biodiversity.</p> <p>Plan level / regional / wider effects No significant impacts are anticipated to designated sites as a result of the proximity of the site to these receptors and the limited pathways to designated sites.</p>					?		

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is not located within a Nitrate Vulnerable Zone or a Groundwater Source Protection Zone.</p> <p>Humber River Basin Management Plan (RBMP): RBMP water body 'Rigg Mill Bk/Long Mill Bk catch (tributary of Esk)' lies circa 25m north. Ecological quality: poor status / chemical quality: <i>'does not require assessment'</i>. No local RBMP lakes. RBMP Groundwater: 'Esk and Yorkshire Coast Ravenscar': current quantitative quality - good / chemical quality - good.</p> <p>Catchment Abstraction Management Strategy (CAMS): Site is in the Esk CAMS. Surface water is available at very low flows (at least 95% of the time).</p> <p>Local effects Potential impacts will result from construction run off (is an existing site but further construction may take place in currently undeveloped areas), leachate from storage of waste in the transfer facility and fuel spills / run off from vehicles. These are all expected to be readily resolvable through good site management / vehicle washing etc. Overall impacts in relation to this objective are considered to be neutral as it is assumed that the relevant environmental permits and regulations will operate effectively.</p> <p>Plan level / regional / wider effects As with local effects the wider water environment is not expected to be affected as it is assumed that the relevant environmental permits and regulations would operate effectively. Neutral.</p>					0	0	0
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable	<p>Proximity of transport receptors Site is located on the outskirts of Whitby, though is remote from many waste facilities (a metal recycling facility lies 4.3km south-east). Assumed existing vehicle movements (source: application details NYM/2010/0497/FL) Light vehicles: 60 two-way movements, HGV vehicles: 38 two-way movements.</p> <p>Traffic Assessment: Net change in daily trip generations; Light vehicles: 0; Heavy Goods Vehicles (HGVs): 6. Traffic assessment rating: Green – <i>'There would be a small increase in the number of HGV movements at the site but this would use an established access and is expected to have a negligible</i></p>		✓		✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
modes of transportation	<p><i>traffic impact</i>.²</p> <p>Public Rights of Way: none.</p> <p>Rail: 1.2 km north-west (Whitby Station 1.5km north) / nearest known railhead: 83.1km south-west. Strategic Road: A171 350m south. Canal / Freight waterway: 63.2km south-west to Ouse</p> <p>Local effects This site is for the extension in area and use of a recycling and transfer plant. As such, this submission only also allows for an additional 6 HGV movements above current levels, The traffic impacts of additional traffic are therefore considered negligible onto the A171.</p> <p>It is assumed that some waste would be bulked to larger vehicles through transfer, this would reduce the journey lengths of smaller vehicles which has an overall positive effect. Its location on the edge of town also helps to minimise the transport miles between waste source and the site.</p> <p>The existing access appears to work for the current use despite not been wide enough for two HGVs to pass side by side. If a large vehicle wants to leave the site at the same time as one entering, one of them would have to give way to the other but, with the relatively small amount of traffic that the site generates, this is not an issue presently.</p> <p>If the site traffic volumes were to significantly increase, the situation could arise where traffic was queuing in the highway waiting for vehicles to exit the site. Possible solutions would be to have a shared access with the pumping station to the south of the site or have a new access in the field to the east of the site³.</p>							

² Jacobs (2015); Minerals and Waste Joint Plan Traffic Assessment – Final Traffic Assessment.

³ A previous planning application involving intensification of vehicular use (NYM/2009/0675/FL) was recommended for refusal by highways due to the width and construction standard of the existing access and the detrimental effect on the network. A reduced proposal followed (NYM/2010/0497/FL) which was consented. At the time of making a highway recommendation on application number NYM10/497/FL, the Highway Authority had concerns over the restrictions to the existing access, the layout of the industrial estate and the creeping intensification of the traffic using the junctions onto the A171. However, the expansion of the business park will provide a link between Fairfield Way and Enterprise Way and, whilst the waste site is located at the extremity of the estate, this new link will allow access to the waste site via both junctions. The business park expansion proposals did assess the capacity of the junctions onto the A171, and it was deemed no safety or capacity improvements were required to accommodate the expansion of the park.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Overall the site is expected to have a minor negative effect on the objective due to the small increase in vehicle movements.</p> <p>Plan level / regional / wider effects None noted.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors No Air Quality Management Areas (AQMAs) or hazardous substances consent sites within 5km. In terms of receptors for dust and odour the outskirts of Whitby residential area lies 300m west, Stainsacre lies 900m south-east. Several individual properties lie to the north, east and south. Two schools lie within 1km, 330m west and 500m south-west.</p> <p>Local effects The site is an existing waste transfer and recycling facility and already has measures in place such as a vehicle wash, to reduce dust and odour issues. It is considered that the expansion of the site would lead to increased waste deliveries and associated emissions (however this process will facilitate the bulking of waste so that it can be transported onwards in a more efficient manor). The location of the site on an industrial estate may lead to cumulative air quality issues with other nearby industrial sites. Overall, impacts are considered to be minor negative.</p> <p>Any proposal to increase waste quantities and extend the site would require a variation to the site's environmental permit, and the Environment Agency note that for any variation to be granted, the applicant would need to demonstrate that existing odour and dust concerns at the site could be satisfactorily addressed.</p> <p>Plan level / regional / wider effects The proposal is not expected to have wider effects on the SA objective.</p>		✓	✓		-	-	-
5. To use soil and land efficiently and safeguard or enhance their	<p>Proximity of soil and land receptors Site is located in an area of Agricultural Land Classification (ALC) Grade 3 (Moderate to Good quality) land however the majority of land-use on the site is as an existing waste recycling and transfer facility. In terms of land stability, development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects Currently 20-25% of the site is undeveloped. It is considered that the loss of circa 0.25ha</p>	✓		✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
quality	<p>of moderate to good agricultural land located on the edge of an industrial estate constitutes a negligible impact.</p> <p>Plan level / regional / wider effects The potential loss of a relatively small area of undeveloped land that could be potentially lost to the proposal is expected to have a negligible impact to the availability of soils in the wider area.</p>							
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Two areas of deciduous woodland priority habitat lie within 200m (10m north and 65m east). An additional 19,000 tonnes of waste would need to be transported per annum.</p> <p>Local effects Climate change is considered on a global scale.</p> <p>Plan level / regional / wider effects It is not considered that the development of the remaining areas of the site would cause the loss of any significant carbon stores. It is acknowledged that areas of deciduous woodland lie in close proximity to the site and is considered that dust deposition on leaves may lead to a minor loss of productivity; however the effect on this objective is considered to be insignificant. The site is located on the outskirts of Whitby and additional infrastructure may enable the site to deal with an additional 19,000 tonnes per annum throughput. It is considered that this increase in capacity will allow more waste material to be sorted and bulked up for more efficient transit, ultimately diverting waste from landfill and saving carbon emissions in waste transportation. Overall the effect is considered to be positive.</p>	✓			✓	+	+	+
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁴ of a site Site is in Flood Zone 1. About 5% of the site is subject to low risk (1:1000 (0.1%)) to high risk (1:30 (3.33%)) surface water flooding. Low risk and medium risk (1:100 (1%)) areas are to the north of the site while high risk flood risk areas are along the western site boundary.</p>					0	0	0

⁴ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Site is located in an area of ALC Grade 3 land however the majority of land-use is occupied by an existing waste recycling and transfer facility.</p> <p>Local effects Surface water flooding affects small areas of this site; however it is considered that the site could be configured in a way that would avoid these high risk areas. Climate change to river flood risk is unlikely to affect the site in the latter part of the Plan period. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively. A changed site profile will have affected where water gathers. Overall, impacts in relation to this objective are considered to be negligible.</p> <p>Plan level / regional / wider effects None noted.</p>							
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site Alterations / extension of this site would allow an additional throughput of 19,000 tonnes per annum of waste.</p> <p>Local effects A waste transfer station would ultimately help to get waste to recycling and other treatment centres (assisting the circular economy by ultimately reducing resource consumption). This indirect beneficial effect would be dependent on the final destination of the waste.</p> <p>Plan level / regional / wider effects None noted.</p>	✓			✓	+	+	+
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects A waste transfer and recycling facility would ultimately help to get waste to recycling and other treatment centres (moving it up the waste hierarchy in most cases). Its indirect beneficial effect would be dependent on the final destination of the waste.</p> <p>Plan level / regional / wider effects The proposal would increase waste transfer capacity within the Plan area, with indirect benefits as noted above.</p>	✓			✓	+	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors Whitby Conservation Area lies 1km north-west. Whitby Abbey House Registered Park and Garden (Grade II, ID 1001467) lies 1.48km north-west. No registered battlefields or World Heritage Sites lie within 5km.</p> <p>Three Scheduled Monuments lie within 2km: 'Moated site at Low Laithes Farm, Whitby Laithes' (ID 1020402) 900m east; 'Whitby Abbey: Saxon double-house, post-conquest Benedictine monastery, C17 manor house and C14 cross' (ID 1017941) 1.42km north; and Saltwick Nab alum quarries (ID 1017779) 1.46km north-east. 10 Listed Buildings lie within 1km (all Grade II), the closest is Lodge Farmhouse (NHLE: 1253887) 320m north-west. Four named designed landscapes lie within 2km: Whitby Cemetery 420m west, Unnamed Allotments 1.01km north, Pannett Park 1.83km north-west and unnamed gardens and pleasure grounds 2km north-west.</p> <p>Local effects on the historic environment The site is not known to have any direct impacts on the historic environment and any impact on setting will be as an element of the overall industrial estate rather than as a specific isolated development. Any expansion of the site needs to consider potential impact on the setting of the Robin Hood and Little John Stones (to the east of the site) and in particular the wider surrounding landscape in which they are appreciated. Also there is the setting of Whitby Abbey and both views into the site as well as views out which may impact on the enjoyment and appreciation of the asset. Historic England, however, may have further comments to make relating to setting with reference to the Scheduled Monuments of Whitby Abbey and Low Laithes Moated Site.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	0	0	0
							?	?
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character Site lies within North York Moors National Park (NYMNP) and North Yorkshire and Cleveland Heritage Coast lies 700m east.</p> <p>The site is located in North Yorkshire and Cleveland Hills National Character Area. The North Yorkshire and York Landscape Character Assessment identifies the site as 'Rugged Cliffs, Coastal Valleys and Bays (coastal landscapes)' landscape character type. This area is characterised by high visual sensitivity as a result of strong inter-visibility with adjacent coastal and inland landscape character types</p>	✓	✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>and strong inter-visibility within views from the sea; high ecological sensitivity as a result of the presence of numerous diverse coastal habitats which support rare species; and high landscape and cultural sensitivity as a result of the dynamic landscape pattern of striking cliffs and undercliffs, deep wooded ravines and coastal hinterland; combined with remnant historic jet, ironstone and alum mines and a historic settlement pattern of small coastal settlements and fishing villages crowded into tight cliff foot locations or confined in narrow valleys where they meet the sea. In the NYMNP LCA the site lies within '4b Coast and Coastal Hinterland - Whitby- Cloughton'.</p> <p>Urban intrusion – disturbed. Light pollution – moderate. On the 2000 Campaign to Protect Rural England (CPRE) map the level is assessed as 117 on a scale of 1-255, with 1 representing maximum darkness. Light intrusion is likely to have increased since that date.</p> <p>Local effects The site is visible from the edge of residential areas of Whitby, 0.3km to 0.4km distant, but is seen as part of a wider area of intrusive industrial development. Should new buildings be developed as part of the site expansion, impacts on views from Whitby Abbey should be given particular consideration. The site currently adversely affects the setting of the NYMNP (and conflicts in a small way with the purposes of the National Park), although it is also part of a larger industrial estate which also adversely affects the Park. The proposals seem likely to involve possible expansion of current uses, which will result in further urban intrusion into the countryside and have a negative impact on local landscape character. The scale is small, but part of incremental change.</p> <p>In closer views the current site is considered to be incongruous with the landscape. Existing buildings are of a light reflective colour that stands out in the landscape (although the Whitby Business Park Area Action Plan does provide a design brief for this area to ensure that buildings are designed well going forward), and there is small scale clutter that is unscreened (it is considered that there is little scope for screening the site). The site has been levelled by the importation of fill material and this artificial landform intrudes into the small valley to the north of the site (and possibly also into the small tributary valley to the west). It is possible however that through this allocation, there may exist an opportunity to make something better of the existing site in terms of its overall appearance / visual impact.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Overall, there is some uncertainty as it is not clear how much, if any, change is proposed in terms of the layout of the site. If none, effects in relation to landscape will be neutral. If currently undeveloped areas of the site are developed it is considered that this would constitute urban intrusion into the countryside and have a negative impact on the local landscape character. The scale this impact would be small, but part of incremental change.</p> <p>Plan level / regional / wider effects As noted in local effects, there is the potential that the expansion of the site could have further urban intrusion within the NYMNP countryside and a negative effect on the setting of the Park. As the expansion is small in scale, this is considered to be a minor negative effect.</p>							
12. Achieve sustainable	Proximity of factors relevant to sustainable economic growth Site is located on the outskirts of		✓	✓	✓	+	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
economic growth and create and support jobs	<p>Whitby, though is remote from many waste facilities (a metal recycling facility lies 4.3km south-east).</p> <p>Local effects While dealing with waste effectively is an important part of a functioning, sustainable economy the area is not rich in waste facilities. Therefore this transfer station will be an important part of ensuring that waste can be transported to disposal or recycling / reuse in a more cost effective way. The allocation may result in a very small increase in job opportunities and the recycling function of the site would enable value to be added to waste products. As it is considered that the site would divert waste from landfill it is considered that financial savings would be made in terms of landfill tax. Overall the impact in relation to this objective is minor positive.</p> <p>Plan level / regional / wider As above.</p>							
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability The Index of Multiple Deprivation (IMD) area is Fylingdales. This is not in the most deprived 20% of areas. The site lies in Whitby Business Park which is covered by the Whitby Business Park Area Action Plan. One of the aims of the Area Action Plan is to make additional land available to stimulate investment in the business park and create job opportunities. The areas of the site that are not yet developed lie within 'Additional allocations – B Use Classes' on the Area Action Plan policies map.</p> <p>Local effects Although this site will provide a small number of jobs, it's location on an industrial estate is remote enough from residential communities as to not particularly affect their vitality. It is considered that extension to current operations onsite would work towards the aims of the Whitby Business Park Area Action Plan. The site would provide local infrastructure to enable and encourage the treatment of waste higher up the waste hierarchy. Impacts are therefore considered to be minor positive.</p> <p>Plan level / regional / wider effects Effects considered on a local scale.</p>		✓		✓	+	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors In terms of public rights of way, no local routes lie within 250m or national routes within 500m (the Moors to Sea cycle route passes 800m south-west).</p> <p>Local effects Although the site is located within the NYMNP, it does lie on an industrial estate and the allocation would involve the expansion of an existing waste transfer and recycling site. Given these factors and the distance between the site and any recreation routes/leisure facilities, impacts in relation to this objective are considered to be negligible.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
15. To protect and improve the wellbeing, health and safety of local communities	<p>Proximity to population / community receptors / factors relevant to health and wellbeing Nearby populations: Whitby 300m west, Stainsacre 900m south-east. Several individual properties lie to the north, east and south. 2 schools lie within 1km, 330m west and 500m south-west.</p> <p>Local effects Waste Transfer Stations can have noise, dust and odour impacts on receptors, which may affect wellbeing. Most residential / school receptors are thought to be too distant for these impacts to be significant, though an industrial estate is adjacent (though noise and odour levels may be less of an issue on an already industrial site). Minor negative effects.</p> <p>Plan level / regional / wider effects Not expected to affect communities in the wider Plan area.</p>	✓		✓		-	-	-
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones The Site is in Flood Zone 1. About 5% of the site is subject to low risk (1:1000 (0.1%) to high risk (1:30 (3.33%)) surface water flooding. Low and medium risk areas are to the north of the site while high risk flood risk areas are along the western site boundary. Site is in 2 1km square identified as susceptible to superficial deposit flooding across <25% of the km square to the west and >50% to <75% of the km square to the east. Proposals are above ground so risk is likely to be less</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>significant. This site is not at risk from the 1:20 (5%) flood event.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test⁵ undertaken for the site concluded that this site would 'Pass'. Small areas of the site are affected by surface water flooding although it is considered that the site could be configured in a way that would avoid the use of high risk areas for sensitive infrastructure/processes. Effects are therefore considered to be negligible.</p> <p>A site specific flood risk assessment would be required as although this site is in Flood Zone 1 it is greater than 1ha. Surface water runoff from this site should be managed using Sustainable Urban Drainage Systems (SuDS) where appropriate.</p> <p>Plan level / regional / wider effects None noted.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans (and would fall into 'B use classes' as far as the Business Park / Area Action Plan is concerned).</p> <p>Local effects No real benefits to a changing population.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
Cumulative / Synergistic effects⁶								
Planning context	This is not in the lowest 20% of the IMD. The site lies in Whitby Business Park which is covered by the Whitby Business Park Area Action Plan. One of the aims of the Area Action Plan is to make additional land available to stimulate investment in the business park and create job opportunities. The areas of the site that are not yet developed lie within 'Additional allocations – 'B Use Classes' on the Area Action Plan							

⁵ The Sequential Test approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (Flood Zones 2 and 3) and other areas affected by other sources of flooding where possible.

⁶ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

	proposals map. The proposed allocation would fall into 'B Use Classes' as far as the Business Park / Area Action Plan is concerned.
Other Minerals and Waste Joint Plan Sites	No other potential Minerals and Waste Joint Plan sites lie within 5km.
Historic minerals and waste sites	York Potash Pipeline Nationally Significant Infrastructure Project lies 2.9km south-west (beyond the 2km search area we have used in this assessment). In terms of other nearby active and dormant minerals and waste sites, a Household Waste Recycling Centre lies 50m west of the site; non-hazardous waste transfer station sites lies 80m south and 120m west; and construction and demolition waste transfer sites lie 120m west and 1km north-west. A metal recycling facility lies 4.3km south-east. No authorised or historic landfill sites lie within 2km.
Air Quality	It has been identified under objective 4 that this site may act in combination with others located on the industrial estate to impact upon air quality. It is not considered that this cumulative impact in relation to objective 4 would be greater than negligible.
Economy	The expansion of this site may work with other developments in the area to stimulate investment and growth of the Whitby Business Park, an aim of the Whitby Business Park Area Action Plan. It is considered that this allocation along with other developments in close vicinity may have a cumulative positive economic impact.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts to habitats and protected species during construction of the proposal. • Appropriate mitigation measures to address and control of invasive species. • Design of development and landscaping of site to mitigate impact on: the North York Moors National Park, and the Moated site at Low Laithes Farm Scheduled Monument, Lodge Farmhouse, Robin Hood and Little John Stones Listed Buildings and Registered Park and Garden and their respective settings, and local landscape features • A site specific flood risk assessment would be required prior to development, as although this site is in Flood Zone 1 it is greater than 1ha • Design to include suitable arrangements for access onto the A171 and local roads • Appropriate arrangements for control of and mitigation of the effects of noise and dust, etc.; for any variation to the site's environmental permit to be approve, the applicant would need to demonstrate that existing odour and dust concerns at the site could be satisfactorily addressed. 	

MJP34 - Land between Sandsend and Scarborough

Due to the large scale of this site (27,421ha) it has not been assessed using the standard approach employed by this methodology. The scale of the submission and complexity of the features within the submission area, combined with the high degree of sensitivity of the location (i.e. National Park designation and presence of Natura 2000 sites, etc.) means that detailed strategic level assessment of the submission is not possible and it is only practicable to carry out a more detailed assessment at project specific level via an Environmental Impact Assessment at the planning application stage. However, it is possible to identify some of the high level factors which would be relevant to such an application and these include:

- The special qualities of the National Park
- Landscape and visual impact
- Historic environment
- Water environment
- Wildlife and habitats
- Highways
- Amenity

MJP59 Spikers Quarry, East Ayton

Site Name	Site MJP59 Spikers Quarry, East Ayton, North York Moors National Park (XY 498306 486199)
Current Use	Agriculture
Nature of Planning Proposal	Extraction of Jurassic limestone as proposed extension to former quarry
Size	Approximately 5.6ha
Proposed life of site	15 years
Notes	Restoration: Detailed design is not available yet, but would be potentially some form of recreation combined with nature / geological conservation. The stone would be used as aggregate and building stone and would be processed using a mobile processing plant within the MJP59 site area.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	Proximity of international / national and local designations and key features Natura 2000 sites: 12km north – North York Moors Special Area of Conservation (SAC); 12km west – Ellers Wood and Sand Dale SAC; 12.5km north-east – Beast Cliff-Whitby SAC. Eight Sites of Special Scientific Interest (SSSIs) lie within 5km. Two of these are within 1km, Raincliffe and Forge Valley Woods (also a National Nature Reserve (NNR)) adjacent to the east and Spikers Hill Quarry 50m west. One Site of Importance for Nature Conservation (SINC) within 2km - Black Rigg and Long Plantation (pre-existing SINC, TA08-31) 1.7km east.		✓	✓	✓	--	--	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>The site lies within North York Moors Important Bird Area. Priority Habitat: An area of deciduous woodland lies adjacent to the site to the east and a further area lies circa 30m North. Rowbrow Wood ancient woodland lies adjacent to the site to the east.</p> <p>Ecological Networks: approximately 15% of the site is covered by core England Habitat Network (woodland). Site lies entirely within the 'Derwent' Regional Green Infrastructure corridor. Site lies within the 'Upper Derwent Tributaries' Living Landscape.</p> <p>Local effects Raincliffe and Forge Valley Woods SSSI (also a National Nature Reserve) is particularly important in terms of ecology and it is considered that there could be effects on the vegetation for which the site is notified due to deterioration in air quality / dust, noise disturbance to wildlife e.g. breeding birds, changes in hydrology affecting the tufa springs that emerge along the woodland slope and pollution of these springs.</p> <p>Otter and other protected species are considered likely to be present in the vicinity of this site.</p> <p>Overall, it is anticipated that this site has the potential to have major negative impacts in relation to biodiversity / geo-diversity in the short and medium term. Restoration to biodiversity and recreation would have potential for the creation of limestone grassland in the area and would have a positive effect.</p> <p>Due to the sensitivity of this site, the Habitats Regulations Assessment and Sustainability Appraisal should consider alternative sites. If it is considered that if no alternatives are available and there is a need for this particular material, it should be considered whether a smaller extraction area could meet the required need (though this should still be weighed against potential harm to SSSI interest features or any other harm to biodiversity).</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Plan level / regional / wider effects Although there is connectivity between MJP59 and the River Derwent (via a steep hill), a habitats regulations assessment reported that <i>'the River Derwent does not become a European Site until in excess of 20km downstream. It is therefore considered that dilution effects along with a limited number of sources for pollution (assuming that the environmental permitting process operates effectively) means that likely significant impacts are not anticipated'</i>.</p> <p>The site is located between two SSSIs and site operations have the potential to have a significant impact upon these.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is in a Nitrate Vulnerable Zone (NVZ) for groundwater and lies in Groundwater Source Protection Zone (SPZ) 1 and 2.</p> <p>Site is in Humber River Basin Management District (RBMP). Nearest RBMP river is 'River Derwent from Troutdale Beck to River Rye' 100m east of the site. This 'heavily modified' river has a current ecological quality status of 'poor potential' while chemical quality is 'good'. Possible connectivity between the site and this watercourse due to steep downhill slope between site and river. No RBMP lakes in the vicinity. RBMP Groundwater: 'Derwent Vale of Pickering Corallian Limestone' waterbody - poor quantitative quality / poor chemical quality.</p> <p>Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 30% of time. Up to 70% of the time (at lower flows) new extraction licenses may be more restricted and new licenses may not be available (red assessments recorded for at least 30% of lowest flows).</p> <p>Local effects The coincidence of the site with Groundwater SPZ 1 and 2 means that there is the potential for the aquifer to disrupt water flow to a water source. According to Environment Agency guidance⁷, the</p>		✓	✓		--	--	?

⁷ Environment Agency (2013). Groundwater protection: Principles and practice (GP3).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Agency would object to quarries in SPZ 1, and object if there was an unacceptable risk in SPZ 2. Quarrying can deplete the aquifer, for instance by discharging groundwater to the surface during dewatering (if this occurs) or depriving the aquifer of its protective layer. Of particular risk will be fuel spills at these sites, however, unless further processing of the mineral occurs, risk will be confined to aquifer depletion if material is worked below the saturated zone, possible mobilization of pollutants from overburden and the risk from spillages, which are potentially manageable through mitigation, monitoring and permitting.</p> <p>There may also be issues with materials used to restore the site. Limitations and mitigation requirements will be greatest in SPZ 1 which may require that extraction only be allowed above the saturated zone. The location of the site circa 100m from the River Derwent and with connectivity to this watercourse due to a steep downwards slope could also lead to negative impacts to the status of this waterbody due to pollution from the site.</p> <p>Some uncertainty is also noted due to the possible restrictions on surface water extraction at the site. This is, however, expected to be dealt with through the water licensing regime.</p> <p>In summary, without mitigation impacts are considered to be major negative (with some uncertainty) in the short and medium term and unknown in the longer term.</p> <p><u>Plan level / regional / wider effects</u> There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways.</p>					?	?	

