Annex F: SA/SEA incorporating SFRA and HRA

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

Sustainability Appraisal Report

Volume 3: Assessment of Sites

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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

MJP45 Land to North of Hemingborough – ALLOCATED SITE

Site Name	MJP45 Land to North of Hemingborough (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	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 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 Restoration to a series of ponds with marginal planting, areas of wildflower meadow, neutral and acidic grassland and species rich hedgerow.

SA FINDINGS SUMMARISE SIGNFICANT 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	**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 /	✓	✓	✓	✓	-	-	+ ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
and geo-diversity and improve habitat connectivity	Ramsar 7km south-east; Sites of Special Scientific Interest (SSSI): No Sites of SSSIs within 2km: Breighton Meadows SSSI 2.1km east, River Derwent SSSI 2.2km east. SSSI IRZ: Site within IRZ (for minerals working) for River Derwent SAC/SPA. 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). **Local effects.** 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 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. 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. **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 (in particular, extraction of clay							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	is unlikely to have significant impact on hydrology affecting SAC due to the site being located in an unproductive aquifers).							
2. To enhance or maintain water quality and improve efficiency of water use	**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). 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). Catchment Abstraction Management Strategy (CAMS): Hull and East Riding CAMS: surface water resources not assessed. No groundwater available. **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. 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		✓		✓	- ?	- ?	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	that can improve water quality). Groundwater water would be significantly restricted in terms of availability for extraction, while surface water availability is not known. **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.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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 constructed[2], 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. Light vehicles: 16 two-way movements (application details NY/2015/0058/ENV); Heavy Goods		✓		✓	- ?	- ?	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
	Vehicles (HGVs): 100 HGV two-way movements (application details NY/2015/0058/ENV). Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0; Traffic assessment rating: Yellow '*it is likely that the traffic impacts of the site will remain at present levels and will represent improvement on the present situation.'*[3] 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). 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. **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). According to the traffic assessment "*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*".							

[3] Jacobs (2015); Minerals and Waste Joint Traffic Assessment – Final Traffic Assessment.

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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 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). 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). 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. **Plan level / regional / wider effects.** None noted.							
4. To protect and improve air quality	**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.		✓	✓		- ?	- ?	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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). 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 form 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. **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.** 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 Board development high risk area. The potential for land contamination is not known, though is thought to be low due to the green field location. **Local effects.** Due to the nature of clay extraction and the possible restoration to wetland, the loss of this area of best and most versatile agricultural land would, at least in part, most likely	✓		✓		m-	m-	- ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **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 development[4] 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** 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). **Local effects.** As climate change is a global issue effects are reported in wider effects below. **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	✓		✓	✓	-	-	- ?

[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. An 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	P	T	D	I	Score S	Score M	Score L
	at Great Heck circa 12.3km south-west. The site 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. 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 undertaken[5].							
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[6] 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. Catchment Abstraction Management Strategy (CAMS): Hull and East Riding CAMS: surface	✓		✓		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	P	T	D	I	S	M	L
	water resources not assessed. No groundwater available. Site is Grade 2 ALC. **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 adaptation[7] 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. 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. **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.							
8. To minimise the use of resources and	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified. **Local effects.** This site will extract virgin clay which will be unavailable for future use (unless	✓	✓	✓	✓	--	--	--

[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	recycled). This is considered to have a high negative effect on the SA objective. **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.** 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. **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	✓		✓	✓	-	-	-
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**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). Woodhall Park Named Designed Landscape (ornamental parkland) lies 1.6km east. No scheduled monuments within 2km and no listed buildings within 1km. 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	✓		✓		- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	settlement remains is not known and may extend into the allocation area. 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. **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). 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) – '*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. 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.							

Sustainability Objective	Key Observations on Significance						Score		
		P	T	D	I	S	M	L
	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. 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. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**Proximity of landscape / townscape receptors and summary of character.** 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'. **Local effects.** 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. The scale of effects depends on the operations at any one time. In the short term locally	✓		✓		-	-	- ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. 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. 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. **Plan level / regional / wider effects.** None noted.							
12. Achieve sustainable economic growth and create and support jobs	**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). **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		✓	✓	✓	+	+	+ ?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	and Plasmor block making site in the short term. 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 recreational / tourism opportunity. **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.							
13. Maintain and enhance the viability and vitality of local communities	**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 (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'. **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.		✓	✓	✓	+	+	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	Plan level / regional / wider effects. Not applicable to this site.							
14. To provide opportunities to enable recreation, leisure and learning	**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). **Local effects.** The site may diminish the experience of walking on the local footpaths in close proximity 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 screened[8]. In the long term possible restoration to wetland may enable opportunities for recreation or learning (e.g. wetland nature reserve). **Plan level / regional / wider effects.** The Trans Pennine Trail, although not a national trail, is of national interest, so effects on this are significant.		✓	✓		-	-	+ ?
15. To protect and improve the wellbeing,	**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 (the northern edge of Hemingbrough lies adjacent to the site, Cliffe lies 300m west of		✓	✓	✓	-	-	?

[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	P	T	D	I	Score S	Score M	Score L
health and safety of local communities	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. **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 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. **Plan level / regional / wider effects.** None noted.							
16. To minimise flood risk and reduce the impact of flooding	**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. Strategic groundwater flooding maps show that the site is not within an area at risk from groundwater flooding. As a clay site the site is likely to extract below the perched water table (though groundwater					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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. 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. **Local effects.** A Strategic Flood Risk Assessment (SFRA) Sequential Test[10] 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.. 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. **Plan level / regional / wider effects.** None noted.							

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
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 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. **Plan level / regional / wider effects.** None noted.		✓		✓	+	0	0

Cumulative / Synergistic effects[11]	
Planning context	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: "*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...*" No allocations in the 2005 Local Plan conflict with this site, however the site is in a 'strategic countryside gap' where proposals *'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'*[12].
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	The area between Cliffe and Hemingbrough is becoming continually disturbed by development / more urbanised. This

[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].

Impacts	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	
• Mitigation measures during construction are identified within the Environmental Statement for this proposal to be delivered via a Construction Environmental Management Plan.	

MJP55 Land Adjacent to Former Escrick Brickworks – PREFERRED AREA

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	WJP06 proposes landfill of the MJP55 site. 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 for MJP45 have been extracted. No detailed design for restoration available yet, but would be back to agriculture at or near original ground levels

SA FINDINGS SUMMARISE SIGNFICANT 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	P	T	D	I	Score S	Score M	Score 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: 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 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	✓	✓	✓	✓	- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
connectivity	affect Skipwith Common. Site of Importance to Nature Conservation (SINC): 11 SINCs / potential SINCs 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 (Riccal Dam, Potential SINC). 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). 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. **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). 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.							

Sustainability Objective	Key Observations on Significance	P	T	D	I	S	M	L
	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. 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. **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 permeability[13], makes any risk to Skipwith Common unlikely. 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.							

[13] 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
2. To enhance or maintain water quality and improve efficiency of water use	**Proximity of water quality / quantity receptors.** Site is in a Nitrate Vulnerable Zone (NVZ). Not in a Source Protection Zone (SPZ). 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. Catchment Abstraction Management Strategies (CAMS): surface water resources available at least 70% of the time. Groundwater is restricted. **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 'aquitard' which acts as a low permeability block between an aquifer and the surface so impacts are most likely to be fairly low. **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.		✓		✓	-	-	- ?
3. To reduce transport miles and associated emissions	**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 Park onto the A19. Within the site there is a bridge over the		✓		✓	-	-	- ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	S	M	L
from transport and encourage the use of sustainable modes of transportation	Trans Pennine Trail. Light Vehicles: 10 two-way movements (submitter information); Heavy Goods Vehicles (HGV): 100 two-way movements (submitter information). Net change in daily trip generations: Light vehicles: 10; HGVs: 100. Public Right of Way (PRoW): Immediate access to the site is not affected by PRoW. 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. Selby are undertaking a highways study that could contribute further information to these sites. **Local effects.** Site would generate 100 two way HGV movements a day and 10 light vehicle movements. According to the Joint Plan traffic assessment "*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".* 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, "*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*". As 14,000 vehicles							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	a day currently use the A19 congestion impacts on the A19 are unlikely to be significant. 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. 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. **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.							
4. To protect and improve air quality	**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. 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. **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		✓		✓	m -	m -	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	may see slightly raised air pollution levels, though not at a significant level. Mitigation for local receptors may however be necessary. **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. Mitigation (e.g. screening, damping down) is required to deal with dust impacts.							
5. To use soil and land efficiently and safeguard or enhance their quality	**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 Board 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. **Local effects.** Potentially 112ha of possible best and most versatile land will be lost[14]. 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. **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		✓	✓		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.