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors The site lies in close proximity to Scarborough (4km) however other larger markets are more distant such as York (50km), Hull (55km), Middlesbrough (58km). Access: confirmed to be onto unclassified Cockrah Road (U551) and south to West Ayton.</p> <p>HGV Vehicles: 40 two-way daily movements (submitter information); Light vehicles: 14 two-way daily movements (submitter information).</p> <p>Public Right of Way (PRoW): Footpath 30.22/702 runs along the eastern boundary of the site.</p> <p>Rail: circa 5km east / nearest known railhead: 64.4km south-west. Strategic Road: A170 1.3km south. Canal / Freight waterway: 53km south-west.</p> <p>Local effects This site would generate 54 two way vehicle movements per day. This would increase traffic on minor roads to the A64 and in holiday periods combine with traffic accessing the National Park and coast potentially slowing journeys, as well as timber traffic (A64 is a timber freight route). A transport assessment would be required.</p> <p>Access on to Cockrah Road is proposed at the north west corner of the site. With the previous quarry on the west of Cockrah Road, there is an area of separation between the existing sheer vertical face of the workings and the edge of the carriageway. This level of separation should be maintained if permission is granted to quarry on the east of Cockrah Road.</p> <p>The access should be relocated to the south west corner of the site to minimise large vehicle traffic along Cockrah Road through the middle of the two quarries.</p> <p>Plan level / regional / wider effects A transport assessment will also be required which should also look at any travel modes beyond the local highway network.</p>		✓		✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p>Proximity of air quality receptors Site is not within a Hazardous Substances Consultation Zone or an Air Quality Management Area (AQMA). Properties are located at East Ayton 900m south-east, West Ayton 1km south and a number of individual properties (Low Yedmandale 500m south-west, Osborne Lodge 680m north-east, Spikers Hill 800m north) are in range the potential range of dust.</p> <p>Local effects Dust might be an issue at the site in dry conditions, which may affect receptors such as Raincliffe and Forge Valley Woods SSSI / NNR adjacent to the east, though human receptors are likely to be sufficiently distant for dust impacts to be negligible. It is however acknowledged that mitigation may reduce any impacts such that effects would be insignificant however this is currently unknown until a dust / air quality assessment is undertaken and any required mitigation is outlined. Traffic would be generated by this extension, with 54 two way vehicle movements per day. Possible air pollution impacts may result from traffic fumes and onsite processes. Overall it is considered that impacts would be minor negative in the short and medium term, though in the long term restoration to recreation / biodiversity will see air quality return at least to the baseline.</p> <p>Plan level / regional / wider effects There are no air quality effects expected to the wider area.</p>		✓	✓		-	-	0
5. To use soil and land efficiently and safeguard or enhance their	<p>Proximity of soil and land receptors Approximately 25% of the site is classified as non-agricultural land and the remaining site area is ALC Grade 3. In terms of land stability development does not lie within or adjacent to a Coal Authority development high risk area.</p> <p>Local effects A relatively small amount of Grade 3⁸ (good to moderate quality) agricultural land will be lost</p>			✓		-	-	+

⁸ ALC Grade 3 land is sub-divided into Grade 3a and 3b, with the best and most versatile agricultural land ALC Grade 1 to 3a. Without further investigation it is not known whether Grade 3 land at this site is 3a or 3b and best and most versatile. For the purposes of this SA the precautionary principle approach has been adopted and it is assumed that Grade 3 land is Grade 3a and the best and most versatile agricultural land.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
quality	<p>to this development. Restoration will be to recreation / biodiversity, which may well allow soils to be re-instated and enhanced.</p> <p>Plan level / regional / wider effects The loss of best and most versatile agricultural land cumulatively could have an effect on national food production capacity. The contribution of this site to the cumulative loss is considered to be a small in relation to the overall agricultural land lost in England per annum to development⁹ but could have a small scale effect on national food production capacity.</p>							?
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change An area of priority ancient woodland lies adjacent to the site to the east. The site lies in close proximity to Scarborough (4km) however other larger markets are more distant such as York (50km), Hull (55km), Middlesbrough (58km).</p> <p>Local effects As climate change is a global issue, effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects Traffic from the site (estimated 54 two way vehicle movements per day) would generate carbon, and it is considered that the site is relatively distant from larger markets in the region (potentially an unnecessary source of CO₂ depending upon the end use of the resource and the situation of alternative sites to market). The site consists of arable fields and so it is not considered that carbon stocks would be lost as a result of the site however it is possible that dust would reduce productivity of the adjacent woodland. While the latter impact is expected to be small scale, and at the very low end of the significance scale. The impact is thus seen as moderate negative with some uncertainty as the end market for the resource is currently unknown.</p>	✓			✓	m-	m-	m-
						?	?	

⁹ 4.2ha (currently 25% of site is non-agricultural land) annualised across the 15 year life of the site would be an annual 0.28ha loss. There was 2365ha of agricultural land was lost to development in 2014/15 across England. A 0.28ha loss would represent a 0.01% contribution to this category of soil loss across England for each year of the site.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹⁰ of a site The site is in Flood Zone 1 and is not affected by surface water flooding. Ecological Networks: approximately 15% of the site is covered by core England Habitat Network (woodland). The site lies entirely within the 'Derwent' Regional Green Infrastructure corridor. Site lies within the Upper Derwent Tributaries Living Landscape.</p> <p>Approximately 25% of the site is Non-Agricultural Land Classification (ALC) and the remaining site area is ALC Grade 3.</p> <p>Local effects Although dust deposition may occur, this is unlikely to be a significant enough effect to disrupt the wider ecological network (Living Landscape / England Habitat Network). Flooding is not a particular issue for this site. Neutral.</p> <p>Plan level / regional / wider effects Agricultural land is increasingly recognised as being vulnerable to climate change, loss of this land will have a combined effect with wider losses elsewhere due to climate change – the effect is considered a minor negative.</p>	✓	✓	✓		-	-	?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site will contribute to the need for limestone. However, depending on whether it is extracted as crushed rock or whether some building stone is extracted, which will be unavailable for future use (unless recycled). It may to a degree offset recycled materials that could potentially replace them. This works against the SA objective, so it is scored negatively.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓		-	--	--

¹⁰ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors identified.</p> <p>Local effects The site would not deal with waste and no details are provided of how waste would be managed on site.</p> <p>Plan level / regional / wider effects The site may have an indirect negative impact on the prioritising the management of waste down the waste hierarchy as a result of providing limestone and reducing the need to recycle limestone from other locations.</p>		✓		✓	-	-	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p>Proximity of historic environment receptors West Ayton Conservation Area lies (DNY1022) 900m south. No Registered Parks and Gardens, Registered Battlefields or World Heritage Sites lie within 5km.</p> <p>Twelve Scheduled Monuments lie within 2km - 'The Moor Dikes and Cradlegrip Dike prehistoric linear boundaries and other prehistoric remains in Wykeham Forest' (ID 1,017,164) 1.6km north-west, 'Round Barrow on Coverdale Moor, 530m south of North Stile Cottage' (ID 1,017,156) 1.6km north-west, 'Round Barrow on Coverdale Moor, 470m south of North Stile Cottage' (1,020,295) 1.61km north-west, ' Round barrow in Raincliffe Woods, 420m north of Osborne Lodge' (ID 1,021,235) 1.05km north-east, 'Skell Dikes: a prehistoric linear boundary with two associated round barrows and an adjoining pit alignment' (ID 1,021,238) 930m north-east, 'Round barrow 520m north west of Keepers Cottage' (ID 1,008,482) 1.46km north-east, 'Round barrow 200m north of Keepers Cottage' (ID 1,008,479) 1.56km north-east, 'Bowl barrow 1300m north of Betton Farm' (ID 1,012,082) 1.8km east, 'Bowl barrow 950m north of Betton Farm' (ID 1,008,130) 1.58 km east, ' Bowl barrow 920m north of Betton Farm' (ID 1,008,129) 1.63km east, ' Bowl barrow 700m north of Betton Farm' (ID 1,008,128) 1.38km east, 'Ayton Castle: medieval manorial centre, fortified house including tower and fishponds' (ID 1,015,410) 900m south. One Listed Building is located within 1km, 'House approx. 10m north of low Yedmandale Farmhouse' (Grade II NHLE- 1,148,949) 560m south-west.</p>	✓	✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Although no heritage assets have been recorded to-date within the footprint of the proposed new quarry site, it is encircled by crop marks of prehistoric sites which emphasize the high archaeological potential of the area for evidence of prehistoric, and later, human activity. These include a ditched Bronze Age burial mound (HER 18973) up to 30m in diameter circa 170m south-south-east of the new quarry proposal; a double ditched trackway (HER 3162), thought to be prehistoric in date, 290m away to the south-west; a ditched promontory enclosure (HER 3148) circa 400m to the west and an Iron Age square barrow circa 770m to the north-west</p> <p>Local effects The presence of surrounding archaeological sites implies that further, as yet unknown, prehistoric sites could be in the vicinity of the site and, therefore, any new quarrying proposal should be subject to appropriate archaeological evaluation and mitigation. Due to this high archaeological potential for the survival of archaeological remains within the site it is assumed that allocating this site would be likely to cause the loss of these archaeological remains if the site is extracted without mitigation. As archaeology is a finite, irreplaceable resource, the impact will therefore be significant. However, it is expected that investigation/ excavation works required by the Joint Plan Policy D08 (Historic Environment) '<i>mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>' would result in an effect of no greater than minor negative.</p> <p>The provision of a local building stone would help maintain and support the local distinctiveness of the North Yorkshire Moors National Park if used for the local building industry.</p> <p>The site is not considered to have any impact on the West Ayton Conservation Area or any Listed Buildings within the immediate vicinity (Low Yedmandale Farmhouse), however any expansion needs to consider any potential impact on the setting of these designated heritage assets, including the longer distance views and wider landscape settings in which these Assets are appreciated, together with the need for appropriate archaeological mitigation.</p> <p>Plan level / regional / wider effects None noted.</p>					?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p>Proximity of landscape / townscape receptors and summary of character The site lies within the North York Moors National Park. North Yorkshire and Cleveland Heritage Coast lies around 6.2km north-east.</p> <p>The site lies within North Yorkshire Moors and Cleveland Hills National Character Area (NCA) and is categorised in the North Yorkshire and York Landscape Character Assessment (NYLCA) as Limestone Foothills and Valleys. This landscape character area has high visual sensitivity as a result of extensive long distance views to adjacent Landscape Character Types, strong inter-visibility with surrounding landscapes and the flat open summits of the Tabular Hills; High ecological sensitivity as a result of the numerous linear belts of ancient woodland lining the dales sides, coupled with numerous SSSIs; and high landscape sensitivity as a result of the strong landscape and settlement pattern, with strong visual unity in settlement and distinctive cultural patterns comprising medieval villages located at spring lines. The site lies in 'Limestone Hills Landscape Character Area: 5b Tabular Hills- Pickering to Lockton' in the North York Moors Landscape Character Assessment (LCA). The site is located within the south-facing dip slope of the Tabular Hills Escarpment, with narrow, densely wooded valleys which are typical. There are views over the Vale of Pickering and also views from the Vale of Pickering towards the escarpment.</p> <p>In terms of tranquillity landscape is 'disturbed'. Light pollution: Low-moderate - on 2000 Campaign to Protect Rural England (CPRE) map the level is shown as 67, on a scale of 1-255, with 1 representing maximum darkness.</p> <p>In terms of screening, the site is well screened by Forge Valley Woodlands to the east, a plantation to the</p>	✓	✓	✓		--	--	--

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>north, and screen planting around the existing inactive quarry to the west. However, it is open to views from Cockrah Road adjacent to the site.</p> <p>Local effects It is considered that development of the site would not directly affect the setting of East or West Ayton, which lie just over 1km to the south and south east. Development of this site would however conflict with the purposes of the national park designation. Locally there would be a cumulative impact with the existing quarry, and it is considered likely to adversely affect the enjoyment of visitors to the area and to Forge Valley NNR. There also does not appear to be any buffer between the site and Forge Valley NNR which is likely to result in an unacceptable landform. It is considered that a steep ridge to the site would not be desirable in this location. Vehicle movements to the site may also change the character of the surrounding area which appears relatively quiet at present and would impact upon the tranquillity of the area. It is considered that there is limited scope to effectively further screen the site.</p> <p>Overall, impacts are considered to be major negative in relation to this objective during the operation of the site. There is some uncertainty regarding impacts in the long term as restoration plans are currently unknown.</p> <p>Plan level / regional / wider effects None noted.</p>							?
12. Achieve sustainable economic growth and create and support jobs	<p>Proximity of factors relevant to sustainable economic growth The site lies in close proximity to Scarborough (4km) however other larger markets are more distant such as York (50km), Hull (55km), Middlesbrough (58km).</p> <p>Local effects This site would result in an expected 200,000 tonnes per annum of limestone being made available to the market over a period of up to 15 years. This would make a significant contribution to the building sector by helping to boost supply of a key building material. It would also directly support jobs in extraction and freight. The site does not represent low carbon development however; particularly as possible markets are relatively spread out, which could increase the carbon footprint of building. The effect overall is considered to be positive in the short and medium term and neutral in the long term as a result to positive of</p>		✓	✓	✓	+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>restoration plans as restoration to recreation may attract limited numbers of visitors to the area, depending on the type of recreational opportunities provided.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>							
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> Index of Multiple Deprivation (IMD) area-Derwent Valley. Not in most deprived 20%. Within 2km of the site lie East Ayton (900m south-east), West Ayton (1km south) and Hutton Buscel 1.5km south-west and a number of individual properties. West and East Ayton are listed as service villages in the North York Moors Core Strategy and Hutton Buscel is listed under 'other villages'. Core Policy B of the Core Strategy outlines that in service villages including West and East Ayton, limited development opportunities exist including open market and affordable housing, employment and improvement of existing facilities. In other villages limited opportunities exist for housing to meet local needs and affordable housing.</p> <p><u>Local effects</u> It is considered that most communities are too distant to experience significant amenity impacts that may impact on tourism etc. The site is however located within the North York Moors National Park, an area where many people visit to enjoy the open landscape and scenic beauty. Although a very minor impact is anticipated, it is considered that the allocation of this site may work against the sub-objective of 'providing opportunities to boost tourism'. The site will provide some job opportunities for local communities and enable the provision of locally available construction materials. Overall, impacts in relation to this objective are considered to be largely neutral in the short and medium term and positive in the long term as site restoration will provide a recreational resource for nearby communities.</p>		✓		✓	0	0	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects Not applicable to this site.							
14. To provide opportunities to enable recreation, leisure and learning	<p>Proximity to recreation, leisure and learning receptors The site lies within the North York Moors National Park. A number of rights of way pass in close proximity to the site: Footpath 30.22/702 runs along the eastern boundary of the site, an 'other route with public access' runs circa. 80m west of the site, Footpath 30.22/001 runs circa. 125m east of the site, Footpath 30.6/220 runs 180m east of the site, Footpath 30.6/218 runs 200m east of the site and Footpath 30.22/003 runs 200m north-west of the site.</p> <p>Local effects It is considered that the location of this site within the National Park and in close proximity to a number of public rights of way and Forge Valley NNR may impact upon the enjoyment of the National Park / recreational routes / areas in the vicinity of the site. Users of nearby footpaths particularly footpath 30.22/702 which runs adjacent to the site may experience an increase in dust and noise and effects on visual amenity and will experience an increase in heavy goods vehicles on the intersecting road. It is considered that users of the footpaths within Forge Valley are unlikely to experience any significant impacts due to screening from the Forge Valley Woodland combined with the valley topography. West Ayton caravan site lies circa 700m south of the site and is accessed via unclassified road 551 which would also be likely to constitute the quarry access route. Users of this caravan site may experience increased traffic levels when arriving / leaving the site and intermittent views of the site. Overall, it is considered that the site would have a moderate negative impact upon recreation, leisure and learning during the operational phase. Long term impacts are highly positive as site restoration will be to recreation.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓	✓	m-	m-	++
15. To protect and improve the wellbeing, health and safety of local	<p>Proximity to population / community receptors / factors relevant to health and wellbeing No hospitals, clinics or health centres within 1km. East Ayton lies 900m south-east, West Ayton lies 1km south. A caravan site is located approximately 700m south. A number of individual properties lie within a 1km radius including Low Yedmandale 500m south-west, Osborne Lodge 680m north-east and Spikers Hill 800m north.</p> <p>Local effects It is assumed that traffic to this site would pass through East Ayton / West Ayton. Increased</p>		✓		✓	-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
communities	<p>HGV movements in these settlements may result in a minor negative impact in relation to the wellbeing and health and safety of these communities (noise, dust, vibration, road safety, impact upon tranquillity, etc.).</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Site is in Flood Zone 1 and is not affected by surface water flooding.</p> <p>Local effects No significant effects are predicted.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population The site does not conflict with any known allocations in other plans.</p> <p>Local effects The site would make a contribution to self-sufficiency in the supply of Jurassic limestone (building stone and aggregate) and may also support markets outside of the Plan area.</p> <p>Plan level / regional / wider effects The site may also support markets outside of the Plan area.</p>		✓	✓		+	+	0
Cumulative effects	<p>Cumulative / Synergistic effects¹¹</p> <p>Planning Context: East Ayton is located 900m south-east, West Ayton is 1km south and Hutton Buscel 1.5km south-west and a number of individual properties. West and East Ayton are listed as service villages in the North York Moors Core Strategy and Hutton Buscel is listed under 'other villages'. Core Policy B of the Core Strategy outlines that in service villages including West and East Ayton, limited development opportunities exist including open market and affordable housing, employment and improvement of existing facilities. In other villages limited</p>							

¹¹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	<p>opportunities exist for housing to meet local needs and affordable housing. No conflict with allocations, though the site does lie adjacent to an area marked in the Plan as 'woodland (including ancient woodland)' so would gain protection through Core Policy C 'Natural Environment, Biodiversity and Geodiversity'.</p> <p><u>Other Joint Minerals and Waste Plan Sites:</u> Site lies within the boundary of MJP34 (discounted site) 'Land between Sandsend and Scarborough'.</p> <p><u>Historic Minerals and Waste Sites:</u> The site lies in a DECC PEDL (Petroleum Exploration and Development License) onshore license block. In terms of other active and dormant sites, North Yorkshire County Council Highways Depot transfer station lies 1.6km south.</p> <p>Due to the location of the site in the North York Moors National Park levels of development in close proximity to MJP59 are relatively low and it is not considered that the allocation of the site would give rise to few significant cumulative effects. However, one such effect was noted for transport.</p> <p><u>Transport:</u> This site would increase traffic on minor roads to the A64 and in holiday periods combine with traffic accessing the National Park and coast potentially slowing journeys, as well as timber traffic (A64 is a timber freight route).</p>							
Limitations / data gaps	More detailed assessment would be required to fully evaluate a number of effects. This should be addressed at any subsequent planning application stage.							
Mitigation requirements identified through Site Assessment process								
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, including impact on designated sites, protected species and habitats. • Any proposals for the development will need to be accompanied by a hydrogeological risk assessment and the implementation of mitigation measures to reduce risks to groundwater quality and groundwater resources to an acceptable level. • Appropriate arrangements for amenity issues, such as control of and mitigation of the effects of noise and dust. • Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources. • Design to mitigate impacts to heritage assets, including appropriate archaeological investigation and mitigation. • Design to mitigate landscape and visual intrusion issues, including: North York Moors National Park, Forge Valley Woods National Nature Reserve, local landscape features. 								

- Design to reduce impact on right of way users and other recreation activities in the vicinity.
- Appropriate restoration scheme using opportunities for habitat creation.

**Appendix 3k: Assessment of Sites in the City of York
Minerals and Waste Joint Plan**

Contents

ALLOCATED SITE			
Reference	Site Name	Type of site	Page
MJP52	Field SE5356 9513, to north of Duttons Farm, Upper Poppleton	Extraction of clay	4
WJP05	Field to north of Duttons Farm, Upper Poppleton	Landfill and recycling of waste from construction industry	19
WJP11	Harewood Whin, Rufforth	Retention of the following facilities beyond 2017 <ul style="list-style-type: none"> • landfill, • recycling (including treatment bulking and transfer) and liquid waste treatment • energy from waste (biomass and landfill gas utilisation) • kerbside recycling and waste transfer operation and Construction of new materials recycling facility and waste transfer station	34
WJP02	Former North Selby Mine Site, Deighton	Anaerobic digestion (AD)	50

Sustainability Appraisal Score

Score	Description
++	The Site option is predicted to have higher positive effects on the achievement of the SA objective. For example, this may include a highly significant contribution to issues or receptor of regional or wider significance, or to several issues or receptors of local significance.
m+	The Site option is predicted to have moderate positive effects on the achievement of the SA objective. For example, this may include a positive, but not highly positive contribution to issues or receptor of more than local significance, or to several issues or receptors of local significance.
+	The Site option is predicted to have minor positive effects on achievement of the SA objective. For example, this may include a significant contribution to an issue or receptor of more local significance.
0	The Site option will have no effect on the achievement of the SA objective ¹ .
-	The Site option is predicted to have minor negative effects on the achievement of the SA objective. For example, this may include a negative contribution to an issue or receptor of local significance.
m-	The Site option is predicted to have moderate negative effects on the achievement of the SA objective. For example, this may include a negative, but not highly negative contribution to an issue or receptor of more than local significance.
--	The Site option is predicted to have higher negative effects on the achievement of the SA objective. For example, this may include a significant negative contribution to an issue or receptor of more than local significance.
?	The impact of the Site option on the SA objective is uncertain.

¹ This includes where there is no clear link between the site SA objective and the site

MJP52 - Field to north of Duttons Farm, Upper Poppleton

Site Name	MJP52 Duttons Farm, Upper Poppleton, York (XY:453967 454090)
Current Use	Agriculture and lake (former clay working)
Nature of Planning Proposal	Extraction of Clay
Size	6.28ha
Proposed life of site	5 to 10 years from commencement of extraction
Notes	Former quarry adjacent to former clay working. Following extraction, the site is proposed for inert waste landfill as a means to achieve the restoration of the site.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Special Area of Conservation / Special Protection Area (SAC/SPA): 10km north-east – Strensall Common SAC; 14.8km south-west – Kirk Deighton SAC. Sites of Special Scientific Interest (SSSI): 1 SSSI within 5km: Clifton Ings and Rawcliffe Meadows 3.6km east.</p> <p>Sites of Importance for Nature Conservation (SINC): 4 SINC within 2km: Low Moor Lane Meadow Hessay (neutral grassland) 930m south-west, Town Pond Shirbutt Lane (pond) 1.4km south-west, Hessay Churchyard 1.48km west, River Ouse 1.74km north-east. Watercourse – Foss Dike adjacent to the site to the south.</p>	✓		✓		-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>UK Priority Habitat: None within 200m.</p> <p>Local effects The Site is unlikely to have a significant effect on any designated nature conservation sites as a result of the proximity of this site to receptors and the limited pathways to each of the designations. However, the site is adjacent to the Foss Dike and therefore it would be important that pollution arising as a result of clay extraction / future landfill (see WJP05). does not occur</p> <p>The site is bordered by hedgerows and currently contains a lake which may provide habitats for animals such as farm birds (and there may be potential for great crested newt). Any new clay extraction activity in this location may cause disturbance to the biodiversity in this location. Further understanding of this would be required to understand the impacts in the long-term. There may be an opportunity for restoration following this use, although the impacts on biodiversity are unknown. On balance, there is potential for this to have uncertain / minor negative effects depending on the scale of development and biodiversity in close proximity to the site.</p> <p>Plan level / regional / wider effects The site is unlikely to have a significant effect on designated nature conservation sites and biodiversity in the wider Plan area.</p>					?		
2. To enhance or maintain water quality and improve efficiency of	<p>Proximity of water quality / quantity receptors The site is within a Nitrate Vulnerable Zone (NVZ) for surface water and groundwater. It also falls within the Humber River Basin District, specifically within the Swale, Nidd, Ure and Ouse Catchment. The Foss Dike watercourse runs adjacent to the site to the southern boundary. This area is called 'Foss Dike from Source to The Foss'. This stretch of the river is of moderate ecological quality. It is not assessed for its chemical quality. The site lies within the aquifer catchment of the</p>		✓	✓	✓	-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
water use	<p>Sherwood Sandstone. Groundwater quality is current quantitatively good and the chemical quality is poor (deteriorating).</p> <p>Catchment Abstraction Management Strategy (CAMS): Surface water is available at least 50% of the time. Restrictions on abstraction licenses may apply in low flows.</p> <p>Local effects The site is within an NVZ and the sensitive Sherwood Sandstone aquifer, surface and groundwater may be vulnerable due to run-off from the clay extraction operation, including fuel spills (though it is acknowledged that the relatively impermeable nature of clay would offer protection to the underlying aquifer. In addition, there is an existing lake (although it is assumed this would be drained / filled) and an existing pathway into the Foss Dike watercourse to the southern end of the site. Should the use change to be landfill, there would need to be a strategy in place to contain any resultant contamination as a result of leachate, surface run-off or dewatering of the lake.</p> <p>Overall the effects are predicted to be minor negative over the timeframe of the plan with effects becoming more uncertain in the long-term as this would be dependent upon the implementation of protocols to ensure that contamination as a result of draining the site and subsequent landfill is put into place.</p> <p>Plan level/ regional/ wider effects There is the potential pollution from the site could pass into the wider water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by the environmental permitting system during operation.</p>					?	?	
3. To reduce transport miles and associated	<p>Proximity of transport receptors This site is within 100m of the A59 which runs between Harrogate and York. Access would be via an existing site which is via Kettlewell Lane onto Newlands Lane then onto A59; Light Vehicles: 2 to 4 two-way daily movements (estimate); Heavy Goods Vehicles (HGVs): 10 to 14 two-</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
emissions from transport and encourage the use of sustainable modes of transportation	<p>way daily movements (estimate).</p> <p>Net change in daily two-way trip generations: Light vehicles: 2 to 4; HGVs: 10 to 14. Traffic assessment rating: Red² – Significant adverse impacts are expected for a site. The site may be unsuitable for the submission or strong detailed mitigation measures may be required in relation to safety aspects (these are addressed in relation to SA objective 15). Summary: <i>'The traffic and HGV generations of the site are relatively minor however there are road safety concerns over the use the single lane Newlands Lane and junction with the A59'</i>.³</p> <p>PRoW: None affecting access or site.</p> <p>Rail: 460m south / nearest known railhead: 22km south; Strategic Road: A59 is 900m south along roads; Canal / Freight waterway: 1.75km north-east (River Ouse).</p> <p>Local effects Re-opening the clay pit will increase the number of vehicle journeys to and from this location, though only by a modest amount (10 to 14 HGVs per day). This increase in HGVs is unlikely to significantly increase congestion on the A59 onto which traffic would flow. The effects predicted are therefore likely to be minor negative as, while the traffic impact is minimal, Newlands Lane and the A59 Newlands Lane junction present road safety concerns for the duration of working the site.</p> <p>It seems unlikely that sustainable modal shift could support this small site. A transport assessment and travel plan would be required.</p> <p>Plan level / regional / wider effects The development of the site would result in an increase in traffic to and from the site; however, this is expected to be relatively minor in relation to the wider Plan area.</p>							

² The traffic assessment has informed this assessment in part, but the SA assessment of transport is broader in its scope and considers continuation effects where sites with finite lifespans would, without the plan, have been predicted to cease operation. This inevitably results in some divergence in scoring between the two assessments.

³ Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	<p><u>Proximity of air quality receptors</u> The site is within 4.5km of the York City Centre and Leeman Road Air Quality Management Areas (AQMAs) (to the east of the site). The village of Upper Poppleton is within 2km of the site with the nearest property within 1km (270m) to the east of the site. A school and playing fields lie 1.3km east in Upper Poppleton.</p> <p><u>Local effects</u> The main receptors of any air quality effect would be the properties in proximity to the site (Duttons Farmhouse) and the western edge of Poppleton Village as well as properties facing onto the A59 and York Outer Ring Road. However, as the number of lorries are expected to be low, predicted effects are not expected to be significant and could be easily reduced, if need be, by the implementation of air quality abatement measures. While it is possible that inappropriate routing of lorries could cumulatively have a negative effect on the York AQMA, it is unlikely that lorries would systematically route from this site through the AQMA (any impacts on the AQMAs due to lorry routes taken would need to be considered for any application that comes forward). Significant direct dust impacts from extraction at the site are thought to be out of range of Upper Poppleton though may affect Duttons Farm, so an air quality assessment is needed.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		-	-	0
5. To use soil and land efficiently and safeguard or enhance their quality	<p><u>Proximity of soil and land receptors</u> This area is a former clay quarry. It is surrounded by Grade 3 (good to moderate) agricultural land.</p> <p><u>Local effects</u> The proposed clay quarry site is adjacent to a previous clay quarry. This is likely to extend the clay pit in this location but is unlikely to have major effects on this objective as the quarry itself was also a historic clay working. Nonetheless, the surrounding land is currently being farmed, so small scale effects are expected. It is assumed that if the site is to be landfilled the intention is to restore soils on top of the landfill. However, to be sure, mitigation should be to retain on-site soils for restoration e.g. use as bund.</p> <p><u>Plan level / regional / wider effects</u> As this site extends onto agricultural land, ultimately there could be an effect on food security as land is taken out of production. However, on its own 6.38ha is not likely to be a significant effect.</p>		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	<p><u>Proximity of factors relevant to exacerbating climate change</u> The site is bounded by hedgerows and is predominantly used for agriculture.</p> <p><u>Local effects</u> As climate change is a global issue effects are reported in wider effects below.</p> <p><u>Plan level / regional / wider effects</u> The proposal for this site to be used as a clay quarry is unlikely to significantly contribute to climate change. However there will be some negative effects as a result of carbon emissions from increased vehicle movements to and from site and the operation of machinery involved in clay extraction activities. Vegetation will also be lost during the operation of the proposed site. Overall this is expected to have a minor negative effect.</p>	✓		✓		-	-	-
								?
7. To respond and adapt to the effects of climate	<p><u>Proximity of factors relevant to the adaptive capacity⁴ of a site</u> The site does not lie within or adjacent to a designated green corridor. No nature conservation designations are within close proximity. The site lies predominantly within Flood Zone 1 although also includes Flood Zone 3 (high flood risk) and Flood Zone 2.</p>	✓			✓	-	-	?

⁴ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
change	<p>The proposed site is on Grade 3 agricultural land.</p> <p>Local effects Whilst the site has an area of high flood risk to the southern end, it is not anticipated that the risk of flooding will be exacerbated in the short term. There may be some impacts in the longer term as currently there is a lake in the old clay pit. Quarrying for clay may change the drainage regime in the localised area which may have a minor adverse effect on flood risk in the immediate vicinity. This would need to be assessed further to ensure that this does not cause subsequent adverse effects. There would be a loss of agricultural land during the operation of the proposed site.</p> <p>Overall, the effects on this objective are likely to be minor negative although there is some uncertainty as to any long term effects on the drainage regime by changing the site to landfill.</p> <p>Plan level / regional / wider effects None noted.</p>						?	
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects This site is expected to produce 40,000 tonnes of clay annually, and may indirectly provide a disincentive to seeking alternative recycled sources of building materials. Minor negative.</p> <p>Plan level / regional / wider effects Considered to be the same as local effects.</p>	✓		✓	✓	-	-	-
9. To minimise waste generation and prioritise management of waste as high up the waste	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects The proposed extraction of clay is unlikely to have significant effects on this objective directly.</p> <p>Plan level / regional / wider effects None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
hierarchy as practicable								
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	<p><u>Proximity of historic environment receptors</u> There are no other notable heritage assets within 1km of the site. The Upper Poppleton Conservation Area is 1.2km east. The site is outside of the historic character and setting areas as identified in the City of York Greenbelt Appraisal (2003) and subsequent amendment.</p> <p>Registered Parks and Gardens: Beningbrough Hall (Grade II, ID 1,001,057) 4.2km north; Registered Battlefields: Battle of Marston Moor 3.9km west.</p> <p>Historic Landscape Characterisation (HLC): According to the HLC map the site is in an area defined as: Broad Type: Enclosed Land and HLC Type: Unknown Planned Enclosure. This is a large area of parliamentary enclosure which consists of medium sized regular fields defined by straight ditches. This area has significant legibility and dates between 1750 and 1850. This is mainly part of Moor Monkton between 1786 and 1787.</p> <p><u>Local effects</u> Whilst there has formerly been clay working on this site, it is currently used as a lake / agricultural land. There are unlikely to be significant effects here given that the site has previously been used for clay extraction (so will neither disrupt archaeology or historic character).</p> <p>On balance, the effects on this objective are assessed as potentially neutral with some uncertainty in the medium to longer term reflecting the unknown scale of buildings on the site and their visibility which could, for instance, if large enough, impact on the setting of York (though the risk of this is seen as relatively low) or Upper Poppleton.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
11. To protect and enhance the quality and character of landscapes and townscapes	<p><u>Proximity of landscape / townscape receptors and summary of character</u> There are no National Parks, Areas of Outstanding Natural Beauty (AONBs) or areas of Heritage Coast within 15km. The site is located within the Draft Green Belt as per the City of York Local Plan Preferred Options (2013).</p> <p>The site is located within the National Character Area 'Vale of York'. The North Yorkshire and York Landscape Character Assessment places this site in landscape character type 28: 'Vale farmland with plantation woodland and heathland (farmed lowland and valley landscapes). This is identified as a relatively low-lying undulating vale landscape enclosed to the west by rising landscape of Magnesian Limestone Ridge landscape character type and to the east by the Wooded Hills and Valleys and Chalk Wolds landscape character types. This area is identified as having a moderate visual sensitivity overall as there is a strong sense of openness and a result of the topography although plantation woodland does disrupt views. There is also a moderate ecological sensitivity and moderate sensitivity to the landscape and cultural elements as in places there are historic landscape patterns compromised by modern development and infrastructure.</p> <p><u>Local effects</u> This site is surrounded by hedgerows which provide some screening of the site from the A59, although these do look patchy in some locations facing Upper Poppleton village.</p> <p>The proposal for the extraction of clay adjacent to the former quarry is unlikely to have significant effects on the landscape subject to the scale and design of any additional facilities. Any effects may be in relation to character and setting as a result of increased traffic movements and visibility of any activity in relation to the landfill operations. Design of any management facilities would need to consider visibility of the site to ensure that this does not dominate the existing landscape and affect the setting of York. Currently the site is a lake and therefore, the increase in activity is likely to impact particularly in the short term.</p> <p>On balance the effects of this proposed use at Duttons Farm is likely to be minor negative.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		-	-	-
								?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Currently the site is in agricultural use / lake. The site is a former clay pit.</p> <p><u>Local effects</u> The proposal for this site may have a minor positive effect on the local economy. Clay extraction is likely to require the creation of a small number of jobs although the scale of this is not likely to be significant. Overall, it is considered that this is likely to have a neutral to minor positive effect for the duration the site is in use.</p> <p><u>Plan level / regional / wider effects</u> Clay extraction would also facilitate the supply of engineering clay to the construction sector, indirectly supporting future economic growth.</p>		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> Duttons Farmhouse is 250m from the edge of the site. Other dwellings in close proximity are along Newlands Lane within 350m. The site is 1.2km west of Upper Poppleton, and circa 2.5km from the city of York. The new local plan for York is still in production. The adopted 2005 local plan concentrates development on brownfield land within the built up urban area and urban extensions. Outside of defined settlement limits planning permission will only be granted for development appropriate to the Green Belt or the open countryside. Upper Poppleton has, however, been defined as an action area where planning permission will not be granted for development that could prejudice the implementation of their redevelopment. Checks on the York Proposals Map show this site as being reasonably distant from allocations or policies, with an area including an employment allocation and open space >400m south-east.</p> <p><u>Local effects</u> Job opportunities are likely to be limited as a result of the proposed use. The proposal for clay extraction is unlikely to benefit the immediate settlements in any significant way. The site is equally unlikely to hinder tourism. Overall, it is considered that the effects of these proposals are a minor positive in relation to job creation.</p> <p><u>Plan level / regional / wider effects</u> The proposal for clay extraction at this site is unlikely to affect communities in the wider area. Neutral.</p>					+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
14. To provide opportunities to enable recreation, leisure and learning	<p><u>Proximity to recreation, leisure and learning receptors</u> There are no public rights of way (PRoW) or leisure facilities within proximity of the site. Within 1km of the site is Upper Poppleton Village Green although there is no direct pathway to access this in the village.</p> <p><u>Local effects</u> Using this site for clay extraction is unlikely to have significant effects on opportunities for recreation, leisure and learning. It is also probably too small and remote to provide opportunities for recreational access.</p> <p><u>Plan level / regional / wider effects</u> Same as local effects, unlikely to have significant effects on opportunities for recreation, leisure and learning in the wider area.</p>					0	0	0
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> York hospital is approximately 6km from the site. The village of Upper Poppleton is within 2km of the site with the nearest property within 1km to the east of the site.</p> <p><u>Local effects</u> This site is predominantly set away from residential areas with access via a private track. Whilst this will help to minimise issues concerning safety, protocols would need to be in place to be precautionary.</p> <p>Without mitigation, noise, dust and light from the site may also have an impact on the village nearby, including from associated traffic for dwellings adjacent to the A59. This may have a slight impact on safety of pedestrians and cyclists who choose to use the A59.</p> <p>A traffic assessment has identified concerns over the safety levels if Newlands Lane and the Newlands Lane / A59 junction are used by HGVs without mitigation. Although access is acceptable on to Newlands Lane, works will be required to form the access onto Newlands Lane and improvements will be required along Newlands Lane to the A59. Newlands Lane will need to be widened to allow two way traffic movements. The Joint Plan traffic assessment states “<i>The site would be accessed off Kettlewell Lane with traffic routing via Newlands Lane onto the A59. Newlands Lane is a single track carriageway with occasional passing places and is also subject to a 7.5T weight limit except for access which is understood to be for HGV traffic management purposes. As a minimum Kettlewell Lane is likely to require upgrading for regular use by HGVs</i>”</p>		✓	✓		m-	m-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>for this submission. The junction of Newlands Lane and the A59 also looks to fall short of required visibility standards and may present a road safety risk if use of the junction is intensified by additional traffic from the submission”.</p> <p>The traffic assessment states that “it is envisaged that these issues could be mitigated although may require third party land with the level of additional traffic from the site which could be accommodated likely to depend on the extent of the mitigation measures put in place”.</p> <p>On balance, it is predicted that, due to traffic safety on Newlands Lane and the Newlands Lane / A59 junction, moderate negative effects could occur for the duration of the development without mitigation.</p> <p>Plan level / regional / wider effects None noted.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones About 15% of the site to the south lies in Flood Zones 2 and 3. About 85% of the site lies in Flood Zone 1. Additional areas of low risk surface water flooding are to the eastern side of the site. No more than 10% of the site is affected by surface water flooding (low to high risk), though a lake lies in the centre of the site.</p> <p>In terms of groundwater flooding, the site lies in a 1km square in which <25% of land may be susceptible to</p>	✓		✓	✓	--	--	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Clearwater flooding.</p> <p>Climate change is likely to increase the 1:20 (5%) predicted flood event extent within the site. Areas of Flood Zone 3 are likely to increase into areas that are shown as Flood Zone 2 and Flood Zone 2 is likely to increase in extent into the site. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively.</p> <p>Strategic Flood Risk Assessment (SFRA) sequential test result – this site is not suitable. Less vulnerable land uses are not permitted at sites within functional floodplain.</p> <p>Local effects As a clay site, the site is likely to be extracted below the perched water table, though groundwater flow on clay sites in Clearwater areas is likely to be negligible though basal heave may be an issue depending on the depth of extraction. Therefore, groundwater flooding is unlikely to cause any significant problems though should still be investigated. Perched water tables are an inherent property of clay extraction. Clay extraction in this location has been undertaken previously. There could be possible run-off to the Foss Dike, though the effect on flooding would be insignificant. On balance, the unsuitability of the site as detailed in the SFRA results in a major negative score, but uncertain in the short, medium and long term and would need further work to determine whether flood plain compensatory storage would be needed. As with other sites a site specific flood risk assessment would be required.</p> <p>Plan level / regional / wider effects Impacts towards the end of the period of operation should be considered further.</p>					?	?	?
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population Landfill may form part of the restoration strategy to restore this landscape.</p> <p>Local effects This site would help to meet the need for clay extraction in the short-medium terms. This might be beneficial in meeting the needs of local businesses requiring clay. This is therefore predicted to have minor positive effects.</p> <p>Plan level / regional / wider effects Same as local effects, there may be minor positive effects for</p>		✓		✓	+	+	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	businesses requiring clay in the wider area.							
Cumulative / Synergistic effects⁵								
Planning context	<p>The site is 1.2km west of Upper Poppleton, and circa 2.5km from the city of York. The new local plan for York is still in production. The existing 2005 local plan concentrates development on brownfield land within the built up urban area and urban extensions. Outside of defined settlement limits planning permission will only be given for development appropriate to the Green Belt or the open countryside, the design of the site would need to ensure that the purposes of the Green Belt designation are not compromised and maintain high environmental standards.</p> <p>Poppleton has been defined as an action area where planning permission will not be granted for development that could prejudice the implementation of their redevelopment. Checks on the York Proposals Map show this site as being reasonably distant from allocations or policies, with an area including an employment allocation and open space >400m south-east.</p>							
Other Minerals and Waste Joint Plan Sites	Other Joint Minerals and Waste Plan Sites within 5km: WJP11 is 1.6km south. Harewood Whin including waste treatment facility, non-hazardous landfill, composting and material recycling is 2.1km south. 2 waste transfer stations are situated at 2.6km and 3.5km south.							
Historic minerals and waste sites	A former recycling centre at Hessay, which included a waste transfer station, 1.7km west.							
Limitations / data gaps								
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.								

⁵ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Mitigation requirements identified through Site Assessment process

- Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on the existing lake and protected species
- Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources
- Design of development and landscaping of site to mitigate impact on: heritage assets (archaeological remains), Upper Poppleton Conservation Area ,City of York's historic character and the Green Belt and their respective settings and local landscape features
- Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate
- Design to include suitable arrangements for access and local roads, including from site along Kettlewell Lane to Newlands Lane; there should be a planning condition which prevents left turning from the site, which could lead to HGV traffic through Nether and Upper Poppleton. Access onto the A59 will require suitable signage for turning lorries in conjunction with any other local road improvements which may be required, to ensure safe access.
- Appropriate arrangements for control of and mitigation of the effects of noise, dust and mud on road.
- Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt.

WJP05 – Field to north of Duttons Farm, Upper Poppleton

Site Name	Site WJP05 Duttons Farm, Upper Poppleton, York (XY: 454010 454102)
Current Use	Agriculture and lake (former clay working)
Nature of Planning Proposal	Landfill and recycling of waste from construction industry
Size	6.28ha
Proposed life of site	2022 to 2027
Notes	Proposed as new landfill for restoration following proposed extraction of clay (MJP52). Restoration: no detailed design yet, but would be to forestry and agriculture.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES / SITE ASSESSMENT SPREADSHEET).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features Special Area of Conservation / Special Protection Area (SAC/SPA): 10km north-east – Strensall Common SAC; 14.8km south-west – Kirk Deighton SAC. Sites of Special Scientific Interest (SSSI): 1 SSSI within 5km: Clifton Ings and Rawcliffe Meadows 3.6km east.</p> <p>Sites of Importance for Nature Conservation (SINC): 4 SINC within 2km: Low Moor Lane Meadow Hessay (neutral grassland) 930m south-west, Town Pond Shirbutt Lane (pond) 1.4km south-west, Hessay Churchyard 1.48km west, River Ouse 1.74km north-east. Watercourse-Foss Dike adjacent to the site to</p>	✓		✓		-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>the South. UK Priority Habitat: None within 200m.</p> <p>Local effects The Site is unlikely to have a significant effect any designated nature conservation sites as a result of the proximity of this site to receptors and the limited pathways to each of the designations. However, the site does connect with the Foss Dike and therefore it would be important that pollution arising as a result of clay extraction / future landfill does impact this watercourse.</p> <p>The site is bordered by hedgerows and currently contains a lake which may provide habitats for animals such as farm birds (and there may be potential for great crested newt). Any new clay extraction activity in this location may cause disturbance to the biodiversity in this location. Further understanding of this would be required to understand the impacts in the long-term. There may be an opportunity for restoration following this use, although the impacts on biodiversity are unknown. On balance, there is potential for this to have uncertain / minor negative effects depending on the scale of development and biodiversity in close proximity to the site.</p> <p>Plan level / regional / wider effects The site is unlikely to have a significant effect on designated nature conservation sites and biodiversity in the wider Plan area.</p>					?		
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is within Nitrate Vulnerable Zones (NVZ) for surface water and groundwater. It also falls within the Humber River Basin District, specifically within the Swale, Nidd, Ure and Ouse Catchment. The Foss Dike watercourse runs adjacent to the site to the southern boundary of the site. This area is called "Foss Dike from Source to The Foss". This stretch of the river is of moderate ecological quality. It is not assessed for its chemical quality. The site lies within the aquifer catchment of the Sherwood Sandstone. Groundwater quality is current quantitatively good and the chemical quality is Poor (deteriorating).</p> <p>CAMS: Surface water is available at least 50% of the time. Restrictions on abstraction licenses may apply in low flows.</p> <p>Local effects Because the site is within an NVZ, surface and groundwater may be vulnerable due to run-off or leachate from the landfill waste management facility. In addition, there is an existing lake (although it</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>is assumed this would be drained and filled under MJP52) and an existing pathway into the Foss Dike to the southern end of the site. However, as the site would deal with inert waste there are unlikely to be significant issues. In addition, it is assumed that the environmental permitting system would adequately control risks.</p> <p>Plan level / regional / wider effects There is the potential that run-off or leachate pollution from the site could pass into the wider water environment via surface and groundwater pathways, however as with local effects, it is considered these risks would be adequately controlled.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p>Proximity of transport receptors Site is 100m of the A59 between Harrogate and York. Access: Confirmed to be as existing which is via Kettlewell Lane onto Newlands Lane then onto A59, Light Vehicles: 2 to 4 two-way daily movements (estimate); HGV vehicles: 10 to 14 two-way daily movements (estimate).</p> <p>Net change in daily two-way trip generations: Light vehicles: 2 to 4; HGVs: 10 to 14. Traffic assessment rating: Red⁶ – Significant adverse impacts are expected for a site. The site may be unsuitable for the submission or strong detailed mitigation measures may be required in relation to safety aspects (these are addressed in relation to SA objective 15). Summary: <i>'The traffic and HGV generations of the site are relatively minor however there are road safety concerns over the use the single lane Newlands Lane and junction with the A59'</i>.⁷</p> <p>PRoW: None</p> <p>Rail: 400m south / nearest known railhead: circa 22km south; Strategic Road: 100m north of A59 /900m south along roads; Canal / Freight waterway: 1.75 km north-east (River Ouse).</p>		✓		✓	0	0	0

⁶ The traffic assessment has informed this assessment in part, but the SA assessment of transport is broader in its scope and considers continuation effects where sites with finite lifespans would, without the plan, have been predicted to cease operation. This inevitably results in some divergence in scoring between the two assessments.