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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[15] 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.** 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) **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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 undertaken[16].	✓			✓	-	-	- ?

[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.

[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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[17] 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.. Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 70% of the time. Groundwater is restricted. Site is largely Grade 3 ALC (good to moderate quality) with a small corner marked as possible grade 2 **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. **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.		✓	✓		-	-	- ?

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	P	T	D	I	Score S	Score M	Score L
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified. **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. **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 factors relevant to managing waste higher up the waste hierarchy.** No spatial factors identified. **Local effects.** Indirectly this site is creating a space for the landfilling of inert waste (WJP06) which will work against this objective. **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 clay and reducing the need to recycle clay from other locations..		✓		✓	-	-	-
10. To conserve or enhance the historic environment	**Proximity of historic environment receptors.** 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	✓		✓	✓	- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and its setting, cultural heritage and character	prebendary manor moated site, 300m north west of Hawthorn Farm. Site visit confirmed the site is screened by topography and woodland so is not visible. No other contribution to asset significance was observed, 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). 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. 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. **Local effects.** The site visit / assessment confirmed no effect of significance on the designated heritage assets or areas. There is high archaeological potential for the survival of archaeological remains within the site							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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) – *'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 . 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. **Plan level / regional / wider effects.** None noted							
11. To protect and enhance the quality and character of landscapes and townscapes	**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. 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	✓		✓		m -?	m -?	m -?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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). York green belt in Selby is 600m north. In terms of tranquillity 70% of site disturbed. Western 30% is undisturbed. **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. 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. 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							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. Lighting may be visible from local receptors. 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. 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. An evaluation of the impact on Escrick Conservation Area and the designed landscape of Escrick Park would be required. **Plan level / regional / wider effects.** None noted.							
12. Achieve sustainable economic growth and create and support jobs	**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). **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		✓		✓	+	+	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. 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). 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 **Plan level / regional / wider effects.** This site is likely to support markets outside of the Plan Area in addition to local markets.							
13. Maintain and enhance the viability and vitality of local communities	**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). 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. **Local effects.** This site will potentially provide some local jobs. Few tourism receptors other than		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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). **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. The will provide building materials that would directly support the housing market (bricks), with benefits for communities.							
14. To provide opportunities to enable recreation, leisure and learning	**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. **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. **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.		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Mitigation could include screening as well as improvements and enhancements of the Trans Pennine Trail.							
15. To protect and improve the wellbeing, health and safety of local communities	**Proximity to population / community receptors / factors relevant to health and wellbeing.** Several farm properties and a business park lie within 1 km. **Local effects.** 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. 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. **Plan level / regional / wider effects.** The site may contribute to a cumulative effect further south around the A63 / A19 roundabout.		✓		✓	m -	m -	0
16. To minimise flood risk and reduce the impact of	**Proximity to flood zones.** 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%)). The southern part of this site lies within a series of three 1km squares where >75% of their area		✓	✓		-	-	?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
flooding	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 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. This site is not at risk from the 1:20 (5%) flood event. **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. **Plan level / regional / wider effects.** None noted.							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
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.** 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. **Plan level / regional / wider effects.** This effect could apply to a wider area than the plan area.		✓		✓	+	0	0

Cumulative / Synergistic effects[18]	
Planning context	To the north of the site (around 2km north) is the village of Escrick and around 2km south is Riccall. 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.
Other Minerals and Waste Joint Plan Sites	This site also forms the boundary of WJP06 Escrick Brickworks.
Historic minerals and waste sites	Within 1km west is an onshore hydrocarbon field (PEDL) Licensed area. This includes a coal mine methane vent. WJPO2 lies to the north. There is a non-hazardous landfill site immediately adjacent on the southern boundary of the site. Within 2 km there are no historic landfill sites apart from the still active site adjacent (nearest are between 4 and 5 km away). Housing and

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

	employment related development is recorded at objective 13.
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.

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 – ALLOCATED SITE

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	**Proximity of international / national and local designations and key features** No Natura 2000 sites within 15km. 4 Sites of Special Scientific Interest (SSSIs) within 5km. 1.76km north - Brockadale SSSI; 3.79 km 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. A small patch of priority habitat deciduous woodland lies within MJP28 in the south east corner. 100m north there is a long strip of deciduous woodland with two additional patches 200m north-east and 233m north-	✓	✓	✓		-	-	+ ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	west. **<u>Local effects.</u>** 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. 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 conservation[19]. **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.							
2. To enhance or maintain water quality and improve efficiency of water use	**<u>Proximity of water quality / quantity receptors</u>** 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. 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 1.75 km north has a 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 2 km 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'. Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 95% of		✓		✓	- ?	- ?	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	P	T	D	I	Score S	M	L
	the time. **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. 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). In relation to this site during the site assessment panels the Environment Agency noted no showstoppers. **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.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable	**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 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: 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). 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 "*Unlikely to result in any significant traffic impacts but it is recommended that mitigation measures*		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
modes of transportation	*currently in place are continued if the planning application currently being considered is approved".* [20] 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. Rail: 3.8km south. Nearest railhead: 10.6 km north-east; Strategic Road: A1 junction with A6201 is circa 500m south; Canal / Freight waterway: River Don / River Don Navigation circa 10.2 km south-east. **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. 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: "*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 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"*. 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							

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	separation of traffic or diverting the bridleway (see also objective 14). **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 Joint Plan Area.							
4. To protect and improve air quality	**Proximity of air quality receptors** The site is not within an Air Quality Management Area (AQMA), however Wakefield Council M1 AQMA for NO_2 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. **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. **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 NO_2 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.		✓	✓	✓	m -	m -	0
5. To use soil and land efficiently and safeguard or enhance their quality	**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 Board development high risk area **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		✓	✓		-	-	0 ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	early medium term and neutral impacts are considered likely in the and long term with uncertainty depending on the restoration plan. **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 development[21] 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** An area of deciduous woodland priority habitat lies onsite. Various standalone trees and hedgerows lie along the site boundaries. **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. 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 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). **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.	✓		✓	✓	-	-	-

[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	P	T	D	I	Score S	Score M	Score L
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[22] of a site.** Site is in flood zone 1. No habitat networks onsite or adjacent. Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 95% of the time. **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. **Plan level / regional / wider effects.** None noted.					0	0	0
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified **Local effects.** See wider effects. **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 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.	✓		✓	✓	-	-	-

[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	P	T	D	I	Score S	Score M	Score L
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	**Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy** No spatial factors identified. **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 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). **Plan level / regional / wider effects.** None noted.					0	0	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors.** 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) 2.25 km north-east (just outside of search area). 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. 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-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. In terms of Historic Landscape Character, the HLC Broad Type is ‘enclosed land’ and HLC Type is ‘strip	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **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) – '*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 . An archaeological mitigation strategy should be put in place. 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. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes	**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: *'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*	✓	✓	✓		m -	m -	-

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
and townscapes	*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 SD Local Plan will continue to be afforded protection'*. The Site is in Green Belt for West Yorkshire. In terms of tranquillity the site is 'disturbed'. 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. **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. 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							