⁷ Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects As this is dependent on MJP52 it is assumed that improvements to access, etc. would already have been made. The additional traffic effects from this landfill exercise are thought to be largely insignificant, though if this site were to be a landfill without MJP52 first occurring first the same major negative assessment as highlighted in MJP52 applies. A transport assessment and travel plan would be required to demonstrate this.</p> <p>Plan level / regional / wider effects The development of the site would result in an increase in traffic to and from the site; however, this is expected to be relatively minor in relation to the wider Plan area.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is within 4.5km of the York City Centre and Leeman Road AQMAs (to the East of the site). The village of Upper Poppleton is within 2km of the site with the nearest property within 1km (270m) to the east of the site. A school and playing fields lie 1.3km east in Upper Poppleton.</p> <p>Local effects Air quality may be impacted as a result of the proposed future use of this site, though due to the low level of traffic this is thought to be an insignificant impact. In addition, landfill could produce dust which would need to be appropriately managed. This may have associated negative effects on air quality. The main receptor of this would be the properties within proximity (Duttons Farmhouse) and the western edge of Poppleton Village as well as properties facing onto the A59 and outer York ring-road (cumulative effect with other traffic). Following the landfill, it is likely that effects on air quality would significantly reduce, subject to final use of the site. It is likely that in the long-term this would become neutral.</p> <p>Any impacts on the AQMAs due to lorry routes taken would need to be considered for any application that comes forward.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
5. To use soil and land efficiently and safeguard or enhance their quality	<p><u>Proximity of soil and land receptors</u> This area is a former clay quarry. It is within Grade 3 agricultural land.</p> <p><u>Local effects</u> Waste management of this kind can result in some contamination of soils due to leachate and surface run-off of contaminated water from the waste. However, given that this would be a former clay quarry, problems associated with leachate may be reduced as this is used as a material to line landfill sites. Landfill also has implications on land take though this impact has been attributed to MJP52 so is not counted again here.</p> <p>On balance, the effect of this use on the proposed site are uncertain and insignificant to minor negative based upon the potential risk for contamination at a new landfill site. However, in the longer term, restoration will be to agriculture or forestry, which is beneficial.</p> <p><u>Plan level / regional / wider effects</u> Same as local effects, if restored to agriculture or forestry has the potential to contribute positively to soil in the wider Plan area.</p>	✓	✓	✓		-	+	+
6. Reduce the causes of climate change	<p><u>Proximity of factors relevant to exacerbating climate change</u> The site is bounded by hedgerows and surrounded by predominantly arable uses.</p> <p><u>Local effects</u> As climate change is a global issue effects are reported in wider effects below.</p> <p><u>Plan level / regional / wider effects</u> Proposal for this site to be used as a waste management facility for landfill may have a mixed effect on climate change. There may be small scale negative effects as a result of increased transportation to the site as a result of this use. Vehicle movements would be the predominant mode of transport to and from this facility. There is potential for these journeys to have cross boundary effects as well should this attract landfill from other authorities. Gases produced as a result of landfill would be insignificant as the site would deal with inert waste.</p> <p>On the other hand, recycling waste generally reduces greenhouse gases through reducing the carbon footprint of the wastes handled.</p>	✓			✓	?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	As there are both positive and negative effects expected an overall score of uncertain has been applied. Further study would be required to assess the effect of the site on reducing climate change.							
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity⁸ of a site The site does not lie within or adjacent to a designated green corridor. No nature conservation designations are within close proximity. The site lies predominantly within Flood Zone 1 although the Foss Dike watercourse borders the site to the south, and thus the site includes Flood Zone 3 (high flood risk) and Flood Zone 2.</p> <p>Local effects Whilst the site has an area of high flood risk/river to the southern end of the site, it is not anticipated to exacerbate the risk of flooding in the short term as this area could be avoided. There may be some impacts in the longer term as currently there is a lake in the old clay pit. Landfill may change the drainage regime in the localised area which may have a minor adverse effect on flood risk in the immediate vicinity. However, in the longer term landfill operations may venture closer to the areas of flood</p>	✓		✓	✓	0	-	-

⁸ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>risk, and future Flood Zone 2 could behave more like present Flood Zone 3 under climate change. This site would be categorised as less vulnerable development.</p> <p>Overall, the effects on this objective are likely to be minor negative although there is some uncertainty as to any effects on the drainage regime by changing the site to landfill.</p> <p>Plan level / regional / wider effects Same as local effects.</p>					?	?	?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site No spatial factors identified.</p> <p>Local effects Managing waste through landfill does not help to manage waste sustainably as it is part of the lower tier of the waste management hierarchy. It would be necessary to ensure that only waste that could not be recycled or reused is landfilled in this location to minimise negative effects associated within minimising resource use. Recycling of construction waste is also proposed, which is positive.</p> <p>This site is considered to have positive to minor negative effects although there is some uncertainty as site is also the MJP52 site area and any proposal would follow on from the extraction as the means to achieve the restoration on the site.as details.</p> <p>As there are both negative and positive effects, the overall score is considered uncertain.</p> <p>Plan level / regional / wider effects None noted.</p>	✓		✓	✓	?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p><u>Proximity of factors relevant to the resource usage of a site</u> No spatial factors identified.</p> <p><u>Local effects</u> Managing waste through landfill does not help to manage waste sustainably as it is part of the lower tier of the waste management hierarchy. It would be necessary to ensure that only waste that could not be recycled or reused is landfilled in this location to minimise negative effects associated within minimising resource use. Recycling of construction waste is also proposed however, which is positive.</p> <p>Overall without more detailed study the effect of the site is considered uncertain. As detailed above there are likely to be both negative and positive effects, at this stage it is not possible to conclude which would be more significant.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>	✓		✓		?	?	?
10. To conserve or enhance the historic environment and its setting, cultural	<p><u>Proximity of historic environment receptors</u> There are no other notable heritage assets within 1km of the site. The Upper Poppleton Conservation Area is 1.2 km east. The site is outside of the Historic Character and Setting areas as identified in the City of York Greenbelt Appraisal (2003 and subsequent amendments).</p> <p>Registered Parks and Gardens: Beningbrough Hall (Grade 2, ID 1,001,057) 4.2km north; Registered</p>	✓		✓		-	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
heritage and character	<p>Battlefields: Battle of Marston Moor 3.9km west.</p> <p>HLC: According to the HLC map the site is in an area of defined as: Broad Type: Enclosed Land and HLC Type: Unknown Planned Enclosure. This is a large area of parliamentary enclosure which consists of medium sized regular fields defined by straight ditches. This area has significant legibility and dates between 1750 and 1850. This is mainly part of Moor Monkton between 1786 and 1787.</p> <p>Local effects Whilst there has formerly been clay working on this site, it is currently used as a lake/agricultural land. Any effects may be in relation to character and setting as you approach York and from the village of Upper Poppleton (part of which is a Conservation Area) and as a result of increased traffic movements and visibility of any new management facilities. Design of the management facilities would need to consider visibility of the site to ensure that this does not dominate the existing landscape and affect the setting of York / Upper Poppleton.</p> <p>Archaeological impacts are unlikely due to the former use of the site and its assumed further working under MJP52.</p> <p>Following the landfill use as part of the restoration for the site, it is likely that effects would significantly reduce where they arise in relation to setting, subject to final use and landform of the site (proposed to be agriculture or forestry). It is likely that in the long-term this would result in a neutral effect.</p> <p>Plan level / regional / wider effects None noted.</p>					?		
11. To protect and enhance the quality and character of landscapes	<p>Proximity of landscape / townscape receptors and summary of character The site is located within the Draft Green Belt as per the City of York Local Plan Preferred Options (2013). It is located within the National Character Area 'Vale of York'. The North Yorkshire and York Landscape Character Assessment places this site in landscape character type 28: 'Vale farmland with plantation woodland and heathland (farmed lowland and valley landscapes). This is identified as a relatively low-lying undulating vale</p>	✓	✓	✓		-	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and townscapes	<p>landscape enclosed to the west by rising landscape of Magnesian Limestone Ridge landscape character type and to the east by the Wooded Hills and Valleys and Chalk Wolds landscape character types. It is identified to have a moderate visual sensitivity overall as there is a strong sense of openness and a result of the topography although plantations woodland does disrupt views. There is also a moderate ecological sensitivity and moderate sensitivity to the landscape and cultural elements as in places there are historic landscape patterns compromised by modern development and infrastructure.</p> <p>Local effects This site is surrounded by hedgerows which provide some screening of the site to the A59, although these do look patchy in some locations facing Upper Poppleton village.</p> <p>The proposal for landfill is unlikely to have major significant effects on the landscape subject to the scale and design of additional facilities. Any effects may be in relation to character and setting as a result of increased traffic movements adjacent to the existing small village of Upper Poppleton and visibility of any activity in relation to the landfill operations. Design of any management facilities would need to consider visibility of the site to ensure that this does not dominate the existing landscape and affect the setting of York.</p> <p>It is likely that the full restoration of the site may have a positive effect by restoring the landscape to conceal the former clay working area. This will depend upon the final restoration of the site following its use as a landfill location.</p> <p>On balance the effects of this proposed use at Duttons Farm is likely to be neutral to minor negative becoming more uncertain in the long-term, subject to the scale and proposals for restoration on the site.</p> <p>Plan level / regional / wider effects None noted.</p>						?	?
12. Achieve sustainable economic	<p>Proximity of factors relevant to sustainable economic growth The site is close to the A59 and City of York giving it good access to construction materials.</p>		✓		✓	+	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
growth and create and support jobs	<p>Local effects The proposal for this site may have a minor positive effect on the local economy. Landfill is likely to require the creation of a small number of jobs although the scale of this is likely to be low. It is likely to be similar to the clay working on the site as proposed (in MJP52).</p> <p>Overall, it is considered that this is likely to have a neutral to minor positive effect for the duration the site is in use.</p> <p>Plan level / regional / wider effects None noted.</p>							
13. Maintain and enhance the viability and vitality of local communities	<p>Proximity of factors relevant to community vitality / viability Duttons Farmhouse is 250m from the edge of the site. Other dwellings in close proximity are along Newlands Lane within 350m. The site is 1.2km west of Upper Poppleton, and circa 2.5km from the city of York. The new local plan for York is still in production. The existing 2005 local plan concentrates development on brownfield land within the built up urban area and urban extensions. Outside of defined settlement limits planning permission will only be given for development appropriate to the Green Belt or the open countryside. Upper Poppleton has, however, been defined as an action area where planning permission will not be granted for development that could prejudice the implementation of their redevelopment. Checks on the York Proposals Map show this site as being reasonably distant from allocations or policies, with an area including an employment allocation and open space >400m south-east.</p> <p>Local effects Job opportunities are likely to be limited as a result of the proposed use. The proposal for waste management is unlikely to benefit the immediate settlements in any significant way. The site is equally unlikely to hinder tourism. Overall, it is considered that the effects of these proposals are insignificant / neutral.</p> <p>Plan level / regional / wider effects The proposal is unlikely to affect communities in the wider Plan area.</p>					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
14. To provide opportunities to enable recreation, leisure and learning	<p><u>Proximity to recreation, leisure and learning receptors</u> There are no PRoW or leisure facilities within proximity of the site. Within 1km of the site is Upper Poppleton Village Green although there is no direct pathway to access this in the village.</p> <p><u>Local effects</u> Using this site for landfill / recycling is unlikely to have significant effects on opportunities for recreation, leisure and learning.</p> <p><u>Plan level / regional / wider effects</u> Using this site for landfill / recycling is unlikely to have significant effects on opportunities for recreation, leisure and learning for the wider Plan area.</p>					0	0	0
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> York hospital is approximately 6km from the site. The village of Upper Poppleton is within 2km of the site with the nearest property within 1km to the east of the site.</p> <p><u>Local effects</u> This site is predominantly set away from residential areas within access of a private track. Whilst this will help to minimise issues concerning safety, protocols would need to be in place to be precautionary.</p> <p>Without mitigation, noise, dust and light from the site may also have a low level impact on the village nearby.</p> <p>A fully restored site following the landfill should decrease in amenity effects.</p> <p>If this submission were approved, without MJP52 being approved, safety impacts from traffic would be major negative in the short term for the same reasons as the MJP52 assessment. However this scenario would seem unlikely as the landfill is proposed to enable the restoration of MJP52.</p> <p>On balance, it is predicted that the proposals on this site may be predominantly neutral but also a slight minor negative effect for the operational period of the site.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓	✓	-	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones About 15% of the site to the south lies in Flood Zones 2 and 3. About 85% of the site lies in Flood Zone 1. Surface water flooding also follows the watercourse along the boundary with most of the high risk area being outside of the site boundary, leaving mainly medium risk (1:100 (1%)) and low risk (1:1000 (0.1%)) surface water flood risk in a narrow band along the boundary. Additional patches of low risk surface water flooding are to the eastern side of the site. No more than 10% of the site is affected by surface water flooding (low to high risk), though a lake lies in the centre of the site.</p> <p>In terms of groundwater flooding, the site lies in a 1km square in which <25% of land may be susceptible to Clearwater flooding.</p> <p>The 1:20 (5%) predicted flood event extent following along the watercourse (Foss Dike) runs along the south western boundary. The 1:20 (5%) event extent mapping for this SFRA shows that about 5% of this site is at flood risk.</p> <p>Climate change is likely to increase the 1:20 (5%) predicted flood event extent within the site. Areas of Flood Zone 3 are likely to increase into areas that are shown as Flood Zone 2 and Flood Zone 2 is likely to increase in extent into the site. Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively.</p> <p>SFRA sequential test result – Site is not suitable. More vulnerable and less vulnerable land uses are not permitted at sites within functional floodplain.</p> <p>Local effects As a landfill site on a former clay extraction site, groundwater flow is likely to be negligible, though basal heave may be an issue depending on the depth of prior extraction. Therefore groundwater flooding is considered unlikely to cause any significant problems, though should still be investigated. The sequential test highlights the site as not suitable. While this area is not shown on the York SFRA strategic map as functional floodplain no defences on the National Flood and Coastal Defence database are noted, and no obstructions are observed in this area so the area shown as being at a 1:20 (5%) flood risk should be considered as initial functional floodplain and further investigated.</p> <p>A flood risk assessment will be required for this site. This should consider how surface water flooding and</p>	✓		✓	✓	?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>drainage will be managed across the site utilising SuDS. Groundwater flooding should be further investigated. The flood risk assessment should also establish whether the south western boundary of the site is part of the functional floodplain and if so that area should be avoided with a suitable standoff as landfill and recycling would not be considered appropriate at those locations. Drainage of the site (including any drainage from the lake) must not increase flood risk on the receiving waterbody.</p> <p>Plan level / regional / wider effects Climate change impacts should also be considered in the positioning of any landfill site as the landfill will endure long beyond the end date of this site.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population No spatial factors identified. The site is also proposed for clay working, which would leave a whole in the ground (site MJP52). Landfill may form part of the restoration strategy to restore this landscape.</p> <p>Local effects This site would respond to previous uses by infilling the clay pit which may have benefits for landscape in the long-term. This responds well to the overall need for waste management although is unlikely to be significant for the population of York given that it does not promote waste management higher up the waste management hierarchy.</p> <p>Plan level / regional / wider effects Will help to respond to waste management needs in the wider Plan area.</p>	✓		✓	✓	+	+	+
								?

Cumulative / Synergistic effects⁹	
Planning context	<p>The site is 1.2km west of Upper Poppleton, and 2.5km from the city of York. The new local plan for York is still in production. The existing 2005 local plan concentrates development on brownfield land within the built up urban area and urban extensions. Outside of defined settlement limits planning permission will only be given for development appropriate to the Green Belt or the open countryside, the design of the site would need to ensure that the purposes of the Green Belt designation are not compromised and maintain high environmental standards.</p> <p>Poppleton has, however, been defined as an action area where planning permission will not be granted for development that could prejudice the implementation of their redevelopment. Checks on the York Proposals Map show this site as being reasonably distant from allocations or policies, with an area including an employment allocation and open space further than 400m south-east.</p>
Other Minerals and Waste Joint Plan Sites	Other Joint Minerals and Waste Plan Sites within 5km: WJP11 is 1.6km south. Harewood Whin including waste treatment facility, non-hazardous landfill, composting and material recycling is 2.1km south. 2 waste transfer stations are situated at 2.6km and 3.5km south.
Historic minerals and waste sites	Hessay Recycling Centre which includes a waste transfer station 1.7km west.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on the existing lake and protected species • Design to mitigate impact on best and most versatile agricultural land and to protect high quality soil resources • Design of development and landscaping of site to mitigate impact on: Upper Poppleton Conservation Area Conservation Area, City of York, local landscape features, Green Belt and their respective settings • Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate • Design to include suitable arrangements for access and local roads, including from site along Kettlewell Lane to Newlands Lane; there should be a planning condition which prevents left turning from the site, which could lead to HGV traffic through Nether and Upper Poppleton. Access onto the A59 will require suitable signage for turning lorries in conjunction with any other local road improvements which may be required, to ensure safe access. • Appropriate arrangements for control of and mitigation of the effects of noise and dust, etc. • Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt. 	

⁹ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

WJP11 – Harewood Whin, Rufforth

Site Name	Site WJP11 Harewood Whin, York (XY: 453992 451704)
Current Use	Waste facility for landfill, recycling (including treatment bulking and transfer) and liquid waste treatment.
Nature of Planning Proposal	Retention of the following facilities beyond 2017; landfill, recycling (including treatment bulking and transfer) and liquid waste treatment, energy from waste (biomass and landfill gas utilisation), kerbside recycling and waste transfer operation.
Size	8.8ha additional area (103ha total size area as amended)
Proposed life of site	15 to 20 years
Notes	Existing waste operation comprises 93.5ha and manages the following wastes: LACW, Commercial and Industrial, Construction and Demolition, Agricultural Waste, Hazardous Waste (WEEE and certain liquid wastes). A planning application (16/00357/FULM) for the construction of a waste transfer station with associated ancillary buildings, hardstandings, car parking and alterations to access is currently awaiting determination, as is planning application (16/00534/FULM) for the continuation of the landfill site beyond 2017.

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	<p>Proximity of international / national and local designations and key features SAC/SPA: 11km north-east – Strensall Common SAC; 13.5km west – Kirk Deighton SAC. SSSI: 2 SSSIs within 5km: Clifton Ings and Rawcliffe Meadows 3.3km north-east; Askham Bog 4km south-east.</p> <p>SINC: 7 SINC (proposed/current/former) within 2km: Rufforth Field (Neutral Grassland-Candidate SINC) 600m south-west; Low Moor Lane Meadow Hessay (neutral grassland) 880m north-west; Grasslands Farm Field (neutral grassland- candidate SINC) 1.48km south-west; Town Pond Shirbutt Lane 1.5km north-west; Hessay Churchyard (Grassland) 1.95km north-west; Westfield School Field (Breck Grassland) 1.75km south-east; Westfield Marsh (acid grassland and marsh) 1.85km south-east. Circa 10% of site covered by Priority Habitat Inventory (deciduous woodland). Mainly concentrated in the western and southern area of</p>		✓		✓	-	-	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>the site.</p> <p>The site lies within 2 MOD aerodrome buffer (for Linton on Ouse Aerodrome and RAF Elvington), as well as the buffer for 5 private airfields.</p> <p>Local effects The site is already in use as a waste facility and the addition of use (energy from waste (biomass and landfill gas utilisation), kerbside recycling and waste transfer operation) is unlikely to impact on the identified designations.</p> <p>The site does contain deciduous woodland (a Priority Habitat) and is screened by hedgerows, which is likely to support habitats for farmland birds, badgers and potentially bat foraging. Extension of the facilities in this location may incur disturbance impacts from any increased activity at the site. It will therefore be important to ensure that new development is located where impacts to these habitats is minimised. In the long-term, the effects are currently uncertain as this may depend upon the location of any associated further development and frequency of activity at the site.</p> <p>Future restoration will need to consult with the MOD if nature conservation is planned (though site is at the outer limits of aerodrome safeguarding buffers).</p> <p>Plan level / regional / wider effects The site is unlikely to have a significant effect on Natura 2000 or other designated nature conservation sites as a result of the proximity of this site to the receptors and the limited pathways to each of the designations.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity receptors The site is within Nitrate Vulnerable Zones (NVZ) for surface water and ground water. It also falls within the Humber River Basin District, specifically within the Swale, Nidd, Ure and Ouse Catchment. The River Foss runs through the site. This area is called "Foss Dike from Source to The Foss". This stretch of the river is of moderate ecological quality. It is not assessed for its chemical quality. The site lies within the aquifer catchment of the Sherwood Sandstone. Groundwater quality is current quantitatively good and the chemical quality is Poor (deteriorating).</p> <p>CAMS: Surface water is available at least 50% of the time. Restrictions on abstraction licenses may apply in</p>		✓		✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>low flows.</p> <p>Local effects Because the site is within a NVZ, surface and groundwater may be vulnerable due to run-off or leachate from the waste or as a result of processing the waste on site as well as a result of continued use as a landfill waste management facility. Given that this is an existing site, the scale of impacts may be reduced compared to the development of these facilities elsewhere. It is thought that current strategies for minimising adverse impacts would be retained. Though a new permit may be required.</p> <p>Overall the effects are predicted to be minor negative over the timeframe of the plan as while existing management strategies and the permitting / pollution control regime will manage impacts to an insignificant level, the proximity to the River Foss means that in the unlikely event of a pollution accident there remains the possibility of ingress to the river.</p> <p>Plan level / regional / wider effects In the unlikely event of a pollution event in proximity to the River Foss there could be impacts to the wider water environment if mitigation is not in place.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of	<p>Proximity of transport receptors Site is proximal to both Wetherby and York; Access: existing access onto Heightlands Lane onto the B1224 running between Wetherby and York. This site is affected by registered PRow which must be kept clear of any obstruction until such time as an alternate route has been provided and confirmed by order.</p> <p>Planning application (16/00534/FULM) details that there would be an expected 160 HGV two way daily movements for the continuation of the site. This is a net increase of 10 HGVs per day as per the current consent granted in 2004.</p> <p>Rail: 1.1km north / nearest known railhead: circa 20km south; Strategic Road: A1237 circa 1km east, A64:</p>		✓		✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
transportation	<p>circa 4.2km south; Canal / Freight waterway: River Ouse 3.5km east.</p> <p>Local effects A traffic and transport¹⁰ assessment undertaken for the planning application (16/00534/FULM) reported that the continuation of the site would not have a significant effect on traffic and transport including driver delay and pedestrian/ cycle amenity. Although there would be an increase in HGVs and the allocation would also extend the life of the site (with associated HGV movements expected to cease), this is considered a minor negative effect.</p> <p>Plan level / regional / wider effects The range of waste management proposed on site is likely to attract processing from areas outside of York, which may also increase the mileage travelled and the associated emissions.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors The site is within 4.5km of the City Centre and Leeman Road AQMAs (to the east of the site). The village of Rufforth is located 200m from the site.</p> <p>Local effects A qualitative air quality assessment undertaken as part of planning application (16/00534/FULM) for extension of landfill operations on the site reports that the risk of impact to receptors near the sites is low. While there would be site specific management plans for the management of odour</p>	✓		✓		-	-	-

¹⁰ Golder Associates, 2016. Addendum to Environmental Statement – Harewood Whin Landfill.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>and dust.</p> <p>The expansion of processing to include energy from waste (biomass and landfill gas utilisation) may increase emission levels down-wind as a result of energy conversion. Overall emissions will therefore be dependent on the specification and design of the combustion plant, the chemical and physical qualities of the fuel (fuel quality) and the presence of any emissions abatement fitted to the plant. However, until modelling and mitigation of pollutants occurs the reasonable distance from this site to key population receptors and its distance from AQMAs would result in minor negative effects. However, effects may be elevated by in combination effects from other development.</p> <p>In light of the above the predicted effects are minor negative with some uncertainty dependant on the level of implementation of air quality abatement measurements on these facilities particularly in-combination with other uses on site.</p> <p>Plan level / regional / wider effects There would a minor net gain in traffic as a result of the proposal, therefore impacts are not expected to be significant in the wider Plan area.</p>					?	?	?
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors This is an existing waste management site that includes landfill, composting and liquid water treatment. The area around the existing site is Grade 3b agricultural land.</p> <p>Local effects The proposals for this site to manage waste in a variety of ways are likely to have positive and negative effects on this objective.</p> <p>The intention to manage waste as high up the hierarchy as possible may have positive implications on the sub-objective for recovering nutrient value from biodegradable waste, through composting for example, and recycling waste and recovering energy from biomass waste would help to maximise the use the land efficiently.</p> <p>However, other forms of waste management may result in some contamination of soils depending upon the type of processing due to leachate and/or spillage. Landfill has implications on land take and potentially extending the existing facility over the course of the Plan period. There is the potential therefore for this type</p>		✓	✓	✓	?	?	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>of waste management to cause contamination from the waste products, run-off and leachate. It is assumed that permission and protocols already in place for this would be renewed and continued as part of the waste management proposal so many of these impacts would be abated through that, though the land take may still have impacts, particularly if any higher quality soils are lost.</p> <p>On balance, this site has been assessed to likely incur both positive and negative associated with this option and a final uncertainty associated with the scoring.</p> <p>Plan level / regional / wider effects There is the potential that Grade 3b agricultural land will be lost, if this is the case ultimately there could be an effect of food security as land is taken out of production. On its own 8.8ha is not likely to be a significant effect, though at a plan level effects could be cumulative. We have made an assessment of the overall cumulative effect in the Sustainability Appraisal Report.</p>							
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Circa 10% of the site is priority habitat inventory (deciduous woodland) concentrated in the south-west corner of the site. The site is bounded by hedgerows and surrounded by predominantly arable uses. The existing site entrance is located on the B1224 which is used for the transportation of waste to and from the site.</p> <p>Local effects As climate change is a global issue effects are reported in wider effects below.</p>	✓		✓	✓	+	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Plan level / regional / wider effects Proposal for this site to continue its use as a waste management facility may have mixed effects on climate change. Whilst the outcomes of the waste management processing such as recycling and composting could have positive implications on climate change through the re-use of resources in the long-term. Gases produced as a result of landfill would be negative. On balance impacts are considered minor positive with a degree of uncertainty.</p> <p>If applicable, an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors should be undertaken¹¹.</p>					?	?	?
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity¹² of a site The site does not lie within or adjacent to a designated green corridor. The site contains a priority habitat – deciduous woodland. No nature conservation designations are within close proximity. The site lies predominantly within Flood Zone 1 although the River Foss runs through the site. Land adjacent to the river is categorised as Flood Zone 3 (high flood risk).</p> <p>CAMS: Surface water is available at least 50% of the time. Restrictions on abstraction licenses may apply in</p>					0	0	0

¹¹ Proposals for the treatment, recovery or disposal of more than 75,000 tonnes per annum of waste should be accompanied by an assessment showing how the design for the proposal has taken into account the need for resilience to climate change factors. These thresholds are based on the 75,000 tonnes per annum threshold for strategically significant waste facilities used in the Yorkshire and Humber Waste Position Statement, which has also been applied also to minerals output for the purposes of Development Management, Policy D11.

¹² Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>low flows.</p> <p>The area around the site is Grade 3b agricultural land.</p> <p>Local effects Whilst the site has an area of high flood risk/river running through the middle of the site, it is not anticipated to exacerbate the risk of flooding in the short term. The site is unlikely to have significant effects on ecology or biodiversity given that the existing uses on site relate to waste management.</p> <p>There is potential for water extraction in relation to processing of waste in line with the proposed development. This may add pressure to the depletion of water extracted from the Sherwood aquifer which serves the area, though surface water may be available.</p> <p>Overall, the effects on this objective are likely to be neutral comparative to the existing baseline. There is some uncertainty as the effects are yet to be determined through the development and processing on site.</p> <p>Plan level / regional / wider effects Agriculture contributes to climate change through the release of greenhouse gases and can also contribute to climate change mitigation by reducing greenhouse gas emissions / sequestering carbon / providing ecosystem services, while maintaining food production. Loss of 8.8ha of agricultural land will have an impact over the short and medium term.</p>					?	?	?
8. To minimise the use of resources and encourage their re-use and safeguarding	<p>Proximity of factors relevant to the resource usage of a site The existing waste management facility processes waste for landfill, recycling, composting and liquid waste treatment.</p> <p>Local effects The proposal for this site to continue and expand its management of waste higher up the waste hierarchy is likely to have positive implications for resources. Recycling and composting waste is positive for minimising and re-using resources. In addition, extracting energy from waste (through biomass and landfill gas utilisation) as part of this proposal would contribute to minimising the use of primary resources.</p> <p>The significance of these effects would rely upon the quantum of waste used in these processes but should</p>	✓			✓	++	++	+ +

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>overall have a positive impact.</p> <p>Plan level / regional / wider effects See local effects above.</p>							
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<p>Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy The existing waste management facility processes waste for landfill, recycling, composting and liquid waste treatment.</p> <p>Local effects The proposal for this site would help to manage waste at all stages of the waste hierarchy. There would be a continuation of the recycling undertaken which would be expanded to include kerbside recycling as well as composting. Whilst the function of the existing landfill would still occur, co-locating the processes together and expanding the type of processing to occur would help to ensure that landfill is minimised.</p> <p>The significance of these effects would rely upon the quantum of waste used in these processes but should overall have a positive impact.</p> <p>Plan level / regional / wider effects The waste management processes on the site would have a positive effect on waste management and the waste hierarchy in the Plan area.</p>	✓		✓		++	++	+
10. To conserve or enhance the historic environment	<p>Proximity of historic environment receptors The village of Rufforth (within 1km) contains 4 Grade II listed buildings, one of which is within 250m of the site – Pinfold (Grade II, ID 1,393,222) 250m to the south-west). There are no other notable heritage assets within 2km of the site. The site is outside of our Historic Character and Setting areas as identified in the City of York Greenbelt Appraisal (2003 and subsequent</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and its setting, cultural heritage and character	<p>amendments). It is also outside of the HLC mapping areas.</p> <p>Local effects Harewood Whin is an existing waste management processing site. The proposal for the continuation of this use plus other uses is unlikely to have effects on the identified listed buildings nearby. Any effects may be in relation to character and setting as a result of increased traffic movements through the existing small village of Rufforth and visibility of any new waste management facilities. Design of the management facilities would need to consider visibility of the site to ensure that this does not dominate the existing landscape and affect the setting of York. Similarly, transport movements would need to be assessed to further understand whether this would affect the character of the existing nearby village.</p> <p>The extra land required for the additional facilities may require archaeological investigation, the scale of which is uncertain and will be as a result of the location of the facilities, though a permanent negative effect would be possible</p> <p>Overall, the effects on this objective are assessed as likely to be neutral with some uncertainty in the medium to longer term.</p> <p>Plan level / regional / wider effects None noted.</p>						?	?
11. To protect and enhance the quality and character of landscapes	<p>Proximity of landscape / townscape receptors and summary of character The site is located within the draft Green Belt as per the City of York Local Plan Preferred Options (2013). It is located within the National Character Area 'Vale of York'. The North Yorkshire and York Landscape Character Assessment places this site in landscape character type 28: 'Vale farmland with plantation woodland and heathland (farmed lowland and valley landscapes). This is identified to have a moderate visual sensitivity overall as there is a strong</p>	✓	✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and townscapes	<p>sense of openness and a result of the topography although plantations woodland does disrupt views. There is also a moderate ecological sensitivity and moderate sensitivity to the landscape and cultural elements as in places there are historic landscape patterns compromised by modern development and infrastructure.</p> <p>Local effects Harewood Whin is an existing waste management processing site. It is already fairly well screened due to the predominantly flat topography with existing woodland plantations and hedgerows surrounding the site, and on the eastern side in particular.</p> <p>The proposal for the continuation of this use plus other uses is unlikely to have significant effects on the landscape subject to the scale and design of additional facilities. Any effects may be in relation to rural character and setting as a result of increased traffic movements through the existing small village of Rufforth and visibility of any new waste management facilities. Design of the management facilities would need to consider visibility of the site to ensure that this does not dominate the existing landscape and affect the setting of York: mitigation is needed to offset the impacts of infrastructure associated with use.</p> <p>The existing landfill is higher than the surrounding landscape so there was some concern that it may be difficult to restore the landscape character of the site.</p> <p>There is some concern / uncertainty that allocating this site may in the long term create an area of brownfield land where future development would be allowed. This would thus be outside the as yet to be defined York inner green belt. The site is located within the draft Green Belt and any development within it would need to be consistent with the purposes of the Green Belt designation.</p> <p>On balance the effects of this proposed use on Harewood Whin is likely to be minor negative, subject to the scale and proposals of additional facilities on the site, with some long term uncertainty. Mitigation for landscape impacts / restoration needs to be integrated with local landscape character, particularly as surrounding land is flat (for instance, through a landscape / nature conservation strategy). In addition, ensure screening extends to bridleway.</p> <p>Plan level / regional / wider effects The site is unlikely to affect the character of the wider landscape.</p>							?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Harewood Whin has employees working on site as part of the existing waste management facilities.</p> <p><u>Local effects</u> The proposal for this site is likely to have positive effects on the local economy. Whilst the site already has employees, widening the scope of waste management facilities is likely to require the creation of a limited amount of further jobs.</p> <p>The management of more waste higher up the waste hierarchy through recycling and re-use should also have benefits in reducing the amount of waste to be landfilled. Similarly, where waste can be used to generate energy there will be a reduction of waste to landfill. These processes in-combination would help to reduce the amount payable for landfill tax which would have economic benefits.</p> <p><u>Plan level / regional / wider effects</u> In addition to the effects above, generating energy from waste may also become income generating. It would also add to energy security. Overall, it is considered that this is likely to have minor positive effects with the potential for significant economic effects subject to the implementation of the uses proposed.</p>		✓	✓	✓	++	++	+ +
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> The village of Rufforth is within 1km of the site with the nearest property within 600m to the west of the site. The village has a housing allocation as proposed in the draft City of York Local Plan which is 750m from the edge of the site.</p> <p><u>Local effects</u> Job opportunities will be created but are likely to be limited as a result of the proposed use, particularly given that it is an operational waste management facility. The proposal for waste management is unlikely to benefit the immediate settlements in any significant way. The site is equally unlikely to hinder tourism. Overall, it is considered that the effects of these proposals are insignificant to minor positive.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
14. To provide opportunities to enable recreation, leisure and learning	<p><u>Proximity to recreation, leisure and learning receptors</u> PRow border the west and east of Harewood Whin, as well as crossing the site. The western right of way acts as a foot and cycle path as well as a bridleway.</p> <p><u>Local effects</u> The site may diminish the experience of using the PRow as further development may result in visual impact, noise and dust and increase in the amount of large vehicle traffic on the roads. However, the effects of this are only likely to minor over and above the existing uses on site. Continuation of the current uses and any additional facilities should not impede the use of the recreational PRow.</p> <p>Overall, the effects of this are identified as to be minor negative.</p> <p><u>Plan level / regional / wider effects</u> It is unlikely the site will provide opportunities. Unlikely to recreation, leisure and learning in the wider area.</p>		✓	✓		-	-	-
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> York hospital is approximately 6km from the site. The village of Rufforth is within 1km of the site with the nearest property within 600m to the west of the site.</p> <p><u>Local effects</u> Given that this is an existing waste management facility, it is assumed that there are safety protocols in place to maintain the safety and amenity of people in relation the activities on site. In the future it is likely that these will need to be reviewed subject to the implementation of waste transfer from kerbside recycling which may incur more local vehicle activity.</p> <p>The production of energy from waste could result in plume dispersion impacts (which could impact on air quality so development needs an Air Quality Impact Assessment as part of any planning application to further understand impacts).</p> <p>Without mitigation, noise, dust and light from the site may also have an impact on the quality of life in the</p>		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>village nearby. Odour plumes may also affect the village of Rufforth under certain conditions, though the effect is likely to be insignificant given the distances to receptors¹³. However, there may be a cumulative effect from other nearby development such as at the Rufforth Industrial Estate.</p> <p>On balance, it is predicted that the proposals on this site may have a minor negative effect over the course of the Plan period.</p> <p>Plan level / regional / wider effects It is expected that the potential impacts identified above would be local in nature.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Much of the site is in Flood Zone 1, however, Flood Zone 3 flows through the centre of this site following the River Foss and this is fringed by Flood Zone 2. Surface water flooding also overlays the area of river flood risk and also affects patches of the wider site (roughly 10% is affected). Surface water flood risk ranges from low risk (1:1000 (0.1%)) to medium risk (1:100 (1%)).</p> <p>The site lies across four 1km squares identified on the Environment Agency's 'Areas Susceptible to Groundwater Flooding' map, three of which are susceptible to Clearwater groundwater flooding (with one 1km square affected across <25% of its area, two 1km squares affected across >25% to <50% of their areas, and one 1km square which holds no data). A 2012 Flood Risk Assessment for part of southern area of the site reported that "groundwater flooding is not considered to pose a risk due to the groundwater levels underlying the site and the negligibly permeable geology"¹⁴.</p> <p>Local effects The 1:20 (5%) event extent mapping for this SFRA shows that about 5% of this site is at flood</p>					--	--	--

¹³ The Environment Agency have used a minimum 50m standoff distance for domestic properties for sludge spreading to land (see: Defra, 2010. Odour Guidance for Local Authorities [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69305/pb13554-local-auth-guidance-100326.pdf]). Elsewhere guidance recognises that distance is a key factor in reducing odour risk though does not give guidance on distance thresholds, rather suggesting the use of odour plume modelling in relation to sensitive receptors (see Institute of Air Quality Management, 2014. Guidance on the assessment of odour for planning [URL: cambridge.gov.uk/sites/www.cambridge.gov.uk/files/documents/cnfe-aap-io-iaqm-odour-assessment-guidance.pdf - URL is no longer available.]

¹⁴ Golder Associates, 2012. Harewood Whin Materials Recovery Facility and Transfer. ES Chapter ES6 Flood Risk [URL: planningaccess.york.gov.uk/online-applications/files/2DAEB4C058944A49EEB0A39C3D40613A/pdf/13_00041_FULM-FLOOD_RISK-1376390.pdf - URL is no longer available.]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>risk. Climate change is likely to increase the 1:20 (5%) predicted flood event extent within the site. Areas of Flood Zone 3 are likely to increase into areas that are shown as Flood Zone 2 and Flood Zone 2 is likely to increase in extent into the site. The SFRA Sequential Test concluded that this site is not suitable. Therefore the site has been awarded a score of major negative.</p> <p>A qualitative air quality assessment undertaken as part of planning application (16/00534/FULM) for extension of landfill operations on the site.</p> <p>Plan level / regional / wider effects Effects are considered to be local in nature.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population No conflicting allocations are identified.</p> <p>Local effects Harewood Whin would enable more waste to be processed in a sustainable way as it is promoting recycling and reuse of waste and as well as energy generation using waste products. This responds well to the overall need and requirement of the population to process waste more efficiently and effectively in a direct way.</p> <p>Plan level / regional / wider effects None noted.</p>		✓	✓		+	+	+
Cumulative / Synergistic effects¹⁵								
Planning context	<p>The village of Rufforth is within 1km of the site with the nearest property within 600m to the west of the site. The village has a housing allocation as proposed in the draft City of York Local Plan which is 750m from the edge of the site.</p> <p>The existing 2005 local plan concentrates development on brownfield land within the built up urban area and urban extensions. Outside of defined settlement limits planning permission will only be given for development appropriate to the Green Belt or the open countryside.</p> <p>Health and wellbeing / Air: there may be cumulative impacts on air quality and noise particularly on the immediate access road (B1224) and within the village of Rufforth (within 1km).</p>							

¹⁵ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

Other Minerals and Waste Joint Plan Sites	Other MWJP sites within 5km: WJP05 and MJP52 are both 1.6km north.
Historic minerals and waste sites	The site overlays numerous historic waste applications and is also adjacent to 2 historic landfill sites.
Waste	Waste hierarchy: there are also cumulative positive impacts arising from the co-location of waste management processes in that it is assumed that this will allow for more effective waste management in accordance with the waste management hierarchy. This should have benefits for reducing resources and overall carbon footprint and well as reducing the amount of waste landfilled.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on protected species. • Design to minimise impact on best and most versatile agricultural land and to protect high quality soil resources. • Design to mitigate impact on archaeological remains. • Design of development and landscaping of site to mitigate impact on: Rufforth village (including Listed Buildings), the historic City of York, Green Belt and local landscape features and their respective settings and users of rights of way. • Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate. • Design to ensure protection of the aquifer. • Design to include suitable arrangements for access to local roads including the B1224 and appropriate a traffic management plan. • Appropriate arrangements for control of and mitigation of the cumulative impacts on air quality, and the effects of noise and dust, etc. • Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt and integrated with the local landscape character, but which is also appropriate to location within a birdstrike safeguarding zone. 	

WJP02 Former North Selby Mine

Site Name	WJP02 Former North Selby Mine Site, Deighton (XY:464665 444239)
Current Use	Former coal mine
Nature of Planning Proposal	Anaerobic digestion (AD)
Size	24ha
Proposed life of site	Permanent
Notes	<p>Planning application (12/03385/FULM) for this development was granted planning permission in April 2014 for receipt of source segregated organic local authority collected waste (LACW), commercial and industrial (C&I) food waste and agricultural waste.</p> <p>No extra capacity is proposed as part of this submission in addition to that already permitted</p>

SA FINDINGS SUMMARISE SIGNIFICANT EFFECTS ONLY. A WIDER RANGE OF CONSTRAINTS AND OPPORTUNITIES WERE INITIALLY ANALYSED AND DISTILLED DOWN TO ONLY THOSE WITH THE POTENTIAL TO BE SIGNIFICANT (SEE ALSO SITE ASSESSMENT METHODOLOGY SUMMARY REPORT FOR A FULL LIST OF CONSTRAINTS AND OPPORTUNITIES).

THIS SITE ALREADY HAS PLANNING PERMISSION, SO UNLIKE OTHER ASSESSMENTS WHICH ARE ASSESSED BEFORE MITIGATION, HERE WE HAVE INCLUDED MITIGATION MEASURES IN THE OVERALL SCORING, ASSUMING THAT THEY WILL BE ENACTED. WE HAVE, THEREFORE, ONLY REPORTED THE RESIDUAL EFFECTS AFTER MITIGATION.

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
1. To protect and enhance biodiversity and geo-diversity and improve habitat	<p>Proximity of international / national and local designations and key features Natura 2000 sites: Lower Derwent Valley SAC/SPA/Ramsar is 5km east; SSSI: None within 2km (site affected by SSSI Impact Risk Zones (IRZ) for Heslington Tillmire SSSI (industrial development that could cause air pollution).</p> <p>SINC: 3 ratified SINCS within 2km, a non-designated SINC adjacent; Priority Habitat: Ancient woodland adjacent, further occasional patches adjacent or close by within 1km (all deciduous woodland); Networks: Green Infrastructure (GI) network in the northern part of the site.</p>	✓		✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	<p>Local effects Although there are occasional priority habitat patches adjacent to the site / access road, effects are likely to be limited to disturbance (noise and lighting) from vehicles and plant, and low scale dust deposition. This is unlikely to be particularly significant. An Environmental Statement¹⁶ submitted alongside the planning application (12/03385/FULM) for this site reported that some protected species (bats / great crested newt / birds / grass snake) use the site, however mitigation included in the design of the site ensured a negligible impact on most species and habits, with some short term minor effects on great crested newt and little ringed plover, for which specific compensation was agreed as part of the planning consent.</p> <p>A SINC Management Plan associated with this site will lead to some positive effects.</p> <p>Plan level / regional / wider effects The approved planning application did not identify any significant effects on SSSIs or international sites.</p> <p>As this site has planning permission granted, and issues have been satisfactorily resolved it is considered to have negligible effects and has therefore been scored as neutral in the short, medium and long term.</p>							
2. To enhance or maintain water quality and improve efficiency of water use	<p>Proximity of water quality / quantity Nitrate Vulnerable Zones (NVZ): the Site is in a NVZ for surface water; Source Protection Zones: None present; Aquifer: Sherwood Sandstone (Principal); River Basin Management Plan: Site is in Stillingfleet Beck Source to Ouse catchment waterbody (current overall status is moderate / objective is good by 2027); CAMS: Wharfe and Lower Ouse CAMS – Limited surface water available at very low flows (Q95), surface water available at least 70 per cent of time / restricted groundwater availability. Bridge Dike crosses the application site.</p> <p>Local effects The Environmental Statement for this site identified the underlying Sherwood Sandstone Principal Aquifer as the key hydrological receptor that might be vulnerable to effects during the construction and demolition phase. According to that assessment “<i>The presence of the clay cover above the aquifer provides a large degree of mitigation from effects to the aquifer. In order to ensure that the aquifer is protected further site investigation is required to confirm the nature of the ground. If any new</i></p>					0	0	0

¹⁶ Barton Wilmore (2013); Environmental Statement Main Report – Former North Selby Mine Site [Available at: <https://planningaccess.york.gov.uk>]. (Accessed September 2016).

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p><i>structures are to be piled, the piling should be undertaken in accordance with current guidance issued by the Environment Agency. Also careful control of the demolition and construction works should be undertaken to ensure correct storage of any fuels/oils is carried out and any spills are resolved on site via use of a spill kit/excavation of effected soils". Following implementation of these mitigation measures there were considered to be no residual effects.</i></p> <p>In addition, effects on the drainage regime for the site were rated as being of negligible magnitude during demolition, construction and development before mitigation, and with mitigation such as the creation of attenuation ponds and water friendly planting, residual effects were considered to be of moderate positive magnitude with minor beneficial significance. While our assessment is broader in scope, incorporating consideration of River Basin Management Plans, given the proposals for mitigation outlined effects are considered neutral.</p> <p><u>Plan level / regional / wider effects</u> Proposals for mitigation are expected to result in a neutral effect to the wider water environment.</p>							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<p><u>Proximity of transport receptors</u> Access to market: Site has connecting road to A19 giving good access to York and Selby; Rail: No rail stations or lines within 2km; Canal / Freight waterway: none noted within 2km; Railhead / Wharfe: none noted within 2km.</p> <p>Access: Existing access from former North Selby mine site onto A19 approximately midway between the villages of Deighton and Escrick.</p> <p>HGVs: 70 for AD facility and 14 for glasshouse facility; Light vehicles: 12 for AD facility and normally 100 for glasshouse facility with up to 200 in the busiest period of mid-November to mid-January (submitter information). Net change in two way trips: +84 HGV / +112 to 212 light vehicles.</p> <p>PRoW: A bridleway crosses the site and follows the southern boundary; a footpath connects with this to the south.</p> <p><u>Local effects</u> Access to and from this site is to the A19 along a 1.7km existing access road called New</p>		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Road. According to the Environmental Statement, residual effects (after mitigation) for additional traffic on New Road are considered minor adverse and negligible on the A19 during the temporary construction phase. For completed development 88 HGV movements (44 arrivals and 44 departures) and 50 cars would use the site each day, which would have a minor adverse residual effect on New Road and a negligible effect on the A19 (after mitigation which includes time controls)¹⁷.</p> <p>Plan level / regional / wider effects The assessment has also considered the cumulative effects with other sites in the Joint Plan which at their peak would reach a minor effect (probably to the south of MJP55 / WJP06), but here the site is rated as minor negative.</p>							
4. To protect and improve air quality	<p>Proximity of air quality receptors AQMAs or Hazardous Substances Consents Sites: None within 2km. York AQMA no. 2 lies about 4.75km north on the A19.</p> <p>Local effects The planning application at the site set out a series of mitigation measures to reduce dust, such as barriers and undertaking dust generating activities away from receptors, to be set out in a Construction Management Plan. Residual effects, post mitigation, across the construction and completed development stages were then assessed as being negligible.</p> <p>In terms of air pollution from traffic using the site, this was considered within the site Environmental Statement using Design Manual for Roads and Bridges (DMRB) guidance and screened out from further assessment as the site was considered to have a negligible effect on air pollution. Process emissions were also considered, and while nitrogen dioxide (NO₂) and volatile organic compounds (VOC) emissions were identified as significant from AD gas engines, and NO₂ identified as significant from the supplementary boiler, analysis of the vulnerability of receptors showed nearly all potentially sensitive receptors to be subject to negligible effects, with one receptor being subject to a minor adverse effect for 1, 3 –Butadiene in a worst case scenario – with an overall effect of negligible. Effects on AQMAs were also considered insignificant.</p> <p>Effects at non-statutory designated sites for biodiversity were considered negligible except for nitrogen</p>					0	0	0

¹⁷ Barton Wilmore, 2013

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>where effects were minor adverse, though when the Construction Management Plan was taken into account effects were considered negligible.</p> <p>Plan level / regional / wider effects There were no potential air quality impacts identified at a regional level within the Environmental Statement.</p>							
5. To use soil and land efficiently and safeguard or enhance their quality	<p>Proximity of soil and land receptors Agricultural Land Classification (ALC): the majority of land within the site is ALC Grade 2 (very good quality) with a smaller amount of Grade 3 (good to moderate quality), though aerial photos show most of the site is hard standing. Contaminated land: potential contamination 'hotspots' identified in the Environmental Statement, related to the sites historic land-use.</p> <p>Local effects The Environmental Statement concluded that '<i>the Application Site is predominantly covered with buildings and hardstanding. There are no significant deposits of topsoil within the boundary of the Application Site</i>' and '<i>No significant sources of potential ground contamination have been identified on the Application Site that would pose a significant risk to the proposed development</i>'. As there wouldn't be a significant loss of soil and there no potential ground contamination sources were identified the proposal has been scored as neutral and is not expected to have an effect on the SA objective.</p> <p>Plan level / regional / wider effects Considered the same as local effects – neutral.</p>					0	0	0
6. Reduce the causes of climate change	<p>Proximity of factors relevant to exacerbating climate change Habitats: ancient woodland adjacent to the site with further occasional patches adjacent or close by within 1km (all deciduous woodland). Carbon in vegetation: Low – site lies in a square with estimated 4.41 tC/Ha; carbon in soils: Low – site lies in a square with estimated 49.67 tC/ha (however figures do not reflect former industrial use / hard standing on site).</p>	✓		✓	✓	++	++	++

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>Local effects As climate change is a global issue effects are reported in wider effects below.</p> <p>Plan level / regional / wider effects The site would generate +84 HGV and +112 to 212 light vehicles¹⁸, which would generate greenhouse gases. However, the proposed AD facility would take organic waste that would otherwise decompose in landfill generating methane, and instead use micro-organisms to anaerobically degrade waste in an enclosed facility to generate biogas which is then to be used for the generation of electricity and heat for use in the plant, a horticultural greenhouse and for exporting electricity to the grid. In total 18,000MWh of electrical and 8000MWh of heat energy per year would be produced. A carbon assessment¹⁹ submitted as part of the site planning application, where traffic is taken into account, estimates a net benefit of 20,618 tonnes of CO₂ per annum²⁰. The proposal is therefore expected to have a significant positive effect on the carbon emissions – one of the causes of climate change.</p>							
7. To respond and adapt to the effects of climate change	<p>Proximity of factors relevant to the adaptive capacity²¹ of a site Flooding: the site is located in both Flood Zones 2 and 3 associated with Halfpenny Dike / Bridge Dike to the western side of the main site. About 35% of the main site area being at risk of flooding. The access road is mainly in Flood Zone 1 apart from the section adjacent to the main site area which is also in Flood Zones 2 and 3. The site is <5% at risk of low risk (1:1000 (0.1%)) to high risk (1:30 (3.33%)) surface water flooding. The high risk areas are associated with the access road rather than the main site area.</p> <p>In terms of groundwater flooding, the site lies in four 1km squares that are used to assess the likelihood of groundwater flooding. Three of the 1km squares are >50% to <75%, and one 1km square where >25% - <50% of the land may be susceptible to Clearwater flooding. The main site area is within the higher risk</p>		✓	✓		+	+	+

Note – the number of vehicles the proposal would generate have been provided by the submitter.