Sustainability Objective	Key Observations on Significance	P	T	D	I	S	M	L
	rectangular outline, and there is likely to be a loss of productive farmland. There should be a presumption in favour of the restoration benefitting the local landscape. **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.							
12. Achieve sustainable economic growth and create and support jobs	**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). **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. **Plan level / regional / wider effects.** Magnesium extraction may indirectly contribute to future economic growth in the wider area.		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	**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 *'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 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. **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					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	immediate settlements are unlikely to directly benefit in any significant way. Overall the effect in relation to this objective is considered to be neutral. **Plan level / regional / wider effects.** None noted							
14. To provide opportunities to enable recreation, leisure and learning	**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. **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. 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. **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.** 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. **Local effects.** Traffic on roads is likely to continue to be experienced beyond the current quarry as a result		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **Plan level / regional / wider effects.** None noted							
16. To minimise flood risk and reduce the impact of flooding	**Proximity to flood zones** Site is in flood zone 1. Strategic Flood Risk Assessment (SFRA) sequential test result – this site is suitable. **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. A Flood Risk Assessment will be required as part of a planning application. **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 small contribution to self-sufficiency in the supply of Magnesian limestone and may also support markets outside of the plan area. **Plan level / regional / wider effects.** As above, the supply of magnesium may support markets outside of the plan area.		✓	✓		+	+	0

Cumulative / Synergistic effects[23]	
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*: "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'*. Upton in Wakefield is 1.7 km west. Upton is defined as a Local Service Centre in the Wakefield Core Strategy (*'in local service centres the scale of development will be appropriate to the size of the settlement….'*)[24]. Site does not conflict with any allocations. Some very limited housing development at Kirk Smeaton and Upton / Elmsall may slightly raise future traffic levelsPlanning 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 km south west in Wakefield District, while there is a historic landfill about 2 km 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.
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	

[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: http://www.wakefield.gov.uk/Documents/planning/planning-policy/local-plan/core-strategy/core-strategy.pdf]

- 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 – ALLOCATED SITE

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	**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 2.3 km north-west. Forlorn Hope Meadow 4.14km east. 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 mixed woodlands. 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		✓	✓		-	- ?	- ?

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	Went Sub-regional). **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 relationship[25]. 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 zone[26]. 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). 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. **Plan level / regional / wider effects.** The Site is unlikely to have a significant effect on designated nature conservation sites and biodiversity in the wider Joint Plan Area.							

[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 http://www.sssi.naturalengland.org.uk/Special/sssi/old/OLD1001489.pdf).
[26] Went Edge Quarry, 2014. Environmental Statement Non-Technical Summary.

Sustainability Objective	Key on Significance	P	T	D	I	Score S	Score M	Score L
2. To enhance or maintain water quality and improve efficiency of water use	**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. 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'. 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. **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 in uncertain / positive. Environmental permits will be required for any discharges. **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.	✓	✓		✓	- ?	- ?	+ ?
3. To reduce transport miles and	**Proximity of transport receptors** Site is close to the A1 giving it good access to key markets such as those in West Yorkshire and 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		✓		✓	-	-	0

Sustainability Objective	Key on Significance	P	T	D	I	Score S	Score M	Score L
associated emissions from transport and encourage the use of sustainable modes of transportation	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). Net change in daily vehicle trip generations: Light vehicles: 0; HGVs: 0; Transport assessment rating: yellow. *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"*. Public Right of Way (PRoW): Immediate access to the site not affected by PRoW. The site is not likely to generate significant transport demand. Rail: 4 km east; Nearest known railhead is 10.5km east; Strategic Road: A1 is 290m west; Canal / Freight waterway: 6.4 km north (Aire and Calder Navigation). **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). According to the Joint Plan traffic assessment "*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".* According to the Highways Assessment this site is acceptable in terms of impact on the existing highway 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							

Sustainability Objective	Key on Significance	P	T	D	I	Score S	M	L
	modes are not likely to contribute to the site. 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. **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 Joint Plan Area.							
4. To protect and improve air quality	**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 NO_2. 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). **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. **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).		✓		✓	-	-	- ?
5. To use soil and land efficiently and safeguard or	**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 Board development high risk area. **Local Effects.** A small amount of best and most versatile land will be lost, potentially 5.6ha. If the site is	✓		✓		-	-	-

Sustainability Objective	Key on Significance	P	T	D	I	Score S	Score M	Score L
enhance their quality	restored to an industrial estate this will be lost forever. **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.							
6. Reduce the causes of climate change	**Proximity of factors relevant to exacerbating climate change** Woodland lies adjacent to the site (Brockadale) which is part of a wider living landscapes area. **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. **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.	✓		✓		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	P	T	D	I	Score S	Score M	Score L
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[28] of a site**. 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. Catchment Abstraction Management Strategy (CAMS): surface water resources available at least 95% of the time. **Local effects.** 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. **Plan level / regional / wider effects.** As above, dust deposition is unlikely to be significant enough to disrupt the wider ecological network.					0	0	0
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site** No spatial factors identified. **Local effects.** 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. **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 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.	✓		✓		--	--	--

[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	**Proximity of factors relevant to 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 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.		✓		✓	0	0	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors** 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 1 km. 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. 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 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. 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	✓		✓		- ?	- ?	- ?

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	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. **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) – '*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 . An archaeological mitigation strategy should be put in place. Some uncertainty until an archaeological assessment is carried out. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**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. 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...'*. Wakefield MDC does not have local landscape designations but the Went Valley (Brockadale within NYCC) is designated as a Wildlife Habitat Network. 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	✓	✓	✓	✓	-	-	-

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	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. In terms of tranquillity landscape is 'disturbed'. Site is in West Yorkshire Green Belt. **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. 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. 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. 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. 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.							

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	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.							
12. Achieve sustainable economic growth and create and support jobs	**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 the South of the Plan Area (e.g. Wakefield, Leeds) **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. **Plan level / regional / wider effects.** Creation of jobs would support the wider economy.		✓	✓	✓	m +	m +	+
13. Maintain and enhance the viability and vitality of local communities	**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 1.5 km to the East, and Womersley about 3.5km away to the north east (both are Secondary Villages in the Selby Local Plan. To the west of the Site lies Wakefield District. Only Wentbridge lies within 2 km 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. **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		✓	✓		+	+	+

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	continue to provide jobs, though these may be the same as the existing industrial estate. **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**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. **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. **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.		✓	✓	✓	-	-	- ?
15. To protect and improve the wellbeing, health and safety of local communities	**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 1.5 km away to the east). **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		✓		✓	-	-	-

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	estate is likely to be less. **Plan level / regional / wider effects.** None noted.							
16. To minimise flood risk and reduce the impact of flooding	**Proximity to flood zones** Site is in flood zone 1. Only very small areas of surface water flooding affect the site (<5%). Strategic Flood Risk Assessment (SFRA) sequential test result – this site is suitable. **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). **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 and may also support markets outside of the plan area. The industrial estate would also support jobs. **Plan level / regional / wider effects.** As above, the extraction of Magnesian limestone may also support markets outside of the plan area.		✓	✓		m +	m +	+

Cumulative / Synergistic effects[29]	
Planning context	To the north and east of the site is Selby District with Kirk Smeaton the nearest settlement around 1.5 km to the east. To the west of the Site lies Wakefield District. Only Wentbridge lies within 2 km 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 1.3 km north-east at its nearest point.
Air quality	A cumulative effect is associated with the pollution form 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.

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

[29] 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 and a Locally Important Landscape Area

MJP23 – Jackdaw Crag, Stutton – ALLOCATED SITE

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 Site of Interest for Nature Conservation (SINC) sites, 1 SINC – SE44-15 Crag Wood – is directly adjacent to the proposed site with previous and current extraction on all sides. This SINC is currently un-surveyed. There are also 2 deleted SINCs within 2km. 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. 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). **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	✓	✓	✓	✓	-	-	? +

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	where quarries and liquid discharges >5m^3/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. 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). 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. **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.							

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	**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. 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. **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 SPZ1, and object if there is an unacceptable risk in SPZ2. 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 SPZ1 which may require that extraction only be allowed above the saturated zone. 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. **Plan level / regional / wider effects.** Traditionally there have been some reservations about		✓	✓	✓	--	--	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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. 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.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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). Net change in daily vehicle trip generation: Light vehicles: 0; HGVs: 0. Transport assessment rating: yellow. Summary "*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*". Public Right of Way (PRoW): Access is not affected by a PRoW. 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. **Local effects.** The site would generate up to 340 vehicle movements per day, albeit that HGV		✓		✓	m-	m-	0 ?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	movement is acceptable onto highway and markets are reasonably accessible via the nearby A64. According to the Joint Plan traffic assessment "*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*". 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. 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 **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,							
4. To protect and improve air quality	**Proximity of air quality receptors** The site is not within an Air Quality Management Area (AQMA), however Wakefield Council M62 AQMA for NO_2 lies 7.2km West. No hazardous substances consent sites nearby. Some farm properties adjacent to possible access roads. **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		✓	✓	✓	m-	m-	?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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 dust[30]). So such effects are considered to be negligible. 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. **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 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).							