¹⁸ The developer's carbon assessment uses the figures for HGVs and light vehicles that were estimated in 2013 in the Environmental Statement. Peel Environmental Management UK, 2013. North Selby Mine Site Sustainability Statement [URL: planningaccess.york.gov.uk/

¹⁹ ²⁰ online- applications/files/BD2CCFDADC53B8C8A3884CB29B4857EF/pdf/12_03385_FULM-SUSTAINABILITY_STATEMENT-1450755.pdf]

²¹ Adaptive capacity is defined as the ability of a system to adjust to climate change to moderate potential; damage or take advantage of opportunities (adapted from CARE International, 2015. Adaptive Capacity [URL: http://www.careclimatechange.org/tk/integration/en/key_concepts/adaptive_capacity.html]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>class with most of the access road being in the lower risk class.</p> <p>Catchment Flood Management Plan (CFMP): Site is in the Ouse CFMP in 'The Wash lands' policy area – Policy 6 – 'areas of low to moderate flood risk where we will take action with others to store water or manage run-off on locations that provide overall flood risk reduction or environmental benefits'.</p> <p>The majority of land within the site is ALC Grade 2 (very good quality) with a smaller amount of Grade 3 (good to moderate quality), though aerial photos show most of the site is hard standing.</p> <p>Local effects Flood risk assessment at the site identified a need to raise the access road to ensure that the site would be resilient to 1/100 plus climate change fluvial flood events during its operational phase. Compensatory flood storage will also be created. The residual effect was minor adverse significance.</p> <p>The adjacent SINC site will be brought into management, which should help increase its resilience to climate change. In addition, the provision of a horticultural facility should assist with future food security.</p> <p>Plan level / regional / wider effects Positive effect mainly due to the reduction of carbon footprint²².</p> <p>The Environmental Statement concluded that '<i>the Application Site is predominantly covered with buildings and hardstanding. There are no significant deposits of topsoil within the boundary of the Application Site</i>'. Therefore the development of the site is not expected to result in a significant loss of agricultural land, with impacts to food security expected to be neutral.</p>							
8. To minimise the use of resources and encourage	<p>Proximity of factors relevant to the resource usage of a site No spatial factors noted.</p> <p>Local effects In terms of resource usage, this site will obtain heat and electricity from a waste resource (offsetting the need to generate energy from primary non-renewable sources elsewhere). It will also</p>		✓	✓		++	++	++

²² The methane produced during AD is burned as fuel, and therefore releases CO₂ into the atmosphere. Because the methane comes from biomass, this does not contribute to climate change. However, if the same waste was left to degrade in a landfill, the methane produced could escape into the atmosphere: methane has a global warming potential 23 times larger than that of CO₂. Therefore, harvesting and using methane from biomass can help to prevent climate change.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
their re-use and safeguarding	produce bio-fertiliser. Highly positive. Plan level / regional / wider effects See local effects above.							
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	Proximity of factors relevant to managing waste higher up the waste hierarchy No spatial factors noted. Local effects This development moves organic waste up the waste hierarchy (from landfill to recovery), producing heat, electricity and bio-fertiliser products (that will also help produce more food through a linked CHP horticultural greenhouse). Plan level / regional / wider effects See local effects above.	✓	✓	✓		++	++	++
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	Proximity of historic environment receptors Conservation Areas: Escrick Conservation Area 280m south; Listed Buildings: 6 within 1km, 3 of which in Escrick Conservation Area; Scheduled Monuments: none within 2km; Registered Parks and Gardens none within 2km; Named Designed Landscapes: 1 within 2km (700m south) – Escrick Hall 19 th Century Ornamental Parkland; Registered Battlefields: None within 2km; World Heritage Sites: None within 2km. Green Belt. Local effects No significant effects are noted and this issue was scoped out of the Environmental Statement for the site. Plan level / regional / wider effects None noted.					0	0	0
11. To protect and enhance the quality and character of landscapes	Proximity of landscape / townscape receptors and summary of character National Park / AONB / Heritage Coast: None within 5km; Inheritance Tax Exempt land: None within 2km; District level landscape designations: None within 2km. National Character Area: Vale of York; NYLCA: Vale farmland with plantation woodland and heathland		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and townscapes	<p>landscape character type (moderate visual sensitivity overall / moderate ecological sensitivity overall / moderate landscape and cultural sensitivity overall); District LCA: Site is identified as Rolling Woodland Farmland in Selby Landscape Character Assessment.</p> <p>Intrusion: Access road is disturbed / western part of site is undisturbed; Light Pollution: Area is categorized as falling between an area of 1.0 to 3.0 and an area of 0.4 to 1.0 radiance, which is moderately dark²³.</p> <p>Local effects According to the Environmental Statement, while new buildings would be constructed in a rural area <i>'The existing woodland structure on the boundaries of the Application Site would be retained, providing a landscape framework encompassing the Proposed Development. The reinforcement of the existing pattern of vegetation with reinstatement planting for vegetation removed during demolition to accommodate the construction of the Proposed Development, with respect to local landscape character, and the appropriate management of existing landscape features, would ensure that the positive landscape structure would be retained and enhanced. As a result, the pattern or 'grain' of the landscape would be retained and reflected within the mitigation proposals for the Application Site, and this would serve to reinforce local distinctiveness and landscape character'</i>. It also states that <i>'The mitigation measures proposed would also 'soften' the edge of the Proposed Development, and assist in assimilating it into its landscape setting, and increase tree cover over the wider area encompassing the Application Site. Once established the overall landscape improvements proposed are assessed as having no detrimental effect'</i>.</p> <p>Similarly, residual effects are reported for visual effects which, because vegetation screening will take time to mature, exhibit a tapering effect that will reduce down from a low magnitude effect to no detrimental effect in the long term.</p> <p>Overall this assessment predicts the effect will be negligible to minor negative in the short and medium term, and neutral in the long term.</p> <p>Plan level / regional / wider effects None noted.</p>							

²³ See NOAA light pollution map [URL: <http://www.lightpollutionmap.info/#zoom=4&lat=5759860&lon=1619364&layers=B0TFFFF>]

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
12. Achieve sustainable economic growth and create and support jobs	<p><u>Proximity of factors relevant to sustainable economic growth</u> Market accessibility: Site has connecting road to A19 giving good access to York and Selby.</p> <p><u>Local effects</u> According to the Environmental Statement, once operational the site is expected to provide 56 full time jobs, plus 50 seasonal jobs, and most employees will be drawn from the local job seeking community. In addition, through providing bio-fertiliser, there is the potential to stimulate the local agricultural contracting market. Jobs will also be needed in maintenance. This is considered a permanent minor beneficial effect on employment. 250 construction jobs would be provided in the short term. As at least some of these employees are likely to be local, they will be likely to spend a proportion of their income locally.</p> <p>In addition, providing renewable energy will help to boost energy security.</p> <p>Overall, moderate positive, and highly positive in the short term.</p> <p><u>Plan level / regional / wider effects</u> Energy will be supplied to the Grid, meaning it could have wider benefits.</p>	✓	✓	✓	✓	++	m +	m +
13. Maintain and enhance the viability and vitality of local communities	<p><u>Proximity of factors relevant to community vitality / viability</u> Index Multiple Deprivation (IMD): not in the lowest 20% of the IMD; Nearest Settlements: Escrick is about 170m south of the access road and about 1.4km south west of the main body of the site.</p> <p><u>Local effects</u> Jobs would be provided, but an increased amount of traffic would pass Escrick (albeit a modest amount on the main A19 road). Some employees may utilise local businesses in Escrick, such as the local garage / pub. There are no significant tourism receptors noted in the vicinity. Broadly minor positive.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>	✓	✓	✓	✓	+	+	+

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
14. To provide opportunities to enable recreation, leisure and learning	<p><u>Proximity to recreation, leisure and learning receptors</u> Rights of Way: A bridleway joins the main body of the site, crosses the western end, and a footpath runs parallel to the access route, but around 380m south. Common land / village greens: None within 1km.</p> <p><u>Local effects</u> Although there would be visual impacts on a right of way, the land is already disturbed due to the presence of the former mine. Although planned landscaping may improve the situation, initial effects would at worst be minor negative. Dust and noise impacts are thought to be not significant in the main due to the distance between the access route and the footpath, but where the bridleway joins construction noise and operational noise from HGV unloading and manoeuvring may impact on user experience. Mitigation for dust and noise (including timing restrictions for noisy activities) is proposed which may lessen the worst effects, leaving a residual minor to moderate adverse effect closest to the site, but overall minor negative effects are predicted.</p> <p><u>Plan level / regional / wider effects</u> None noted.</p>		✓	✓		-	-	-
15. To protect and improve the wellbeing, health and safety of local communities	<p><u>Proximity to population / community receptors / factors relevant to health and wellbeing</u> Receptors (properties / settlements / schools / healthcare): There are a number of farmhouses / isolated properties with 1km; Housing in Escrick is about 170m south of the access road and about 1.4km south west of the main body of the site; No healthcare facilities within 1km; Noise: There are Noise Important Areas (NIAs) for road noise along the A19, with nearest 2 NIAs areas going south through Escrick on the A19 (NIA 6579 and NIA 10207), and further NIAs 1km and 1.3 km north (NIA 6578 and NIA 6577 respectively); Pipeline: None within 1km.</p> <p><u>Local effects</u> There may be minor amenity effects on rights of way (which could potentially affect physical activity rates) as well as increased noise on the A19. There are benefits in terms of jobs.</p> <p>The NIAs on the A19 may also experience a minor elevation in noise. No noise action plan is yet in place for this area. However, while the plan cannot mitigate for approved planning consents, a recommendation is that the SA, through its monitoring requirements, should monitor the status of NIAs as well as the actions identified for specific NIAs. Should these identify a need to implement specific measures at the</p>	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>A19 (or other locations) the SEA may take the opportunity to review the efficacy of development management policies dealing with noise in the Plan.</p> <p>Plan level / regional / wider effects The Environmental Statement identified a risk to construction workers from collapsing mineshafts. To mitigate for this detailed survey is required and the establishment of safety zones around shafts as well as the defining of acceptable structural loads / foundation design for buildings. Venting of shafts and other mitigation is also planned to mitigate for ground gas. Residual effects are rated as minor adverse.</p>							
16. To minimise flood risk and reduce the impact of flooding	<p>Proximity to flood zones Flooding: the site is located in both Flood Zones 2 and 3 associated with Halfpenny Dike / Bridge Dike to the western side of the main site. About 35% of the main site area being at risk of flooding. The access road is mainly in Flood Zone 1 apart from the section adjacent to the main site area which is also in Flood Zones 2 and 3. The site is <5% at risk of low risk (1:1000 (0.1%)) to high risk (1:30 (3.33%)) surface water flooding. The high risk areas are associated with the access road rather than the main site area.</p> <p>In terms of groundwater flooding, the site lies in four 1km squares that are used to assess the likelihood of groundwater flooding. Three of the 1km squares are >50% to <75%, and one 1km square where >25% - <50% of the land may be susceptible to Clearwater flooding. The main site area is within the higher risk class with most of the access road being in the lower risk class.</p> <p>About 20% of the main site area and the eastern end of the access road are located in the 1:20 (5%) event flood extent.</p> <p>CFMP: Site is in Ouse CFMP in 'The Washlands' policy area – Policy 6 – 'areas of low to moderate flood risk where we will take action with others to store water or manage run-off on locations that provide overall flood risk reduction or environmental benefits'.</p> <p>Climate change effects on surface water flooding are likely to increase the extents of the areas at risk and also the depth of flooding for each event respectively i.e. Areas of Flood Zone 3 are likely to increase into</p>		✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	<p>areas that are shown as Flood Zone 2 and Flood Zone 2 is likely to increase in extent into the site.</p> <p>Local effects A Strategic Flood Risk Assessment (SFRA) Sequential Test²⁴ undertaken for the site concluded that this site would 'Pass'. A flood risk assessment completed as part of the planning application at the site identified a need to raise the access road to ensure that the site would be resilient to 1/100 plus climate change fluvial flood events during its operational phase. Compensatory flood storage will also be created. The residual effect was minor adverse significance.</p> <p>Plan level / regional / wider effects None noted.</p>							
17. To address the needs of a changing population in a sustainable and inclusive manner	<p>Proximity to factors relevant to the needs of a changing population Site does not conflict with other allocations.</p> <p>Local effects See plan level effects below.</p> <p>Plan level / regional / wider effects The provision of a waste management facility that also provides useful products that support food security (i.e. bio-digestate and the provision of crops from the horticultural greenhouse) and energy security (through the generation of biogas and the generation of electricity) is highly beneficial to the population.</p>		✓	✓	✓	++	++	++

²⁴ The Sequential Test approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (Flood Zones 2 and 3) and other areas affected by other sources of flooding where possible.

Cumulative / Synergistic effects²⁵	
Planning context	Escrick is a 'secondary village with defined development limits' according to Selby's Core Strategy. According to the Core Strategy <i>"Secondary Villages' are generally much smaller and less sustainable or else have no opportunities for continued growth owing to a combination of flood risk and environmental constraints. Consequently further planned growth would not be appropriate in these settlements, although some housing development inside Development Limits such as conversions, replacement dwellings, and redevelopment of previously developed land, may take place where it will enhance or maintain the vitality of rural communities. Other than filling small gaps in built up frontages and the conversion/redevelopment of farmsteads (which are currently classed as greenfield), development on greenfield land will not be acceptable"</i> ²⁶ . This would suggest there are unlikely to be significant cumulative effects from housing or employment nearby.
Other Minerals and Waste Joint Plan Sites	Other MWJP sites within 5km: MJP55 3.6km south-west, WJP06 4km south-west.
Historic minerals and waste sites	Historic minerals and waste sites: A number of historic landfill sites are within 5km, and the Naburn Sewage works are around 4km away. The site is in a PEDL license area, but no applications have yet come forward in this area. No cumulative effects.
Limitations / data gaps	
No significant data gaps. More detailed assessment would be required to fully evaluate a number of effects however. This should be addressed at any subsequent planning application stage.	
Mitigation requirements identified through Site Assessment process	
<ul style="list-style-type: none"> • Design to mitigate impact on ecological issues, in particular with regard to avoiding impacts on protected species. • Design to minimise impact on best and most versatile agricultural land and to protect high quality soil resources. • Design to mitigate impact on archaeological remains. • Design of development and landscaping of site to mitigate impact on: Rufforth village (including Listed Buildings), the historic City of York, Green Belt and local landscape features and their respective settings and users of rights of way. • Design to include suitable flood risk assessment; for an FRA to be satisfactory, it will need to include necessary mitigation, such as compensatory storage, attenuation and SuDS as appropriate. • Design to ensure protection of the aquifer. • Design to include suitable arrangements for access to local roads including the B1224 and appropriate a traffic management plan. • Appropriate arrangements for control of and mitigation of the cumulative impacts on air quality, and the effects of noise and dust, etc. • Appropriate restoration scheme using opportunities for habitat creation and to a use compatible with its location in the Green Belt and integrated with the local landscape character, but which is also appropriate to location within a birdstrike safeguarding zone. 	

²⁵ Cumulative effects have been factored into the scoring of each SA objective in the assessment framework.

²⁶ Selby District Council, 2013. Selby District Local Plan [URL: http://www.selby.gov.uk/sites/default/files/Documents/CS_Adoption_Ver_OCT_2013_REDUCED.pdf]

Appendix 3I: Assessment of Areas of Search

Joint Minerals and Waste Plan

Contents

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Area C	Extraction of sand and gravel	26

Name and Description of Area of Search

Area A: Area of Search for Sand and Gravel

Area A is described in this table by dividing the area into two blocks – the northern block, which is the area south of Topcliffe and overlaps slip roads to the A168, and the southern block is the two areas around Cundall.

SA Objective Key: 1. Biodiversity/Geodiversity, 2. Water Quality/Quantity, 3. Transport, 4. Air Quality, 5. Soil/Land, 6. Reduce Climate Change, 7. Adapt to Climate Change, 8. Minimise Resource Use, 9. Minimise Waste, 10. Historic Environment, 11. Landscape, 12. Sustainable Economic Growth, 13. Community Vitality, 14. Recreation, Leisure and Learning, 15. Wellbeing, Health and Safety, 16. Flooding, 17. Changing Population

SA objective	Impact / timescale			Type of effect				Analysis
	S	M	L	P	T	D	I	
1.	-	-	-	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>In terms of biodiversity and geo-diversity designations the area does not contain any Special Area of Conservation (SACs), Special Protection Area (SPAs), Ramsar sites or Sites of Special Scientific Interest (SSSIs). However, much of the northern and western parts of the area lie within the outer parts of the SSSI Impact Risk Zone (IRZ) relating to Pilmoor SSSI.</p> <p>The River Swale is possibly sensitive to significant discharges of water or liquid waste to the ground or surface water, good site management practices would mitigate this impact.</p> <p>A Site of Nature Conservation Interest (SINC) Brafferton Embankment SINC lies outside of the southern block. This should preferably be avoided within any potential planning application for a quarry, or should demonstrate no unacceptable impacts consistent with Joint Plan Policy D07.</p> <p>There are also a number of patches of priority habitats, most of which are deciduous woodland. These habitats may also host protected species (as will the river corridors: The Swale and Ure are known to support breeding lamprey which are afforded legal protection). Non-native invasive species will be a key consideration around watercourses. There is some potential to increase connectivity (and thus ecological value) between these habitats.</p> <p><u>Wider regional / national effects</u></p>

								<p>Area A is largely is in the outer zone of the Pilmoor SSSI impact risk zone but this zone does not list discharges or minerals development as a constraint.</p> <p>The Area of Search contains mostly occasional local constraints that do not rise above an occasional distribution, leaving considerable spaces where minerals development would have relatively small scale impacts. In relation to SINCS and priority habitats, these should preferably be avoided within any potential planning application for a quarry, or should demonstrate no unacceptable impacts consistent with Joint Plan Policy D07.</p> <p>Most effects are likely to be at a local scale, though if impacts were to occur at SSSIs (which does not seem likely, but may be possible) this would add a component of national significance to the assessment.</p> <p>Overall effects are considered to be of minor negative significance, mainly due to the high likelihood that any proposal in this Area would fall into a SSSI Impact Risk Zone (but low likelihood that proposals would represent a risk to SSSIs) along with the potential for impacts on relatively dispersed priority habitats. However, even in such zones, effects are essentially unknown until a proposal is put forward. There are also possible positive impacts in the medium and longer term as opportunities to better connect networks may be possible through mineral extraction / restoration.</p>
2.	m -	m -	m -	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>The Area of Search is mostly characterised by occasional small waterbodies (ponds, streams, ditches etc.) and borders the River Swale on its north eastern edge for a small stretch. The Area does not contain any Source Protection Zone</p>

	?	?	?				<p>(SPZ). The northern block lies across two catchment areas including the 'Swale from Wiske to River Ure', though is largely in the 'Cundall Beck / Soppa Gutter' water body catchment (currently moderate / good by 2027). The southern block is in the 'Cundall Beck / Soppa Gutter' water body catchment (currently moderate / good by 2027).</p> <p>The status and objectives of the waterbodies in this area require that sites must not prevent waterbodies from achieving their status objectives (for instance by affecting the ecology or chemical composition of the waterbodies through processes such as discharges to rivers or significant changes to the water table). Where a risk is identified, hydrological / Water Framework Directives (WFD) assessment will be required.</p> <p>The area overlies the Sherwood Sandstone aquifer, and several superficial deposits support secondary aquifers. Much of the area's superficial deposits are glacial till and sands and gravels, so aquifers may be unconfined and potentially more vulnerable to ingress of pollutants. However, other than risk of fuel spills most waste water will be inert, and thus risk would be relatively low.</p> <p>In terms of abstraction, there is generally groundwater available, while there is limited surface water available at low and very low flows (available at least 50% of the time), so restrictions may apply on permits to extract water (e.g. for mineral washing) in dry conditions.</p> <p><u>Wider regional / national effects</u></p> <p>While the Sherwood Sandstone aquifer lies beneath the superficial geology, sand and gravel extraction is relatively shallow and would take place in the superficial deposits above. Pollution of the principal aquifer may be possible, but other than risk of fuel spills most waste water will be inert, and thus risk would be relatively low. Generally there is little evidence at this level to suggest effects would be more than local. Pollution of surface waterbodies, e.g. from discharged water is also likely to be on a local scale (and controlled via permits).</p> <p>Without mitigation effect overall could be up to minor negative. As with other assessments there is considerable uncertainty until sites can be defined.</p>
3.	-	-	-		✓	✓	<p><u>Area level effects</u></p> <p>The Area as a whole is served by a number of minor roads, and the A1(M) is relatively close to the west, giving access to markets such as Ripon and Harrogate, as well as the West Yorkshire conurbation to the south and Teesside to the north.</p>

							<p>The northern block in particular overlaps slip roads to the A168, giving it very good access to markets to the north in Teesside as well as markets to the south. The western edge of northern block also runs very close to junction 49 of the A1, with close proximity to access roads, though villages such as Dishforth may lie between some quarry locations and the easiest point of access to the A1(M) in the south of this block. To the east is the A19 allowing access to York.</p> <p>Although the East Coast Mainline railway line lies to the east, here are no railheads within 5km.</p> <p>Overall this is considered to have a minor negative effect as although there is good access to A roads and direct links to population centres, extraction sites would result increased transport miles to and from the sites.</p> <p><u>Wider regional / national effects</u></p> <p>No regional or wider effects are noted.</p>	
4.	-	-	-		✓	✓	✓	<p><u>Area level effects</u></p> <p>There are no Air Quality Management Areas (AQMAs) within 5km of this area. There are a number of settlements and individual properties and priority habitats (that may be sensitive to dust) spread throughout the area. However, there are also plenty of locations where there are relatively few receptors. On balance effects are considered to be minor negative.</p> <p><u>Wider regional / national effects</u></p> <p>Effects are likely only to be local as traffic is likely to disperse to such an extent as to be an insignificant contributor to local air quality after leaving the local area.</p> <p>Overall effects are thought to be minor negative, though this does not preclude the possibility that at a site scale more significant local impacts could occur if sites are located close to receptors.</p>
5.	-	-	-	✓	✓	✓	✓	<p><u>Area level effects</u></p>

	?	?	?					<p>Most of Area A is Agricultural Land Classification (ALC) 3¹, The National Planning Policy Framework (NPPF) requires that 'Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality'. Area level effects are rated as minor negative with uncertainty as there may be best and most versatile land lost within the area.</p> <p>Restoration could be used to restore land for agricultural purposes, but it should be borne in mind that restoration of sand and gravel is often to open water.</p> <p><u>Wider regional / national effects</u> As highlighted above there is potentially best and most versatile agricultural land across Area A although this is uncertain. Effects would depend on the scale of any quarry application(s) in this area, but larger sites cumulatively may have a measurable impact on agricultural land lost, with wider implications for availability of agricultural land and food security. Potentially minor negative without mitigation.</p>
6.	m -	m -	m -	✓	✓	✓	✓	<p><u>Area level causes / effects</u></p> <p>Climate change is a result of the accumulation of global emissions from local sources. This is a large area with a considerable resource of mineral, so there is significant potential for carbon from transport if numerous sites are approved. However, effects may be less than more remote areas due to the proximity of this resource to the major road network.</p> <p>In terms of land take, while there is potentially more scope for more land to be developed for quarrying in this Area, statistics on carbon in soils and in vegetation in this area suggest the Area has low to moderate carbon stocks in comparison to other parts of the Plan area (for vegetation most of the Area is less than 10 tonnes per hectare, which is relatively low). Up to moderate effects are predicted.</p> <p>Effects could be lessened through undertaking climate change assessment on sites likely to have large emissions (e.g. where they have a large transport impact and / or will take place in areas with higher carbon density in soils / vegetation).</p> <p><u>Wider regional / national effects</u> See above.</p>

¹ ALC Grade 3 land is divided into Grades 3a and 3b, the best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping there is Grade 3 land within Area A, without further investigation it is not known whether it is Grade 3a or 3b.