[30] Darrington Quarries Ltd, 2009. Southern extension to Jackdaw Crag Quarry Environmental Statement
[31] Design Manual For Roads and Bridges Citation needed (DMRB has 200m threshold)

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
5. To use soil and land efficiently and safeguard or enhance their quality	**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 Board development high risk area. **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). **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 development[32] but could have a small scale effect on national food production capacity.		✓	✓		m-	m-	0 ?
6. Reduce the causes of climate change	**Proximity of factors relevant to exacerbating climate change.** Woodland lies adjacent to site. Hedgerows on site. **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). 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. **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		✓		✓	m-	m-	0 ?

[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	P	T	D	I	Score S	Score M	Score L
	and from site and the operation of machinery involved in extraction activities.							
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[33] 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. 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. Site is Grade 2 Agricultural Land which is classified as very good and constitutes 'best and most versatile land'. **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. **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 high grade agricultural land will have a minor negative					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
	impact over the short and medium term.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site** No spatial factors identified **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. **Plan level / regional / wider effects.** 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).	✓			✓	--	--	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	**Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy** No spatial factors identified. **Summary of effects on the waste hierarchy** 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. **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 and stone (so this effect can only be considered by considering all limestone extraction together and cannot be attributed to a single site).					-	-	-
10. To conserve or enhance the historic environment and its	**Proximity of historic environment receptors** No conservation areas within 1km; Bramham Park Registered Parks and Garden is 3.37 km 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 1 km. 1	✓		✓		-	-	- ?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
setting, cultural heritage and character	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. 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. 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 replace an earlier field system. 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. Database record HNY 5479 records the eastern segment of this allocation site as being part of a							

Sustainability Objective	Key Observations on Significance	P	T	D	I	S	M	L
	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. **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. associated with this significant battle. 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) – *'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. Some uncertainty until an archaeological assessment is carried out. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and	**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. 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,*	✓		✓		--	--	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
townscapes	*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 Plan will continue to afforded protection'*. The Site is in Green Belt for West Yorkshire. In terms of tranquillity the site is 'disturbed'. 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. **Local effects.** 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. The area to the east of Crag Wood is a nice landscape and there are some concerns over the effect that a quarry would have. The site is in the 'limestone ridge' local landscape designation. 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							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	visual receptor), the southern part of the site is less disturbed, so there is potential for a more significant impact. Mitigation for this site should include a buffer between it and the A64. However, it is difficult to mitigate because of its location. I n 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. **Plan level / regional / wider effects.** There may be cumulative effects on the landscape from this and other quarries in the vicinity.							
12. Achieve sustainable economic growth and create and support jobs	**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). **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. **Plan level / regional / wider effects.** Creation of jobs would support the wider economy.		✓	✓	✓	+	+	0 ?
13. Maintain and enhance the viability and vitality of local communities	**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					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	and which conform to the provisions of Policy SP4 and Policy SP10'. **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. **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**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. **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. 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). **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.		✓	✓	✓	-	-	-
15. To protect and improve the wellbeing, health	**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		✓	✓	✓	m-	m-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and safety of local communities	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. 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. **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. 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. 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 investigated. Minor to moderate negative. **Plan level / regional / wider effects**. None noted.							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
16. To minimise flood risk and reduce the impact of flooding	**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. Strategic Flood Risk Assessment (SFRA) sequential test result – this site is suitable. **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. **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 small contribution to self-sufficiency in the supply of Magnesian limestone and may also support markets outside of the plan area. **Plan level / regional / wider effects**. As above, the extraction of Magnesian limestone may also support markets outside of the plan area.		✓	✓		+	+	0

Cumulative / Synergistic effects[34]	
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.

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

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 1.8 km 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

- 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
- 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 – ALLOCATED SITE

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 SIGNFICANT 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 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). 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. 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). 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	✓	✓	✓		-	-	?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. Natural England notes the modifications to the allocation and has no further comments on this site. 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. Better restoration would come through a more heathland type habitat (as high walls of site make restoration to agriculture difficult). **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.							
2. To enhance or maintain water quality and improve efficiency of water use	**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. 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		✓	✓	✓	- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	Sandstone Aquifer where no new groundwater licenses will be granted. **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. 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. Some effects on hydrology could be cumulative with other sites, for instance as a result of as yet unknown processes on site. **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							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	conducted based on the nature and quantity of the wastes and the natural setting and properties of the location'[35] 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.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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 estimate[36]. Net change in daily trip generations: light vehicles: 0; HGVs: 0. Traffic Assessment rating: 'green'. PRoW: does not affect access to the site. 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		✓	✓		- ?	- ?	0

[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]
[36] Submitter information

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	and Calder Navigation 1.5km south. **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. According to the traffic assessment "*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 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 in 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). 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							

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	some minor cumulative effect with other nearby minerals and waste sites. A transport assessment is required. **Plan level / regional / wider effects** None noted.							
4. To protect and improve air quality	**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 is to the west of the site, and thus presumed to be mostly upwind from the site. **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.		✓	✓	✓	- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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** Site is Grade 3 Agricultural Land (Good t0 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 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. **Local effects.** There is a potential loss of 14.41ha of the best and most versatile agricultural land[37]. Restoration would be to agriculture (if above water table) so there would be no / insignificant longer term effect once restoration is in place. **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 development[38] but could have a small scale effect on national food production capacity.		✓	✓		-	-?	- ?

[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
6. Reduce the causes of climate change	**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). Carbon in vegetation: low (4.32 tC/ha) / Carbon in soils: low (49.67 tC/ha). **Local Effects** See wider effects below. **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 undertaken[39].	✓		✓		-	-	- ?
7. To respond and adapt to the effects of climate	**Proximity of factors relevant to the adaptive capacity[40] of a site** Most of site, apart from a small central area (c5%) is in Flood Zone 3.. Site is Grade 3 Agricultural Land. It is not known if this is Grade 3a (best and most versatile) or	✓	✓	✓	✓	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	P	T	D	I	Score S	Score M	Score L
change	3b. 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). **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. 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. **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.							
8. To minimise the use of resources and encourage their re-use	**Proximity of factors relevant to the resource usage of a site** No spatial factors identified. **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.	✓		✓	✓	m-	m-	m- ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
and safeguarding	**Plan level / regional / wider effects** None noted.							
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	**Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy** No spatial factors identified **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. **Plan level / regional / wider effects** None noted.					0	0	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors** 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 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.	✓		✓		- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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. **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. 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. **Plan level / regional / wider effects** None noted.							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
11. To protect and enhance the quality and character of landscapes and townscapes	**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. **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 Farmland[41] and existing extraction site landforms in the area are poor. This sub-area has lost most of its original	✓	✓	✓		-	-	- ?

[41] Chris Blandford Associates, 2011. North Yorkshire and York Landscape Characterisation Project [URL: http://www.northyorks.gov.uk/media/22473/North-Yorkshire-and-York-landscape-character-assessment-report/pdf/North_Yorkshire_and_York_landscape_character_assessment_report.pdf]

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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). 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. **Plan level / regional / wider effects** None noted.							
12. Achieve sustainable economic growth and create and support jobs	**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). **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.		✓	✓		+	+	+ ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	Plan level / regional / wider effects This site may export beyond the plan area.							
13. Maintain and enhance the viability and vitality of local communities	**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..." **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. **Plan level / regional / wider effects** None noted.					0	0	0
14. To provide opportunities to enable recreation, leisure and	**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. **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		✓	✓	✓	-	-	0 ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
learning	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. **Plan level / regional / wider effects** None noted.							
15. To protect and improve the wellbeing, health and safety of local communities	**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) and tiny village of Little Heck 200m to the east. **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. 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. 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.		✓	✓	✓	-	-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	Plan level / regional / wider effects None noted.							
16. To minimise flood risk and reduce the impact of flooding	**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. 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 small regions of medium risk ((1:100 (1%)) and high risk ((1:30 (3.33%)) respectively. 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). 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 *"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"*[42]. It is	✓			✓	-	-	0 ?

[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]

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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. This site is not at risk from the 1:20 (5%) flood event. 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.. **Local effects.** A Strategic Flood Risk Assessment (SFRA) Sequential Test[43] concluded that the site would 'Pass' 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. 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							

[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.

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	better to restore the site to agriculture or ecology. 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. **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 sand. **Plan level / regional / wider effects** The site may also support markets outside of the plan area.		✓	✓		+	+	0 ?
Cumulative / Synergistic effects[44]								
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..."							

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

	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 1 km 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.
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 - ALLOCATED

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 habitat connectivity	**Proximity of international / national and local designations and key features.** 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 SINCs within 2km - Disused Railway Line (SE51-02 Deleted SINC) 1km south-west, Balne Moor Ponds (SE51-07 Ratified SINC) 1.8km south-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). 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). **Local effects.** Site is predominantly arable with trees / shrubs between northern boundary and M62	✓		✓	✓	-	-	- ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **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.							
2. To enhance or maintain water quality and improve efficiency of water use	**Proximity of water quality / quantity receptors.** The site is within a NVZ (groundwater and surface water) and lies in Groundwater SPZ3.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'. CAMS: surface water resources available at least 95% of the time for most of site. **Local effects.** The coincidence of the site with Groundwater SPZ3 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		✓		✓	-	-	-

Sustainability Objective	Key Observations on Significance	P	T	D	I	S	M	L
	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. 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. **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..							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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). Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating green. PRoW: The site is not affected by a registered public right of way. Rail: 1.5 km N (Hensall Station 2.2km west) / Nearest railhead: There is a railhead on site. Strategic Road: M62 adjacent to north / 4.4 km east to J34 of M62; Canal / Freight waterway: Aire and Calder Navigation: 300m south (Wharfe associated with WJP07). **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		✓	✓	✓	m+	m+	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. The Highways Assessment concludes that the site is not likely to generate significant travel demand[45]. **Plan level / regional / wider effects.** None noted.							
4. To protect and improve air quality	**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. **Local effects.** In terms of emissions associated with freight, the sand extracted at this site is intended 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. 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. Due to the location of the site adjacent to the M62 it is likely that pollution levels in the area are		✓	✓		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	P	T	D	I	Score S	Score M	Score L
	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. **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.** 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 lie within or adjacent to a Coal Board development high risk area **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). **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					-	-	0

[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.

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	the cumulative loss is considered to be a very 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	**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. **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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. 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.		✓		✓	-	-	- ?
7. To respond and adapt to the	**Proximity of factors relevant to the adaptive capacity[48] 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.	✓		✓		-	-	0

[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. A 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
effects of climate change	CAMS: surface water resources available at least 95% of the time for most of site. Site is Grade 3 Agricultural Land. **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. 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. **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.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified. **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.	✓		✓		-	-	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	P	T	D	I	S	M	L
	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.** 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)). **Plan level / regional / wider effects.** As detailed above.		✓		✓	-	-	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors.** No conservation areas within 1km, Registered Parks and Gardens, Registered Battlefields or World Heritage Sites within 5km. No scheduled monuments or listed buildings in the close vicinity of the site. 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. 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	✓		✓		-	-	- ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	S	M	L
	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. **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) – '*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.'*, 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. It is anticipated that there will no significant effect upon HLC. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**Proximity of landscape / townscape receptors and summary of character.** 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	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	area is classified as disturbed. **Local effects.** 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. 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. **Plan level / regional / wider effects.** None noted.							
12. Achieve sustainable economic growth and create and support jobs	**Proximity of factors relevant to sustainable economic growth.** Sand from this site would be used in the adjacent Plasmor block-making plant. **Local effects.** 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. **Plan level / regional / wider effects.** None noted.		✓	✓	✓	+	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	**Proximity of factors relevant to community vitality / viability.** 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.." **Local effects.** 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.. **Plan level / regional / wider effects.** Not applicable to this site.					0	0	0
14. To provide opportunities to enable recreation, leisure and learning	**Proximity to recreation, leisure and learning receptors.** 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. **Local effects.** 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. **Plan level / regional / wider effects.** None noted.					0	0	0
15. To protect and improve the wellbeing, health and	**Proximity to population / community receptors / factors relevant to health and wellbeing.** 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.		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
safety of local communities	**Local effects.** 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. **Plan level / regional / wider effects.** None noted.							
16. To minimise flood risk and reduce the impact of flooding	**Proximity to flood zones.** Site lies in Flood Zone 1. Only very small areas (<5%) of low risk (1:1000(0.1%)) surface water flooding affect the site . 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). 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 dry[49]. This is unlikely to present a significant issue for a water compatible development, even if it were to go below the water table.					0	0	0

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	This site is not at risk from the 1:20 (5%) flood event. **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. **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 sand (and blocks and concrete products following processing at the adjacent site) **Plan level / regional / wider effects.** The site may also support markets outside of the plan area.		✓	✓		+	+	0
Cumulative / Synergistic effects[51]								
Planning Context:	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. 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							

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

	scale to its location. No allocations conflict with MJP44.
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

- 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 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 – ALLOCATED SITE

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	P	T	D	I	Score S	Score M	Score L
1. To protect and enhance biodiversity and geo-diversity 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) 735m east, Disused Pit (part in Eggborough) (SE52-21, deleted SINC) 1.05km north-west, Balne	✓		✓		0 ?	0 ?	0 ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
improve habitat connectivity	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. 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). 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. **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). 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.							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Uncertainty is also noted in relation to when impacts would fall as this has not been specified. **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.							
2. To enhance or maintain water quality and improve efficiency of water use	**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'. CAMS: Surface water is available less than 30% of the time (with red / unavailable noted for q30, q50, q70 and q95 divisions) **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. 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 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 SPZ1 which may that require extraction only be allowed above the saturated		✓	✓	✓	m- ?	m- ?	m - ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. 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. 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. Uncertainty is also noted in relation to when impacts would fall as this has not been specified. **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 maintenance.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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). Net change in daily two-way trip generations: Light vehicles: 10; HGVs: 30-50. Traffic assessment rating: yellow. PRoW: Immediate access is not affected by PRoW. 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.		✓	✓		- ?	- ?	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
	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. 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 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)". 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. **Plan level / regional / wider effects.** None noted.							
4. To protect and improve air quality	**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. **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		✓	✓	✓	-	-	-?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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). 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. **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.** 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. **Local effects.** As the site is an existing quarry and the potential allocation would be for extension of the 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 to lead to a longer period of sand extraction than would otherwise be expected under the existing baseline situation, therefore delaying restoration plans. **Plan level / regional / wider effects**. None noted.		✓		✓	0	0	0-

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
6. Reduce the causes of climate change	**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). **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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 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. 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 undertaken[52]. The site may also lead to a delay in restoration which is assumed to be short rotation coppice, a source of carbon storage.	✓		✓	✓	m-	m-	- ?

[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.