7.	m -	m -	m -	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>Area A contains areas of Flood Zone 3 at the fringes to the east of the northern area, the southern parts of the search area contain areas of Flood Zone 2 and 3 following watercourses across the area. Sand and gravel extraction is considered 'water compatible'. Extracting from Flood Zone 3 in this Area may or may not increase the adaptive capacity of the flood plain, depending on how minerals are extracted (e.g. if they are above the water table or wet worked they may form an important informal part of the functional floodplain, though if they are dewatered they may increase flow rates which could make flooding worse).</p> <p>In relation to habitat connectivity, Objective 1 has already described the fragmented nature of habitats in this area.</p> <p><u>Wider regional / national effects</u></p> <p>It is possible that dewatering in this area may make a small contribution to flooding downstream, which could be some distance from the site.</p> <p>ALC Grade 3 land could be lost as a result of quarrying in the area. Without mitigation this could have an effect on food security as land would be taken out of food production.</p> <p>Overall, effects are considered to range from moderate negative to positive, though uncertainty is noted in the long term until site specific restoration schemes are confirmed. Flood plain compensatory storage may be one way of mitigating for the effects of development in the floodplain, and creation of locally relevant habitats may help increase species movement. Development outside of the best and most versatile agricultural land would be desirable.</p>
8.	0	0	0					<p><u>Area level effects</u></p> <p>No Area level effects are predicted.</p> <p><u>Wider regional / national effects</u></p> <p>While promoting areas of search could better allow the extraction of resources, it is the policies and the sites themselves to which an impact could be ascribed (as these are driving resource use, not the areas from within which resources might be extracted).</p>

9.	0	0	0					<p><u>Area level effects</u></p> <p>At an Area level it is not possible to report whether waste would be minimised.</p> <p><u>Wider regional / national effects</u></p> <p>It is the policies and the sites themselves to which an impact could be ascribed and therefore a neutral score is noted against this SA objective.</p>
10.	m -	m -	m -	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>In terms of designated heritage assets Area A contains listed buildings in the southern part of the settlement of Asenby, and a Listed Building (Low House Grade II) is very close to the border of Area A. In addition, there are several clusters of listed building just outside these blocks, again mostly in settlements, notably in Cundall, Topcliffe, Dishforth and Brafferton. Some of these settlements are also designated as conservation areas.</p> <p>In terms of undesignated archaeology this area has a number of areas of particular interest. A well preserved complex of medieval earthworks survives in the fields to the north of Thornton Manor Farm. These represent a deserted settlement and a manor house and are of considerable significance with a high archaeological potential. These remains are of demonstrably equivalent significance to scheduled monuments (NPPF para. 139). The area also includes abundant evidence of prehistoric and Romano-British settlement in the form of cropmarks of former settlements, ritual monuments and field systems. This appears to be a coherent landscape of significant archaeological potential.</p> <p>Further consideration of any proposed mineral sites would require additional assessment to define the significance of any undesignated heritage assets or areas of archaeological potential. It would be reasonable to assume that mitigation would be provided in line with Joint Plan Policy D08 (Historic Environment) '<i>...mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>'.</p> <p>Broadly, in terms of designated heritage assets there would appear to be significant space within this Area to develop minerals sites without directly impacting on these assets, though indirect effects on the setting of heritage assets might still occur depending on location. Areas close to settlements are likely to be the most sensitive locations, though other locations, such as near Asenby will also be sensitive. Impacts from dust, noise, vibration or setting are all possible in such locations.</p> <p><u>Wider regional / national effects</u></p> <p>There are also a three scheduled monuments on the eastern side of the River Swale, the closest is approximately 200m from Area A which may be inter-visible with sites near the boundary so screening or other management measures informed by visual impact assessment will be a consideration here.</p>

							<p>A deserted village at Humberton lies about 1.9km south of the boundary of the southern block with relatively flat / low topography between this receptor and the western edge of the southern block. Similarly, a registered battlefield lies only about 2.2km from the western edge of the southern block with probable high inter-visibility between the western edge of the Area and the receptor. Both of these sites may also be visible from the separate northern plot. Minerals sites within visible range of these receptors would, therefore, need to assess impacts on the historic significance of these sites. Effects before mitigation could be quite significant from certain points.</p> <p>Broadly, in terms of designated heritage assets there would appear to be significant space within this Area to develop minerals sites without directly impacting on these assets, though indirect effects on the setting of heritage assets might still occur depending on location. Sites close to settlements are likely to be the most sensitive locations. Overall the effects are considered moderate negative across Area A due to the high number of receptors (but considerable space still exists to avoid significant effects). Around Asenby effects are highly negative, and consideration should be given to removing these constraints from the Area of Search.</p> <p>However, individual sites, depending on where they are located, could have a more significant impact. Such sites would need to be assessed for their effects on historic significance.</p>
11.	m -	m -	m -	✓	✓	✓	<p><u>Area level effects</u></p> <p>The Area does not include any nationally or local designated landscapes and lies within the Vale of York NCAs. The Area of Search lies across two different character types identified in the York and North Yorkshire Landscape Character Assessment (LCA), divided between 'Settled Vale Farmland (moderate overall visual sensitivity, low overall ecological sensitivity, and moderate overall landscape and cultural sensitivity) and River Floodplain (high overall visual sensitivity, high ecological sensitivity and high landscape and cultural sensitivity).</p> <p>The northern plot borders the undesignated designed landscape 'Baldersby Park', two designed landscapes within 2km of the northern plot. A significant proportion of the area has funding available for landscape enhancement under the Allerton Waste Recovery Park Landscape and Cultural Heritage Fund.</p> <p>Much of the northern area is affected by light pollution from the A168 and settlements, though rural parts of this area have relatively dark skies, hence lighting should still be considered at a site level, so as not to significantly add to light pollution.</p> <p><u>Wider regional / national effects</u></p> <p>There are no National Parks or AONBs within 5km.</p>

							Overall, the lack of any designated landscapes within 5km suggests that effects will be primarily of local significance. However, at this local level the area may be quite sensitive (such as near to villages with Conservation Areas, surviving landscapes or in the open landscape of the river floodplain or elevated Magnesian limestone area) so in-depth landscape assessment will be needed. Mitigation will need to focus on minimising visual impacts from receptors. Suitable plans for restoration that are consistent with landscape character are also needed. Overall effects are rated as moderate negative before mitigation.
12.	m +	m +	m +		✓	✓	<p><u>Area level effects</u></p> <p>The Area is relatively well positioned in terms of proximity to market, with proximity to the A1(M), A168 and A59, and thus markets in Harrogate, Ripon, York and Wetherby as well as Leeds nearby. Sand and gravel provided from sites in this area would help support the local construction industry which in turn would support the wider economy. The Area contains an estimated 53 million tonnes² of Category A and B resource³.</p> <p>There are relatively few significant tourism assets in or close to Area A.</p> <p><u>Wider regional / national effects</u></p> <p>It is possible that some material from quarries in this Area could travel further afield given the good transport links, with the West Yorkshire conurbation as whole within relatively easy range of this site (though the further minerals are transported the less economic they become).</p> <p>Regional effects are thought to be broadly positive.</p> <p>Overall the effects on the economy objective are thought to be moderately positive due to the significant amount of category A and B resources available and proximity to market, with some moderate negative effects on tourism.</p>
13.	+	+	+		✓	✓	<p><u>Area level effects</u></p> <p>Quarrying would create small numbers of skilled local jobs in extraction and driving, though this Area is not in the most deprived 20% in terms of the indices of multiple deprivation. Traffic is generally unlikely to be highly problematic.</p>

² Broad estimates bases on British Geological Survey (BGS) Resource Data

³ Category A and B which have been classified with 'indicated' status i.e. those resources that are potentially suitable in quality and have been identified with the highest degree of confidence. North Yorkshire Sand and Gravel Assessment, Minerals and Waste Programme Commissioned Report CR/11/133 (BGS 2011) pp 12-13 - http://www.northyorks.gov.uk/media/17180/North-Yorkshire-sand-and-gravel-assessment/pdf/North_Yorkshire_Sand_and_Gravel_Assessment_2011_FINAL.pdf

			?					<p>If sites are restored to green infrastructure (in green infrastructure corridors that run through all of the areas), there could be longer term benefits</p> <p><u>Wider regional / national effects</u></p> <p>Extracting sand and gravel from this Area would make a general contribution to housing supply as it may be used in construction.</p> <p>Minor positive effects are reported, with some uncertainty noted over longer term restoration objectives.</p>
14.	-	-	-	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>Rights of way cross the northern block of the area. Although quarrying might affect these routes they are likely to be of little more than local interest so effects would be minor, and mitigation achievable through access diversions. Other footpaths in proximity to the sites may receive amenity impacts (noise and dust).</p> <p><u>Wider regional / national effects</u></p> <p>A green infrastructure network crosses the area. If sites are restored to green infrastructure in this area there could be longer term benefits, however this is currently uncertain.</p> <p>Overall effects are considered to be minor negative with long term uncertainty.</p>
15.	-	-	-	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>A few local rights of way might be affected by quarrying proposals, indirectly affecting active lifestyles, while dust from quarrying operations and transport may affect sites close to settlements or individual buildings, depending on location.</p>

			?				<p>Depending on routes taken there may be some increased chance of road accidents – e.g. if heavy goods vehicles route through settlements. If sites are restored to green infrastructure there could be some longer term benefits. There may also be some low level health benefits from job creation.</p> <p>No noise action planning areas exist in proximity to this Area (within 2km).</p> <p><u>Wider regional / national effects</u></p> <p>No wider effects are predicted.</p>
16.	-	-	-	✓	✓	✓	<p><u>Area level effects</u></p> <p>Area A contains minimal areas of Flood Zone 3 at their fringes associated with the River Swale, with areas of Flood Zones 2 and 3 in the southern blocks.</p> <p>Sand and gravel extraction is considered ‘water compatible’. Extracting from Flood Zone 3 in this Area may or may not increase flooding, depending on how minerals are extracted (e.g. if they are above the water table or wet worked they may form an important informal part of the functional floodplain, though if they are dewatered they may increase flow rates which could make flooding worse).</p> <p><u>Wider regional / national effects</u></p> <p>It is possible that dewatering in this area may make a small contribution to flooding downstream, which could be some distance from the site.</p> <p>Overall, effects are likely to be moderate negative as a result of areas of Flood Zones 2 and 3 in the southern blocks. Restoration is expected to be more positive for flooding, though there is some uncertainty over this.</p>
17.	m +	m +	m +	✓		✓	<p><u>Area level effects</u></p> <p>Area A will provide a valuable source of construction materials to a number of significant settlements, thus ensuring relatively short housing and infrastructure construction supply chains. This is considered to be moderate positive given the scale of the resource.</p> <p><u>Wider regional / national effects</u></p>

Name and Description of Area of Search

Area B: Area of Search for Sand and Gravel

Area south of Catterick but west of the A1(M) and north of Bedale.

SA Objective Key: 1. Biodiversity/Geodiversity, 2. Water Quality/Quantity, 3. Transport, 4. Air Quality, 5. Soil/Land, 6. Reduce Climate Change, 7. Adapt to Climate Change, 8. Minimise Resource Use, 9. Minimise Waste, 10. Historic Environment, 11. Landscape, 12. Sustainable Economic Growth, 13. Community Vitality, 14. Recreation, Leisure and Learning, 15. Wellbeing, Health and Safety, 16. Flooding, 17. Changing Population Needs

SA objective	Impact / timescale			Type of effect				Analysis
	S	M	L	P	T	D	I	
1.	-	-	-	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>In terms of biodiversity and geo-diversity designations Area B does not contain any Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites or Sites of Special Scientific Interest (SSSI).</p> <p>Area B contains occasional blocks of priority habitats. However, the effects of development in much of this block will be limited to local level potential effects on protected species or local interest features and habitats, unless it lies close to a constraint.</p> <p>Protected species are likely to be associated with priority habitats and the river corridors. Non-native invasive species will be a key consideration around watercourses.</p> <p><u>Wider regional / national effects</u></p> <p>Impacts on priority habitats, while important, are considered largely of local significance. However, there are also impacts related to nationally designated sites in this area.</p> <p>Newton-le-Willows Site of Special Scientific Interest (SSSI) is approximately 2.3km west of the area., Tthe south-west corner is within the SSSI Impact Risk Zones (IRZ) related to discharge of water (which could result from dewatering at quarries).</p> <p>Such impacts are considered to be of low to moderate risk, but of potentially high magnitude if they were to occur.</p> <p>Effects would be cumulative with existing sites, which already display up to negative (and some positive) effects at a site</p>

							<p>level. At an area level effects are also considered cumulatively to potentially be moderate to high negative.</p> <p>Overall impacts are considered to be minor negative without mitigation. There is the potential for long term benefits for biodiversity with appropriate restoration.</p>
2.	-	-	-		✓	✓	<p><u>Area level effects</u></p> <p>Area B includes the 'Swale for Clapgate Beck to Bedale Beck' water body catchment in the east, as well as the 'Scurf Beck from Source to Bedale Beck' catchment (currently moderate / good by 2027), 'Bedale / Newton / Burton Beck – Brompton Road to Rand' catchment (currently bad / good by 2027), 'Bedale / Newton / Burton Beck from Rand Beck to River Swale' catchment (currently bad / good by 2027) and 'Old Stell Catchment (tributary of Bedale Beck)' (currently moderate / good by 2027).</p> <p>The status and objectives of the water bodies in this area require that sites must not prevent water bodies from achieving their status objectives (for instance by affecting the ecology or chemical composition of the water bodies through processes such as discharges to rivers or significant changes to the water table affecting water bodies). This will be particularly important where current status is poor or bad. Where a risk is identified, hydrological / Water Framework Directive (WFD) assessment will be required.</p> <p>In terms of abstraction, there is generally groundwater available, while there is limited surface water available at low and very low flows (available at least 50% of the time). This may have limited ramifications for processing at some sites.</p> <p><u>Wider regional / national effects</u></p> <p>While principal aquifers lie beneath the superficial geology, sand and gravel extraction is relatively shallow and would take place in the superficial deposits above. Pollution of the principal aquifer may be possible, but other than risk of fuel spills most waste water will be inert, and thus risk would be relatively low. Generally there is little evidence at this level to suggest effects would be more than local.</p> <p>Overall effects are considered minor negative without mitigation (with the most significant effects being on the status of water bodies that might be affected by fuel spills or input of turbid water). As with other assessments there is considerable uncertainty until sites can be defined.</p>
3.	m	m	m		✓	✓	<p><u>Area level effects</u></p>

							<p>The Area as a whole is served by a number of minor roads, and the A1(M) is relatively close, potentially giving good access to Teesside and County Durham in particular, but the area is less well located for access to markets further to the south while the A684 also runs through the area, linking Area B to Northallerton and beyond that Teesside. Traffic is likely to access the A1 from Junction 51. The recent development of the Bedale Bypass also facilitates access to and from this Area. Both of these access points may require traffic to route through settlements depending upon which part of the area minerals are extracted from. Traffic routing across to the A19 from this Area may route through Northallerton.</p> <p>There are no railheads within 5km. Moderate negative due to good access to the major road network, but the quite high likelihood that traffic would route through local settlements.</p> <p><u>Wider regional / national effects</u></p> <p>No regional or wider effects are noted.</p>
4.	-	-	-	✓	✓	✓	<p><u>Area level effects</u></p> <p>There are no Air Quality Management Area (AQMAs) within 5km. There are individual properties and priority habitats (that may be sensitive to dust) spread throughout the area. The settlement of Bedale borders the area to the south-east and Little Crakehall is approximately 600m north-west. There are also plenty of locations where there are relatively few receptors.</p> <p>Dust from extraction activities may affect individual receptors within the area, and sites located close to Bedale may be affected. In addition, there are priority habitats in this area that may be sensitive to dust pollution, while traffic may route through settlements from this location to the A1(M) (cumulatively adding to pollution from the A1(M) for a small number of properties).</p> <p>On balance effects are likely to be moderate negative due to potential traffic pollution impacts in settlements, without mitigation.</p> <p><u>Wider regional / national effects</u></p> <p>No regional or wider effects are noted.</p>
5.	-	-	-	✓	✓	✓	<p><u>Area level effects</u></p>

						<p>Most of the Area is Agricultural Land Classification (ALC) Grade 3⁴, which means it may or may not be best and most versatile land. The National Planning Policy Framework (NPPF) requires that '<i>Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality</i>'.</p> <p>While development should be steered towards lower quality land where possible (and a recommendation of this appraisal is that alternatives should be considered in terms of their effects on soil quality through Environmental Impact Assessment (EIA)) when sites come forward in best and most versatile land, mitigation will also need to be applied to protect and retain soils where possible.</p> <p><u>Wider regional / national effects</u></p> <p>As highlighted above there is potentially best and most versatile agricultural land across Area B although this is uncertain. Effects would depend on the scale of any potential quarry applications in this area, but larger sites cumulatively may have a measurable impact on agricultural land lost, with wider implications for availability of agricultural land and food security. Potentially minor negative without mitigation.</p>
6.	m -	m -	m -	✓	✓	<p><u>Area level effects</u></p> <p>Climate change is a result of the accumulation of global emissions, albeit from local sources. This is a large area with a considerable resource of mineral, so there is potential for carbon from transport if numerous sites are approved. However, effects may be less than more remote areas, due to the proximity of this resource to the major road network (though minerals would still need to travel an unspecified distance powered, at the moment, by fossil fuels).</p> <p>In terms of land take, while there is potentially more scope for more land to be developed for quarrying in this area, statistics on carbon in soils and in vegetation in this area suggest the area has relatively low levels of carbon in vegetation (though locally there are significant blocks of woodland that may be higher).</p> <p>Up to moderate negative effects are predicted. Effects could be lessened through undertaking climate change assessment on sites likely to have large emissions (e.g. where they have a large transport impact and / or will take place in areas with higher carbon density in soils / vegetation).</p> <p><u>Wider regional / national effects</u></p>

⁴ ALC Grade 3 land is divided into grades 3a and 3b, the best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping there is Grade 3 land within Area A, without further investigation it is not known whether it is Grade 3a or 3b.

							See above. Overall effects are considered to be moderate negative due to the potential to generate road journeys added to the potential for development to take place in areas with moderately higher levels of soils carbon.
7.	m -	m -	m -	✓	✓	✓	<p><u>Area level effects</u></p> <p>Increased flooding is a consequence of climate change. Floodplain follows Bedale Beck and Rand Beck within Area B, including Flood Zones 2 and 3. Sand and gravel extraction is considered 'water compatible' in any case, and subject to passing a sequential test, would be acceptable in this area.</p> <p>Extracting from Flood Zone 3 in this Area may or may not increase the adaptive capacity of the flood plain, depending on how minerals are extracted (e.g. if they are above the water table or wet worked, they may form an important informal part of the functional floodplain, though if they are dewatered they may increase flow rates which could make flooding worse).</p> <p>In relation to habitat connectivity, SA Objective 1 has already described the fragmented nature of habitats in most of this area, and how smaller corridors exist.</p> <p>Potentially there is significant best and most versatile land in this area. Loss of best and most versatile land could have a minor negative effect on food security under climate change.</p> <p><u>Wider regional / national effects</u></p> <p>It is possible that dewatering in this area may make a small contribution to flooding downstream, which could be some distance from the site. Loss of best and most versatile land is also considered to be an issue of regional / national significance, but at this level effects would likely be negligible.</p> <p>Overall, effects are considered to be moderate negative, with negative effects mostly resulting from the loss of habitat connectivity. In the longer term effects could well be more positive for habitat connectivity if sites are restoration to lakes or habitat although this is uncertain, though land may have been taken permanently out of production (which may be negative in terms of food security).</p>
8.	0	0	0				<p><u>Area level effects</u></p> <p>No Area level effects are predicted.</p> <p><u>Wider regional / national effects</u></p>

								While promoting areas of search could better allow the extraction of resources, it is the policies and the sites themselves to which an impact could be ascribed (as these are driving resource use, not the areas from within which resources might be extracted).
9.	0	0	0					<p><u>Area level effects</u></p> <p>At an Area level it is not possible to report whether waste would be minimised.</p> <p><u>Wider regional / national effects</u></p> <p>It is the policies and the sites themselves to which an impact could be ascribed, and therefore a neutral score is noted against this SA objective.</p>
10.	m -	m -	m -	✓		✓	✓	<p><u>Area level effects</u></p> <p>Two isolated Grade II listed buildings (White Cross and Rand Grange) are located within Area B. There are clusters of listed buildings just outside the Area, mainly concentrated in Great Crakehall and Bedale settlements. A part of Bedale Conservation Area falls within Area B and Great Crakehall Conservation Area is located approximately 500m from the northern boundary.</p> <p>The newly designated Scheduled Monument at Aiskew Roman Villa is located approximately 1.1km north-east of the area.</p> <p>The archaeological potential for Roman activity is high in this area with the Roman road leading south from Catterick to Leeming Bar known to preserve roadside deposits and settlements. This is a large and dispersed area with numerous archaeological sites recorded on the Historic Environment Record. Further consideration of any proposed mineral sites would require additional assessment to define the significance of any undesignated heritage assets or areas of archaeological potential. It would be reasonable to assume that mitigation would be provided in line with Joint Plan Policy D08 (Historic Environment) '<i>...mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.</i>'</p> <p><u>Wider regional / national effects</u></p> <p>Grade II Thorp Perrow Registered Park and Garden is located approx. 1.4km south east.</p> <p>Broadly, in terms of designated heritage assets there would appear to be significant space within this area to develop minerals sites without directly impacting on these assets.</p>

								<p>In addition, the scheduled monument, registered park and garden and listed buildings in proximity to this Area may be sensitive to change in setting. Planning Applications for quarry sites will need to ensure the issue of historic assets is addressed at the application stage and that they are avoided wherever possible and that appropriate mitigation is put in place.</p> <p>Effects on their own are considered moderate negative due to presence the Grade II Listed Buildings (White Cross and Rand Grange) (but considerable space still exists to avoid significant effects). Effects would be cumulative with existing sites, which already display high negative effects at a site level.</p>
11.	m -	m -	m -	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>Area B does not include any nationally or local designated landscapes. The Area is within the Vale of Mowbray NCA and lies across the character type identified in the York and North Yorkshire Landscape Character Assessment (LCA) 'Magnesian Limestone Ridge' (moderate to high visual sensitivity, high ecological sensitivity and high landscape and cultural sensitivity). Quarry sites in Magnesian Limestone Ridge are therefore most likely to have significant landscape effects.</p> <p>There are a number of designed landscapes which are either within or overlapping this area, or may be within visual range (situated within 2km). Designed landscapes, in the extended area, are also nationally designated Registered Parks and Gardens (see SA Objective 10 above), so proximal development will need to pay special attention to visual impacts.</p> <p>A small portion of Area is affected by light pollution mainly from the settlement (Bedale), though lighting should still be considered at a site level, so as not to significantly add to light pollution.</p> <p><u>Wider regional / national effects</u></p> <p>There are no National Parks or AONBs within 5km.</p> <p>Overall, the lack of any designated landscapes within 5km suggests that effects will be primarily of local significance. However, at this local level the area may be quite sensitive (such as near to formal landscapes or in the open landscape of the elevated Magnesian limestone area) so in depth landscape assessment will be needed and mitigation will need to focus on minimising visual impacts from receptors. Suitable plans for restoration that are consistent with landscape character are also needed. Overall effects are rated as moderate negative before mitigation.</p> <p>Effects could be cumulative with existing sites. At an area level effects are also considered cumulatively to potentially be up to high negative.</p>

12.	m +	m +	m +		✓	✓	<p><u>Area level effects</u></p> <p>The Area is relatively well positioned in terms of proximity to markets, the A1(M) and A684 roads giving access to Teesside, County Durham and Northallerton. Sand and gravel provided from sites in this area would help support the local construction industry which in turn would support the wider economy. The area is less well located in respect of markets to the south. The Area contains an estimated 45 million tonnes⁵ of predominantly Category B with a small proportion Category A resource⁶.</p> <p>Tourist resources that could be affected by quarrying close by include the Wensleydale Railway also which passes through Area B, as does National Cycle Network Route 71, though any sites nearby would be viewed fleetingly and are unlikely to significantly deter visitors. Impacts on these receptors are thought to be minor negative and could be mitigated.</p> <p><u>Wider regional / national effects</u></p> <p>It is possible that some material from quarries in this Area could travel further afield given the good transport links, with County Durham and the North (though the further minerals are transported the less economic they become).</p> <p>Overall the effects on the economy objective are thought to be moderately positive due to the amount of Category B resources available and proximity to market.</p>
13.	+	+	+		✓	✓	<p><u>Area level effects</u></p> <p>Quarrying would create small numbers of local jobs in extraction and driving, though this Area is not in the most deprived 20% in terms of the indices of multiple deprivation (IMD). Traffic from sand and gravel sites may route through</p>

⁵ Broad estimates bases on British Geological Survey (BGS) Resource Data

⁶ Category A and B which have been classified with 'indicated' status i.e. those resources that are potentially suitable in quality and have been identified with the highest degree of confidence. North Yorkshire Sand and Gravel Assessment, Minerals and Waste Programme Commissioned Report CR/11/133 (BGS 2011) pp 12-13 - http://www.northyorks.gov.uk/media/17180/North-Yorkshire-sand-and-gravel-assessment/pdf/North_Yorkshire_Sand_and_Gravel_Assessment_2011_FINAL.pdf

			?				<p>settlements en-route to the A1(M) (so routing agreements may be necessary). If sites are restored to green infrastructure (in green infrastructure corridors that run through all of the blocks), there could be longer term benefits to communities.</p> <p><u>Wider regional / national effects</u></p> <p>Extracting sand and gravel from this Area would make a general contribution to housing supply as it may be used in construction to some extent.</p> <p>Minor positive are reported, with some uncertainty noted over longer term restoration objectives.</p>
14.	m -	m -	m -		✓	✓	<p><u>Area level effects</u></p> <p>There are rights of way that cross the area.</p> <p>The rights of way network is generally quite sparse, with most footpaths and bridleways in the northern part of the Area.</p> <p>Most footpaths and bridleways could be re-routed to minimise disruption more readily.</p> <p><u>Wider regional / national effects</u></p> <p>A green infrastructure network crosses the Area. If sites are restored to green infrastructure in this Area, there could be longer term benefits. The National Cycle Network Route 71 passes through this area on local roads, and the experience of using this could be diminished, for instance by lorries sharing routes, or through visual disturbance from quarries.</p> <p>Overall effects are predicted to have the potential to range from moderate negative, with some uncertainty over longer term restoration objectives.</p> <p>Effects could be cumulative with allocated sites.</p>