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[53] 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). CAMS: Surface water is available less than 30% of the time (with red / unavailable noted for q30, q50, q70 and q95 divisions). 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. **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. 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. **Plan level / regional / wider effects.** None noted.					0 ?	0 ?	0 ?
8. To minimise the use of resources and encourage their re-use and	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified. **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.	✓		✓	✓	m-	m-	m-

[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
safeguarding	**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 on the waste hierarchy.** None noted. **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).					-	-	-
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors.** There are 3 Listed Buildings within 1km (1 Grade 2 and 2 Grade 2*). 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. **Local effects.** It is considered that the current quarry development is likely to have removed any archaeological features that were present onsite. **Plan level / regional / wider effects.** None noted.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
11. To protect and enhance the quality and character of landscapes and townscapes	**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. **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. The quality of the countryside around Great Heck has already been extensively disturbed by sand quarries 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. **Plan level / regional / wider effects.** None noted.	✓	✓	✓	✓	0	0	-
12. Achieve sustainable economic growth and create and	**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). **Local effects.** The estimated mineral reserve at the site without current planning permission is 70,000	✓	✓	✓	✓	+ ?	+ ?	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
support jobs	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, 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 restoration[54], as short rotation coppice would provide an economic opportunity for sale as an energy crop. 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. 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. **Plan level / regional / wider effects.** None noted.							
13. Maintain and enhance the viability and vitality of local communities	**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" **Local effects.** Job opportunities arising from this site are likely to be very limited, and while the site would					0	0	0

[54] Restoration would be prior to end of 2030

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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 any effect is considered to be insignificant. **Plan level / regional / wider effects.** Not applicable to this site.							
14. To provide opportunities to enable recreation, leisure and learning	**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. **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. 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. **Plan level / regional / wider effects.** None noted.					0	0	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.** 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. **Local effects.** Noise, dust, traffic and access to amenities / facilities are considered likely to remain largely similar to the baseline situation.. 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		✓		✓	m-	m-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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 mitigation. **Plan level / regional / wider effects.** None noted.							
16. To minimise flood risk and reduce the impact of flooding	**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. 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). 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 pumping[55] . The deepening of this quarry may potentially (depending on depth planned) dip below this level. However extraction of sand is a water compatible use. This site is not at risk from the 1:20 (5%) flood event. **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					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	P	T	D	I	Score S	Score M	Score L
	within the site specific flood risk assessment. **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.** Deepening an existing site, rather than allocating a new site e would make a small contribution to self-sufficiency in the supply of sand.. **Plan level / regional / wider effects.** The site may also support markets outside of the plan area.		✓	✓		+ ?	+ ?	0
Cumulative / Synergistic effects[56]								
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:	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. Historic Minerals and Waste Sites: Numerous historic and active minerals and waste sites lie to the north within 2 km in the vicinity of MJP22 (see MJP22 for a description of these sites).							

[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 featuresDesign 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 – ALLOCATED SITE

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	**Proximity of international / national and local designations and key features.** 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. 8 SINCs 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)					0	0	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	1.9km south-west. 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). **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. **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							
2. To enhance or maintain water quality and improve efficiency of water use	**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). CAMS: Surface water available at least 70% of the time (at least 5% of the time water licenses may be restricted) **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. **Plan level / regional / wider effects.** None noted.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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). Net change in two-way daily vehicle trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green. 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. PRoW: does not affect access. **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. There is potential scope to link this site out onto the A63 Selby Bypass which would relieve pressure on the A19. 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*	✓		✓	✓	0	+ ?	+ ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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". **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.							
4. To protect and improve air quality	**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. **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). **Plan level / regional / wider effects.** Effects are considered local in nature.		✓	✓	✓	0	+ ?	+ ?
5. To use soil and land efficiently and safeguard or enhance their quality	**Proximity of soil and land receptors.** 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 Board development high risk area. **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 land use					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	changes or changes to soil quality would arise as a result of the allocation of this site. **Plan level / regional / wider effects.** Retention of this site may help to avoid the need for a replacement site within the Joint 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.							
6. Reduce the causes of climate change	**Proximity of factors relevant to exacerbating climate change.** Closest area of priority habitat woodland is a patch of deciduous woodland 140m away. **Local effects.** As climate change is a global issue effects are reported in wider effects below. **Plan level / regional / wider 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 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.	✓			✓	0	+	0
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[57] of a site.** 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). 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					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
	changes or changes to soil quality would ensue as a result of the allocation of this site. **Local effects.** 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. **Plan level / regional / wider effects.** None noted.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified. **Local effects.** 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 future (i.e. it would be a long term positive effect). **Plan level / regional / wider effects.** Considered to be the same as local effects.					0	0	0
9. To minimise waste generation and prioritise management of waste as high up the waste	**Proximity of factors relevant to managing waste higher up the waste hierarchy.** No spatial factors identified. **Local effects.** Not applicable to this site. **Plan level / regional / wider effects.** Not applicable to this site.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
hierarchy as practicable								
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**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. 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. 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 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 legibility[58] of the previous HLC which was planned enclosure. **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. **Plan level / regional / wider effects.** None noted.					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	P	T	D	I	Score S	Score M	Score L
11. To protect and enhance the quality and character of landscapes and townscapes	**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 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'. **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. 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.		✓	✓		0	0	0 ?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Plan level / regional / wider effects. None noted.							
12. Achieve sustainable economic growth and create and support jobs	**Proximity of factors relevant to sustainable economic growth.** Site is proximal to a number of major settlements (e.g. Selby adjacent to site, York 19km, Castleford 20km and Leeds 30km). **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 job creation and achieving sustainable economic growth are anticipated as a result of the allocation of this site. 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). **Plan level / regional / wider effects.** None noted.					0	0	0
13. Maintain and enhance the viability and vitality of local communities	**Proximity of factors relevant to community vitality / viability.** 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 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		✓	✓	✓	0	0?	0?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	growth in Selby. **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. 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). **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**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. **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 recreation, leisure and learning are anticipated as a result of the allocation of this site. Mitigation to improve / enhance the Trans Pennine Trail in this area could be a future opportunity if any further development at this site occurs. **Plan level / regional / wider effects.** None noted.	✓		✓		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	P	T	D	I	Score S	Score M	Score L
15. To protect and improve the wellbeing, health and safety of local communities	**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. **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. 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). **Plan level / regional / wider effects.** None noted.		✓	✓	✓	0	0?	0?
16. To minimise flood risk and reduce the impact of flooding	**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. 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.	✓	✓	✓	✓	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
	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 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. This site is not at risk from the 1:20 (5%) flood event. **Local effects.** A Strategic Flood Risk Assessment (SFRA) Sequential Test[61] 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. 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. **Plan level / regional / wider effects.** None noted							

[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.

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
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.** No spatial factors identified. **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. **Plan level / regional / wider effects.** None noted					0	0	0

Cumulative / Synergistic effects[62]	
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.

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

Air Quality and Noise	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). 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.

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 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 – ALLOCATED SITE

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	P	T	D	I	Score S	Score M	Score L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	**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. There are nine SINC sites occur within a 2km radius of MJP24 with the Joint Plan Area. These are: 260m east - SE52-01 'Bridleway, Cridling Stubbs Crossing' (ratified); 380m south - SE52 -24 'Wake Wood' (pre-	✓		✓		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
	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. **Local effects.** The plant site (which in its present form included crushing, screening and washing plant[64]) 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). 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. **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.							

[64] Darrington Quarry

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
2. To enhance or maintain water quality and improve efficiency of water use	**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 SPZ1 (20% of the site, at its norther 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. 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'. 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. **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 impacts[65]. However, until it can be shown that impacts on water are acceptable (the sites would need to demonstrate no increased risk to the					?	?	0

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	aquifer) the impact on water, the assessment will remain uncertain. **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	**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 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). Net change in daily two way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green. PRoW: Does not affect immediate site access (see also SA objective 14 below). Rail: ational 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. **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. **Plan level / regional / wider effects**. None noted.		✓	✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
4. To protect and improve air quality	**Proximity of air quality receptors.** 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. **Local effects.** 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). **Plan level / regional / wider effects.** Effects are considered local in nature.					0	0	0
5. To use soil and land efficiently and safeguard or enhance their quality	**Proximity of soil and land receptors.** 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 Board development high risk area. **Local effects.** 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. **Plan level / regional / wider effects.** None noted.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
6. Reduce the causes of climate change	**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. **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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.					0	0	0
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[66] 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. There are no intersecting ecological networks. Site in on Grade 2 land though this has already been developed. **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					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	P	T	D	I	Score S	Score M	Score L
	effects predicted. Long term uncertainty is also noted and impacts will be dependent upon the restoration scheme that is implemented[67]. **Plan level / regional / wider effects.** None noted.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified. **Local effects.** Given that the processing plant site and haulage road for the processing of magnesium 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. **Plan level / regional / wider effects.** See local effects above.		✓		✓	+	+	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	**Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy.** No spatial factors identified. **Local effects.** 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. **Plan level / regional / wider effects.** Considered to be the same as local effects	✓			✓	+	-	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	**Proximity of historic environment receptors.** 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. 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. 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. 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. **Local effects.** 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. **Plan level / regional / wider effects.** None noted.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
11. To protect and enhance the quality and character of landscapes and townscapes	**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'. 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:*identifying, protecting and enhancing locally distinctive landscapes*'. There is no local landscape designation for parts of the site in Wakefield. 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'. **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. 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.		✓	✓	✓	-	-	0 ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	Plan level / regional / wider effects. None noted.							
12. Achieve sustainable economic growth and create and support jobs	**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). **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). 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. **Plan level / regional / wider effects.** None noted.		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	**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 ½ km from the town of Knottingley, 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					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	housing growth after the Principal Towns. Villages are expected to accommodate 5% of the housing requirement. 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. **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. **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**Proximity to recreation, leisure and learning receptors.** 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. . 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) **Local effects.** 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	✓		✓		-	-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	S	M	L
	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. **Plan level / regional / wider effects.** None noted.							
15. To protect and improve the wellbeing, health and safety of local communities	**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 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. **Local effects.** Given that the site is some distance from receptors, no significant effects on health and wellbeing are predicted. **Plan level / regional / wider effects.** None noted.					0	0	0
16. To minimise flood risk and reduce the impact of flooding	**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.. 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. 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. This site is not at risk from the 1:20 (5%) flood event.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **Plan level / regional / wider effects.** Effects considered local in nature.							
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 the processing / 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

Cumulative / Synergistic effects[69]

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

Planning context	The access road to site is around ½ km from the town of Knottingley, but significantly further from the plant. It is around 4 km 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. 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: "*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*".
Other Minerals and Waste Joint Plan 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.
Historic minerals and waste sites	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. MJP24 is adjacent to an existing active Magnesian limestone site (Darrington Quarry).

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 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) – ALLOCATED SITE

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 connectivity	**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 (. 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	✓		✓		0	0	+ ?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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. **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). 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. However, dust deposition and the effect of water extraction and discharge on nearby priority habitats should be further investigated. **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.							

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	**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 norther 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). The site is in the Humber RBMP and is 1.7 km 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'. 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). **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 water[70] 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		✓		✓	?	?	?

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	may be required. In the long term impacts are uncertain depending upon the restoration scheme that will be implemented. **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	**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 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). Net change in daily two-way vehicle generation: Light vehicles: 0; HGVs: 0. Transport assessment findings: green. PRoW: Does not affect immediate site access (see also SA objective 14 below). 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. **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. However, the traffic assessment notes that "*As the proposal is not expected to generate any additional HGV*		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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". **Plan level / regional / wider effects**. None noted.							
4. To protect and improve air quality	**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. **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. **Plan level / regional / wider effects**. Effects are considered local in nature.					0	0	0
5. To use soil and land efficiently and safeguard or enhance their quality	**Proximity of soil and land receptors.** Site in 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 Board development high risk area. **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. **Plan level / regional / wider effects.** None noted.					0	0	?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
6. Reduce the causes of climate change	**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. **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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.	✓			✓	+ ?	+ ?	?
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[71] 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. There are no intersecting ecological networks. Site in on Grade 2 land though this has already been developed. **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					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	P	T	D	I	Score S	Score M	Score L
	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. **Plan level / regional / wider effects.** None noted							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified **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. **Plan level / regional / wider effects.** None noted	✓			✓	+	+	0
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.** 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. **Plan level / regional / wider effects.** None noted.	✓		✓		+	+	0
10. To conserve or enhance the historic environment	**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					0	0	?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
and its setting, cultural heritage and character	'Womersley medieval settlement remains and Victorian ice house'. 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. 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. **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. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**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'. 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 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	✓			✓	0	0	+ ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **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. **Plan level / regional / wider effects.** None noted							
12. Achieve sustainable economic growth and create and support jobs	**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 8km and Leeds 20 km). **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		✓	✓		+	+	?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
	medium term. Long term impacts will be dependent upon the restoration scheme that is implemented. **Plan level / regional / wider effects.** None noted.							
13. Maintain and enhance the viability and vitality of local communities	**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. 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					0	0	?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **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. **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**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. 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). **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. **Plan level / regional / wider effects.** None noted.					0	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.** 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). **Local effects.** Given that the site is some distance from receptors, no significant effects on health and					0	0	?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
	wellbeing are predicted in the short and medium term. Long term impacts will be dependent upon the restoration scheme that is implemented. **Plan level / regional / wider effects.** None noted.							
16. To minimise flood risk and reduce the impact of flooding	**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. 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. 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. This site is not at risk from the 1:20 (5%) flood event. **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. **Plan level / regional / wider effects.** None noted.					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	P	T	D	I	Score S	Score M	Score L
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 recycled materials, though much of this may well be used in restoration. **Plan level / regional / wider effects.** As local effects above.					0	0	0

Cumulative / Synergistic effects[73]	
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	

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

subsequent planning application stage.

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) – ALLOCATED SITE

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.

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	P	T	D	I	Score S	Score M	Score L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	**Proximity of international / national and local designations and key features.** 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 lies 1.8km south of the site in Doncaster Metropolitan Borough Council (MBC) Area. 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	✓		✓	✓	- ?	- ?	?

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	directly to the south of the site lies within a Biodiversity Opportunity Area (policy SP35 in the Doncaster Development Plan). **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. 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. **Plan level / regional / wider effects**. None noted.							
2. To enhance or maintain water quality and improve efficiency of water use	**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'. 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		✓	✓	✓	-	-	-

Sustainability Objective	Key on Significance	P	T	D	I	Score S	Score M	Score L
	(i.e. issued case by case). **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). **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	**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 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. Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green. PRoW: Immediate access to the site is shown on maps as a bridleway in Doncaster. 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. **Local effects.** There would be no additional vehicles to MJP28 from this site as the proposal is simply to 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		✓		✓	0	0	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	impact. **Plan level / regional / wider effects.** None noted.							
4. To protect and improve air quality	**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 NO_2. 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. **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. 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. **Plan level / regional / wider effects.** Effects are considered local in nature.		✓	✓		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	**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 Board development high risk area. **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). **Plan level / regional / wider effects.** None noted.		✓			0	0	0 ?
6. Reduce the causes of climate change	**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. **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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. 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.		✓		✓	0	0	0 ?
7. To respond and adapt to the effects of climate	**Proximity of factors relevant to the adaptive capacity[74] 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 prone to surface water flooding though only around 10% – 15% of this is medium risk (1:100 (1%)) to high		✓	✓		?	?	?

[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
change	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. The site is in an area of Grade 2 land (though this land is already being used for minerals). **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. **Plan level / regional / wider effects.** None noted.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified **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. **Plan level / regional / wider effects.** None noted.					+	+	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	**Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy.** No spatial factors identified. **Local effects.** 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.		✓		✓	m +	m +	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors.** 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 2 km 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. 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. 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. 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					0	0	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	completed in recent years in response to recent extraction. 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. **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. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**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. Site is in North Yorkshire LCA as 'Magnesian Limestone Ridge'. This categorises the site as moderate to 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'. **Local effects.** The site (along with MJP28) is within a locally important landscape area. The landscape in	✓	✓	✓	✓	-	-	- ?

Sustainability Objective	Key on Significance	Score						
		P	T	D	I	S	M	L
	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 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. 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). 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. 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). **Plan level / regional / wider effects.** None noted.							

Sustainability Objective	Key on Significance	P	T	D	I	Score S	Score M	Score L
12. Achieve sustainable economic growth and create and support jobs	**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. Wakefield, Leeds and Barnsley). **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). **Plan level / regional / wider effects.** None noted.		✓		✓	0	0	+ ?
13. Maintain and enhance the viability and vitality of local communities	**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). 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. 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. **Local effects.** There are a number of growing communities in the surrounding area, though this site will					0	0	0

Sustainability Objective	Key on Significance					Score		
		P	T	D	I	S	M	L
	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. **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**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). **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. 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). **Plan level / regional / wider effects.** None noted.		✓	✓		?	?	?
15. To protect and improve the wellbeing, health and safety of local communities	**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. **Local effects.** The impacts on health and wellbeing are considered neutral as the site boundary and operation remains the same as the current situation. **Plan level / regional / wider effects.** None noted.		✓	✓		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	**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. 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. 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. This site is not at risk from the 1:20 (5%) flood event. **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. **Plan level / regional / wider effects.** None noted.		✓	✓		-	-	-

[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	P	T	D	I	Score S	M	L
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. **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. **Plan level / regional / wider effects.** As local effects above.	✓			✓	+	+	+ ?