15.	m -	m -	m -	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>A few local rights of way might be affected by quarrying proposals, indirectly affecting active lifestyles, while dust from quarrying operations and transport may affect sites close to settlements or individual buildings, depending on location. Dust may also affect receptor such as farmhouses and settlements. Depending on routes taken there may be some increased chance of road accidents e.g. if heavy goods vehicles route through settlements. If sites are restored to green infrastructure there could be some longer term benefits. There may also be some low level health benefits from job creation.</p> <p>No noise action planning areas are located within 2km of Area B. At an area level, effects are considered moderate negative.</p> <p><u>Wider regional / national effects</u></p> <p>No wider effects are predicted.</p>
16.	-	-	- ?	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>A floodplain follows Newton Beck and Bedale Beck. Large parts of this area are at a low risk of flooding. However, sand and gravel extraction is considered 'water compatible' in any case, and subject to passing a sequential test, would be acceptable in this area.</p> <p>Extracting from Flood Zone 3 in this Area may or may not increase flooding, depending on how minerals are extracted (e.g. if they are above the water table or wet worked they may form an important informal part of the functional floodplain, though if they are dewatered they may increase flow rates which could make flooding worse). Restoration may be to flood storage which could increase water storage capacity in the floodplain.</p> <p><u>Wider regional / national effects</u></p> <p>It is possible that dewatering in this area may make a small contribution to flooding downstream, which could be some distance from the site. Overall, effects are considered to be minor negative, with negative effects mostly resulting from development in the floodplain.</p>
17.	m +	m +	m +	✓		✓		<p><u>Area level effects</u></p> <p>Area B will help provide a valuable source of construction materials to a number of significant settlements, thus ensuring relatively short housing and infrastructure construction supply chains. This is considered to be moderate positive given</p>

								<p>the scale of the resource.</p> <p><u>Wider regional / national effects</u></p> <p>If this Area helps to supply towns further afield (e.g. in County Durham) positive effects will be further enhanced.</p>
Cumulative Effects with Other Areas and Sites (within 5km)								
<p>There are also four allocated sites within 5km of Area B which could potentially lead to cumulative effects such as increased traffic and associated impacts (e.g. pollution, noise). Several of these sites (e.g. MJP11, MJP21 and MJP17 are likely to access the A1 at the similar points (mid Catterick and Leeming Bar junctions). Although cumulative effects were modelled to be insignificant at a site assessment level, the addition of further sites though this Area of Search could create a significant effect.</p> <p>There may also be cumulative impacts to landscape and soils.</p>								
Recommendations / Mitigation								
<p>General areas for mitigation to focus on for sites in this area will include:</p> <ul style="list-style-type: none"> - No net loss of floodplain storage capacity. - Apply good industry practice to control dust and noise where this is an issue and mitigate to receptors. - Apply NPPF mitigation hierarchy for biodiversity impacts at a site level. - Seek to enhance local green infrastructure where sites coincide with green infrastructure corridors. - Ensure compliance with Water Framework Directive and that any site is likely to achieve an environmental permit. - Suitable access and routing agreements may be needed to deal with traffic effects. - Ensure appropriate strategies to deal with soils, including application of a sequential approach to soils consistent with NPPF (for instance through EIA consideration of alternatives). - Appropriate significance assessment and mitigation for historic environment impacts. - Appropriate mitigation / temporary diversion / enhancement of rights of way network. - Appropriate landscaping / lighting / screening / phased working to reduce impact on visual receptors. 								
Summary of Residual Effects (This is not a requirement of SEA but is included to assist in the evaluation process)								
<p>With mitigation in place, most sustainability effects can be reduced to a negligible or temporary minor negative level or even increased to positive effects in some cases (particularly in the longer term). Particular care will need to be observed in relation to landscape effects as the Magnesian Limestone Ridge landscape area will be sensitive to change, so careful design and mitigation will be required to lessen impact on views and natural course of the river. Similarly, effects on soils may, in many cases, lead to at least a temporary negative effect.</p> <p>However, these effects would depend entirely on the details of individual developments which cannot be known until appropriate assessment is undertaken to support planning applications.</p>								

Name and Description of Area of Search

Area C: Area of Search for Sand and Gravel

Land to north of Scotton and Lingerfield

SA Objective Key: 1. Biodiversity/Geodiversity, 2. Water Quality/Quantity, 3. Transport, 4. Air Quality, 5. Soil/Land, 6. Reduce Climate Change, 7. Adapt to Climate Change, 8. Minimise Resource Use, 9. Minimise Waste, 10. Historic Environment, 11. Landscape, 12. Sustainable Economic Growth, 13. Community Vitality, 14. Recreation, Leisure and Learning, 15. Wellbeing, Health and Safety, 16. Flooding, 17. Changing Population Needs

SA objective	Impact / timescale			Type of effect				Analysis
	S	M	L	P	T	D	I	
1.	m	m	m	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>The Area contains few biodiversity constraints other than some small patches of priority habitats (a mixture of types, including deciduous woodland, lowland calcareous grassland, lowland fens and floodplain grazing marsh). Site of Importance for Nature Conservation (SINC) sites mostly fall outside of this area, though one site does fall within the</p>

			?				<p>boundary (an area of floodplain grazing marsh called 'Decoy Fields' near Lingerfield) and there are a cluster of SINC sites that lie close to the boundary in the east of the area, near Farnham. Mires Covert ancient woodland lies within the area. Any potential planning application would need to address that. This is likely to be considered irreplaceable habitat that should be avoided.</p> <p>While these individual habitats / SINC sites are potentially vulnerable to land take or other impacts such as changes in hydrology and smothering through dust, they are relatively remote from one another in most cases, with plenty of intervening land that could potentially accommodate minerals development.</p> <p>Protected species are likely to be associated with priority habitats. Non-native invasive species will be a key consideration around watercourses.</p> <p><u>Wider regional / national effects</u></p> <p>Farnham Mires Site of Special Scientific Interest (SSSI) borders the boundary of the area, and much of the area is highlighted as an area where quarrying should be considered for possible effects. However, there are mostly unproductive superficial aquifers around the SSSI, which may limit more distant groundwater effects. Burton Leonard Lime Quarry to the north also extends its SSSI impact Risk Zones for quarries southward into the north of the western block. While the effects of quarrying should be addressed, intervening unproductive superficial aquifers between this area and the Burton Leonard SSSI would likely rule out effects.</p> <p>Overall impacts are considered to most likely be low, but with some potential for up to moderate negative effects. There is also the potential for restoration to link to a Living Landscape area that runs across central parts of this Area of Search.</p>
2.	-	-	-		✓	✓	<p><u>Area level effects</u></p> <p>Area C is characterised by occasional minor water courses / ponds. On its western flank it is bordered by a series of larger waterbodies. It is almost entirely located in the 'Tutt Catchment (Tributary of Ure)'. This catchment currently has</p>

	?	?	?				<p>moderate water quality, and an overall status objective of good by 2027.</p> <p>The status and objectives of the water bodies in this area require that sites must not prevent water bodies from achieving their status objectives (for instance by affecting the ecology or chemical composition of the water bodies through processes such as discharges to rivers or significant changes to the water table affecting water bodies). Where a risk is identified, hydrological / Water Framework Directives (WFD) assessment will be required.</p> <p>In terms of abstraction, there is generally groundwater available, while there is limited surface water available at low and very low flows (available at least 50% of the time). This may have limited ramifications for processing at some sites.</p> <p><u>Wider regional / national effects</u></p> <p>Area C is located above a complex series of secondary and principal aquifers. In terms of superficial deposits the picture is more complex, including superficial secondary aquifers and unproductive deposits. So aquifers may be unconfined and potentially more vulnerable to ingress of pollutants. However, other than risk of fuel spills most waste water will be inert, and thus risk would be relatively low.</p> <p>Overall effects are considered minor negative without mitigation (with the most significant effects being on the status of water bodies that might be affected by fuel spills or input of turbid water). As with other assessments there is considerable uncertainty until sites can be defined.</p>
3.	m -	m -	m -		✓	✓	<p><u>Area level effects</u></p> <p>The A6055 lies to the east of the area, which gives access to Junction 48 further north on the A1(M), and Knaresborough / Harrogate to the south. Further west, the area has potential for access to the A61, giving access to Ripon, and the B6265 runs to the south of the area, giving access to Harrogate and Knaresborough. These routes, and roads leading to them, occasionally pass settlements, which may suffer increased traffic, depending on the volume of minerals working. In such circumstances routing agreements may be necessary to reduce effects. Generally, however, access to markets (particularly in the south of the Plan area) is relatively good.</p> <p>There are no railheads within 5km. Moderate negative effects due to relatively good access to market but the moderate likelihood that traffic would route through settlements.</p> <p><u>Wider regional / national effects</u></p>

							No regional or wider effects are noted.
4.	m -	m -	m -		✓	✓	<p><u>Area level effects</u></p> <p>There are no Air Quality Management Area (AQMAs) within this area, the closest is located approximately 1.4km south in Knaresborough (Knaresborough AQMA no.1) and is declared for exceedences of nitrogen dioxide (NO₂). There are individual properties and the settlement of Brearton, as well as occasional priority habitats that may be sensitive to dust. However, there are also plenty of locations where there are relatively few receptors. Sites close to the boundary could have a negative effect on the levels of dust reaching population receptors close to the edge without appropriate standoff and mitigation (e.g. dust suppression).</p> <p>The routes of vehicles using sites may follow the A6055 to Knaresborough / Harrogate, which may route through the Knaresborough, with potential emissions impacts to the AQMA located there. If possible mitigation may reduce this impact.</p> <p><u>Wider regional / national effects</u></p> <p>No regional or wider effects are noted.</p> <p>On balance effects are potentially up to moderate negative without mitigation.</p>
5.	-	-	-	✓	✓	✓	<p><u>Area level effects</u></p> <p>The Area is Agricultural Land Classification (ALC) Grade 3⁷, which means it may or may not be best and most versatile land. The National Planning Policy Framework (NPPF) requires that <i>'Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality'</i>.</p> <p>While development should be steered towards lower quality land where possible (and a recommendation of this appraisal is that alternatives should be considered in terms of their effects on soil quality through Environmental Impact Assessment EIA)) when sites come forward in best and most versatile land, mitigation will also need to be applied to protect and retain soils where possible.</p> <p><u>Wider regional / national effects</u></p>

⁷ ALC Grade 3 land is divided into grades 3a and 3b, the best and most versatile agricultural land is ALC Grade 1 to 3a. Based on available mapping there is Grade 3 land within Area A, without further investigation it is not known whether it is Grade 3a or 3b.

							As highlighted above there is potentially best and most versatile agricultural land across Area C although this is uncertain. Effects would depend on the scale of quarry applications in this area, but larger sites cumulatively may have a measurable impact on agricultural land lost, with wider implications for availability of agricultural land and food security. Potentially minor negative without mitigation.
6.	m -	m -	m -	✓		✓	<p><u>Area level effects</u></p> <p>Climate change is a result of the accumulation of global emissions, albeit from local sources. There is potential for carbon from transport if several sites are approved. However, effects may be less than more remote areas due to the proximity of this resource to the road major road network (though minerals would still need to travel an unspecified distance powered, at the moment, by fossil fuels).</p> <p>Choosing this as an area to search for minerals development could direct development to remove some of the stored carbon in soils and vegetation within the Area. Statistics on carbon in soils and in vegetation in this area suggest the area has relatively low levels of carbon in vegetation (though locally there are significant blocks of woodland that may be higher).</p> <p>Effects could be lessened through undertaking climate change assessment on sites likely to generate large emissions (e.g. where they have a large transport impact and / or will take place in areas with higher carbon density in soils / vegetation).</p> <p><u>Wider regional / national effects</u></p> <p>See above</p> <p>Overall effects are considered moderate negative due to the potential to generate road journeys added to the potential for development to take place in areas with moderately higher levels of soils carbon.</p>
7.	m -	m -	m -	✓	✓	✓	<p><u>Area level effects</u></p> <p>Flooding is predicted to get worse as a result of climate change. Area C has a relatively small area (less than 10%) in Flood Zone 3. Large parts of Area C are at a low risk of flooding. Sand and gravel extraction is considered 'water</p>

							<p>compatible' and subject to passing a sequential test, would be acceptable in this area.</p> <p>Habitats in this area are generally far apart and fragmented, though locally in patches small clusters of habitats and local ecological networks exist and a Living Landscape runs through the Area, which represents an opportunity to increase adaptive capacity.</p> <p><u>Wider regional / national effects</u></p> <p>Area C is ALC Grade 3, without mitigation this could have a small cumulative effect on food security if large or numerous sites come forward as best and most versatile land in the Plan area could be lost. As much of this land is Grade 3 uncertainty is noted as to the possible extent of this effect.</p> <p>Overall, effects are considered to be moderate negative due mainly to effects on food production. In the longer term effects could well be more positive for habitat connectivity, assuming restoration is most likely to be to lakes or habitat, though land may have been taken permanently out of production (which may be negative in terms of food security). Application of a sequential approach to developing best and most versatile land more generally would help reduce effects.</p>
8.	0	0	0				<p><u>Area level effects</u></p> <p>No area level effects are predicted.</p> <p><u>Wider regional / national effects</u></p> <p>While promoting areas of search could better allow the extraction of resources, it is the policies and the sites themselves to which an impact could be ascribed (as these are driving resource use, not the areas from within which resources might be extracted).</p>
9.	0	0	0				<p><u>Area level effects</u></p> <p>At an area level it is not possible to report whether waste would be minimised.</p> <p><u>Wider regional / national effects</u></p> <p>It is the policies and the sites themselves to which an impact could be ascribed and therefore a neutral score is noted against this SA objective.</p>

10.	m -	m -	m -	✓	✓	✓	<p><u>Area level effects</u></p> <p>In terms of designated heritage assets there are relatively few Listed Buildings in Area C, though there are small clusters within Farnham and Brearton. The Farnham Conservation Area is partially within this area. The Conservation Area forms a key element of the setting of the village.</p> <p>In terms of undesignated archaeology this area includes the landscape park at Nidd. This includes the remains of the original village and various other sites of archaeological interest. Similarly the area to the immediate north of Scotton preserves a landscape of archaeological significance.</p> <p>There is evidence of prehistoric and Romano-British settlement in the form of cropmarks of former settlements, ritual monuments and field systems. These are dispersed throughout the area. Further consideration of any proposed mineral sites would require additional assessment at the planning application stage to define the significance of any undesignated heritage assets or areas of archaeological potential. It would be reasonable to assume that mitigation would be provided in line with Joint Plan Policy D08 (Historic Environment) ‘...mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.’</p> <p><u>Wider regional / national effects</u></p> <p>In terms of nationally designated assets, there are no Scheduled Monuments within Area C. There are six Scheduled Monuments within 2km, the closest being about 900m south of the area. A Registered Park and Garden, Ripley Castle, is located approximately 1.5km west of the area. There is likely to be some inter-visibility here, so a quarry without mitigation (such as screening) is likely to be visible. Appropriate standoff will be needed to minimise these effect.</p> <p>Overall there would appear to be space in this Area in which development could take place with minimal impact. Similarly, without mitigation there could be significant effects on the Farnham Conservation Area. Therefore, effects are considered to be up to moderate negative.</p>
11.	m -	m -	m -	✓	✓	✓	<p><u>Area level effects</u></p> <p>Most of Area C lies within the Southern Magnesian Limestone National Character Area (NCA), with a small area within the Pennine Dales Fringe NCA. In the North Yorkshire Landscape Character Assessment (LCA) the Area of Search is contained entirely within the ‘Magnesian Limestone Ridge’ landscape character type. This has moderate to high visual sensitivity, high ecological sensitivity and high landscape and cultural sensitivity. So careful design and orientation may be needed.</p> <p>Two undesignated designed landscapes overlay parts of Area C. The western end of the Area of Search includes almost all of Nidd Hall 18th / 19th Century country estate, and the landscape is wooded. Several further undesignated designed</p>

								<p>landscapes lie within 2km of the Area of Search. These areas will be particularly sensitive to adjacent or overlapping quarrying. Around Knaresborough the settings of the Conservation Areas are unlikely to be significantly affected, but residential areas would require standoffs. Extensive areas of restored quarries around Knaresborough with woodland, grassland and water bodies may have high recreational value and further quarrying near these sites could be intrusive.</p> <p>Most of the area has relatively elevated levels of light pollution, though the Area of Search around Brearton is slightly darker so it will be important to minimise light pollution from any site applications proposed quarry through careful design in this area. The western fringe and southern fringe of Area C is disturbed, with just the northern part 'undisturbed'. Quarrying would add to disturbance without mitigation.</p> <p>To the south-west of the area lies part of the Nidd Valley which is Harrogate Borough Special Landscape Area (SLA).</p> <p><u>Wider regional / national effects</u></p> <p>Nidderdale Area of Outstanding Natural Beauty (AONB) is located 6.2km west and is unlikely to be inter-visible with this Area due to distance and intervening topography.</p> <p>Overall effects are considered to be potentially moderate negative, due to the sensitivity of the Magnesian limestone landscape and nearby designed landscapes. The topography of the landscape in this area, however, may lend itself to mitigation, for instance through orienting or carefully phasing sites.</p>
12.	m +	m +	m +	✓	✓	✓	✓	<p><u>Area level effects</u></p> <p>Area C is within easy reach of Knaresborough and Harrogate and close proximity to the A1 as well as the A61 / A605, giving access to markets further south. Sand and gravel provided from sites in this area would help support the local construction industry which in turn would support the wider economy. The area contains an estimated 55 million tonnes⁸ of Category B resource, which is higher than other resource areas⁹.</p> <p>Tourist assets include a campsite just outside the southern boundary. Knaresborough golf club is bordered by the Area of Search, and the Knaresborough Round footpath is within close proximity. Appropriate standoff and / or screening may be needed to protect these assets.</p>

⁸ Broad estimates bases on British Geological Survey (BGS) Resource Data.

⁹ Category A and B which have been classified with 'indicated' status i.e. those resources that are potentially suitable in quality and have been identified with the highest degree of confidence. North Yorkshire Sand and Gravel Assessment, Minerals and Waste Programme Commissioned Report CR/11/133 (BGS 2011) pp 12-13 - http://www.northyorks.gov.uk/media/17180/North-Yorkshire-sand-and-gravel-assessment/pdf/North_Yorkshire_Sand_and_Gravel_Assessment_2011_FINAL.pdf

							<p>Restoration of sites to green infrastructure may bring some minor benefits (such as becoming part of the overall tourist offer of the area).</p> <p><u>Wider regional / national effects</u></p> <p>It is possible that some material from quarries in this area could travel further afield given the placing of this Area.</p> <p>Overall the effects on the economy objective are considered to be a moderately positive effects due to the amount of Category B resources available and proximity to markets.</p>
13.	+	+	+		✓	✓	<p><u>Area level effects</u></p> <p>Quarrying would create small numbers of skilled local jobs in extraction and driving, though this Area is not in the most deprived 20% in terms of the indices of multiple deprivation (IMD). Depending on routes taken, traffic could affect limited numbers of settlements, or, if serving Knaresborough / Harrogate may travel on main roads through these settlements. If sites are restored to green infrastructure (in the green infrastructure corridors that runs through parts of both blocks), there could be longer term benefits to communities.</p> <p><u>Wider regional / national effects</u></p> <p>Extracting sand and gravel from this Area would make a general contribution to housing supply as it may be used in construction to some extent.</p> <p>Minor positive and negative effects are reported, with some uncertainty noted over longer term restoration objectives.</p>
14.	-	-	-	✓	✓	✓	<p><u>Area level effects</u></p> <p>Rights of way and a leisure trail (the Knaresborough Round) cross Area C.</p> <p>Quarrying may have visual effects on these routes, causing diversions or causing temporary noise, dust or traffic related impacts. Mitigation is possible for local interest routes, through standoff, and where appropriate, diversions. But additional</p>

			?				<p>care will need to be taken on the Knaresborough Round route as this would be more difficult to divert without changing the appeal of the route.</p> <p>There are also other recreational facilities near this area, including a golf course. These assets will require appropriate standoff and screening.</p> <p><u>Wider regional / national effects</u></p> <p>None identified.</p> <p>Overall effects before mitigation are considered to be potentially up to minor negative, with some uncertainty in relation to restoration.</p>
15.	m -	m -	m -		✓	✓	<p><u>Area level effects</u></p> <p>A few local rights of way and possibly a route of regional significance might be affected by quarrying proposals, indirectly affecting active lifestyles, while dust from quarrying operations and transport may affect sites close to settlements or individual buildings.. Depending on routes taken by traffic there may be some increased chance of road accidents e.g. if heavy goods vehicles route through settlements, and air pollution from lorries may affect the Knaresborough AQMA. Mitigation measures, including routing agreements, appropriate standoff may mitigate these impacts.</p> <p>If sites are restored to green infrastructure there could be some longer term benefits. There may also be some low level health benefits from job creation.</p> <p>No noise action planning areas are within 2km of Area C.</p> <p><u>Wider regional / national effects</u></p> <p>No wider effects are predicted.</p> <p>Broadly effects are considered to be moderate negative without mitigation mainly due to traffic from the Area potentially affecting an AQMA, and dust and noise potentially affecting a number of properties and sensitive receptors within Knaresborough.</p>
16.	-	-	-		✓	✓	<p><u>Area level effects</u></p> <p>The Area has a relatively small area (less than 10%) in Flood Zone 3. This would effectively leave large parts of Area C</p>

							<p>at a low risk of flooding. Sand and gravel extraction is considered 'water compatible' and subject to passing a sequential test, would be acceptable in this area.</p> <p>Extracting from the occasional areas of Flood Zone 3 in this area may or may not increase flooding depending on how minerals are extracted (e.g. if they are above the water table or wet worked they may form an important informal part of the functional floodplain, though if they are dewatered they may increase flow rates which could make flooding worse). Restoration may be to flood storage which could increase water storage capacity in the floodplain.</p> <p><u>Wider regional / national effects</u></p> <p>No significant effects noted.</p> <p>Overall this is considered a minor negative due to relatively small areas of Flood Zone 3 within the area.</p>
17.	m +	m +	m +		✓	✓	<p><u>Area level effects</u></p> <p>Providing an Area of Search in this area will help provide a valuable source of construction materials to a number of significant settlements, thus ensuring housing and infrastructure construction supply chains. This is considered to be moderate positive given the scale of the resource.</p> <p><u>Wider regional / national effects</u></p> <p>If this Area helps to supply towns further afield (e.g. in West Yorkshire) positive effects will be further enhanced.</p>
Cumulative Effects with Other Areas and Sites (within 5km)							
There may be a cumulative effect on the historic character of Allerton Park Registered Park and Garden from site WJP08 (approximately 4.5km east).							
Recommendations / Mitigation							
<p>General areas for mitigation to focus on for sites in this area will include:</p> <ul style="list-style-type: none"> - No net loss of floodplain storage capacity. - Apply good industry practice to control dust and noise where this is an issue and mitigate to receptors. - Apply NPPF mitigation hierarchy for biodiversity impacts at a site level. - Seek to enhance local green infrastructure if sites can help meet an identified local need. - Ensure compliance with Water Framework Directive and that any site is likely to achieve an environmental permit. - Suitable access and routing agreements may be needed to deal with traffic effects. - Ensure appropriate strategies to deal with preservation of soils, including application of a sequential approach to soils consistent with NPPF (for instance through EIA consideration of alternatives). 							

- Appropriate significance assessment and mitigation for historic environment impacts.
- Appropriate mitigation / temporary diversion / enhancement of rights of way network.
- Appropriate landscaping / lighting / screening / phased working to reduce impact on visual receptors.
- Include climate change assessment for sites with large traffic impacts or land takes in areas of significant carbon storage.

In addition, specific recommendations for mitigation are made:

- The routes of lorries using the A6055 to deliver to Knaresborough / Harrogate may route through the Knaresborough AQMA. Clean vehicle technology (e.g. Euro VI HGVs) or time restrictions would be helpful if there is a need to justify using this route on a regular basis.
- Knaresborough golf club is bordered by Area C, and the Knaresborough Round footpath also passes through. Appropriate standoff and / or screening may be needed to protect these assets.
- Green infrastructure (GI) will be a priority for restoration in the GI corridor, and there are opportunities to restore to habitats in the Living Landscape area.

Summary of Residual Effects (This is not a requirement of SEA but is included to assist in the evaluation process)

With mitigation in place, most sustainability effects can be reduced to a negligible or temporary minor negative level or even increased to positive effects in some cases (particularly in the longer term). Particular care will need to be observed in relation to landscape effects as the Magnesian Limestone Ridge landscape area will be sensitive to change, so careful design and mitigation will be required to lessen impact on views and natural course of the river. Similarly, effects on soils may, in many cases, lead to at least a temporary negative effect. However, such effects are to a degree inherent to sand and gravel extraction, so effects can only be reduced, with the onus on restoration in the longer term.

However, these effects would depend entirely on the details of individual developments which cannot be known until appropriate assessment is undertaken to support planning applications.

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