Cumulative / Synergistic effects[76]	
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. 2 km 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 km 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 – ALLOCATED SITE

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	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. Part of the WJP10 site has planning permission for the extraction of Magnesian limestone. Existing restoration scheme for quarry is to limestone grassland with blocks of woodland and scrub.

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.** 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. SINC: SE51-01 Brockadale, Wentbridge (potential SINC) is immediately adjacent to the north west at its 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. Most (95%) of site coincides with area of upland mixed woodlands (according to national maps, though the	✓	✓	✓	✓	- ?	- ?	+ ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	situation on the ground is that this land has now been quarried). 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). **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. 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). 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. 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. **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.							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
2. To enhance or maintain water quality and improve efficiency of water use	**Proximity of water quality / quantity receptors.** Site is in a NVZ (surface water and groundwater). 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'. 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. **Local effects.** 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 receptors[77]. 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. **Plan level / regional / wider effects.** As detailed above.					0 ?	0 ?	0 ?

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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 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). Net change in daily two-way trip generations: Light vehicles: 6; HGVs: 108: traffic assessment rating: yellow. PRoW: No PRoW affect immediate access. 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 6.6 km north. **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. According to the traffic assessment for this site "*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*". In addition, traffic impacts on the A1 are expected to be relatively low, and the traffic assessment states "*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*". Highways England have communicated that they have no immediate concerns.		✓		✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	Some concerns have been raised in historic planning applications about maintenance and signage so minor negative impacts are noted. **Plan level / regional / wider effects**. None noted.							
4. To protect and improve air quality	**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 NO_2. **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. **Plan level / regional / wider effects.** Effects are considered local in nature.		✓		✓	-	-	-
5. To use soil and land efficiently and safeguard or enhance their quality	**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 Board development high risk area. **Local effects.** The land has already been quarried, so no impact will occur. However, restoration plans to limestone grassland will have benefits. **Plan level / regional / wider effects.** None noted.					0	0	+

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
6. Reduce the causes of climate change	**Proximity of factors relevant to exacerbating climate change.** Priority woodland adjacent to north and west of site. **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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.	✓			✓	-	-	+
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[78] 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. Most of site ALC Grade 2. Northern 20% is Grade ACL 3. Current use is details as part of existing quarry and industrial estate. **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.		✓	✓		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	P	T	D	I	Score S	Score M	Score L
	Plan level / regional / wider effects. None noted.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified. **Local effects on resource usage.** 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. **Plan level / regional / wider effects.** None noted	✓			✓	m +	m +	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	**Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy.** No spatial factors identified. **Local effects.** 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. **Plan level / regional / wider effects.** None noted.	✓		✓		m +	m +	0
10. To conserve or enhance the historic environment and its setting,	**Proximity of historic environment receptors.** 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. 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.					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
cultural heritage and character	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. 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. **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. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**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. 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'. 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		✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	the Selby LCA. Site is in West Yorkshire Green Belt. In terms of tranquillity site is 'disturbed'. **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. 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 mitigate the large hole left through quarrying. 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. **Plan level / regional / wider effects.** None noted.							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
12. Achieve sustainable economic growth and create and support jobs	**Proximity of factors relevant to sustainable economic growth.** Site is close to the A1 giving it good access to key waste sources such as those in West Yorkshire and the South of the Plan Area (e.g. Wakefield, Leeds) **Local effects.** 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. **Plan level / regional / wider effects.** None noted.		✓	✓	✓	+	+	0
13. Maintain and enhance the viability and vitality of local communities	**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 3.4km away to the north east (both are Secondary Villages in the Selby Local Plan – See MJP24 for description). 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). 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. 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		✓	✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	villages will accommodate infill housing only. **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. **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**Proximity to recreation, leisure and learning receptors.** A footpath running through Brockadale 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). **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 Brockadale 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. **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.** No schools or health centres within 1km. Nearest property is Rectory Farm (930m south-east) and nearest settlement is Kirk Smeaton 1.5 km away to the east). **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		✓		✓	-	-	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	**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.. 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. 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 site[79]. 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]. This site is not at risk from the 1:20 (5%) flood event. **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					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	P	T	D	I	S	M	L
	surface water without causing additional flood risk. SuDS could be used for draining / storing surface water **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 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. **Plan level / regional / wider effects.** As local effects above.		✓		✓	+	+	+

Cumulative / Synergistic effects[82]	
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.

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 Brockadale 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 – ALLOCATED SITE

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	P	T	D	I	Score S	Score M	Score L
1. To protect and enhance biodiversity and geo-diversity and improve habitat connectivity	**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. 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 Barff - Ratified SINC). Priority Habitats: No priority habitats onsite or adjacent. There is some deciduous woodland circa 280m south-east. No ecological networks or green infrastructure. **Local effects.** It is considered that there would be no impacts on SSSIs or SINCs. Although no nationally important habitats would be threatened, there is some potential on the site for reptiles and nesting birds.	✓		✓		- ?	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	Himalayan Balsam *Impatiens glandulifera* may also be a problem on this site. In summary, an insignificant to minor negative impact may occur during construction in the short term. **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.							
2. To enhance or maintain water quality and improve efficiency of water use	**Proximity of water quality / quantity receptors.** Site is in a NVZ (surface water). 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. 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. **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 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. Discharges of water may need to be in agreement with Internal Drainage Board. **Plan level/ regional/ wider effects.** There is the potential pollution from the site could pass into the wider					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	water environment via surface and groundwater pathways, however it is assumed these risks would be adequately controlled by the environmental permitting system during operation.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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 4 km north-east; Strategic Road: A19 790m west; Canal / Freight waterway: Selby Canal 425m north. Net change in daily two-way vehicle trip generations: Light vehicles: 12; HGVs: 64. Transport assessment rating: green. PRoW: Immediate site access is not affected by PRoW. **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. The traffic assessment reports local effects: *"Traffic data from a traffic survey in 2013 along Common Lane 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.		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	Plan level / regional / wider effects. None noted.							
4. To protect and improve air quality	**Proximity of air quality receptors.** No AQMAs or Hazardous substances consent sites within 10km. 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. **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. **Plan level / regional / wider effects.** Effects are considered local in nature.		✓		✓	-	-	-
5. To use soil and land efficiently and safeguard or enhance their quality	**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 Board development high risk area. **Local effects.** No impact as previously developed land. **Plan level / regional / wider effects.** None noted.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
6. Reduce the causes of climate change	**Proximity of factors relevant to exacerbating climate change.** No proximal habitats that may be affected. There is some deciduous woodland circa 280m south-east. **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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.	✓			✓	+	+	+
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[83] 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. Site is located in an area of ALC Grade 2 land. However, site is on a former airfield. **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 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. **Plan level / regional / wider effects.** None noted.		✓		✓	-	-	- ?

[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	P	T	D	I	Score S	Score M	Score L
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified. **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. **Plan level / regional / wider effects.** See local effects above.	✓			✓	+	+	0
9. To minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	**Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy.** No spatial factors identified. **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. **Plan level / regional / wider effects.** Considered to be the same as local effects.		✓		✓	+	+	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors.** No designated features noted. Burn airfield, a former RAF airfield dating to the 1940s is the only heritage asset recorded on the HER 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. **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	✓		✓		-	-	-

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	the landscape with its own historic character value. 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. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**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. 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. **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 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. 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		✓	✓		-	-	-

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. Vehicle movements from the site will have little effect on character as there is already some traffic. 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. 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). **Plan level / regional / wider effects.** None noted.							
12. Achieve sustainable economic growth and create and support jobs	**Proximity of factors relevant to sustainable economic growth.** Site is close to Selby, though is remote from many waste facilities (only categories of landfill within 5km). **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 overall impact in relation to this objective are therefore considered to be positive in the short and medium term. **Plan level / regional / wider effects.** None noted.		✓		✓	+	+	0
13. Maintain and enhance	**Proximity of factors relevant to community vitality / viability.** 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		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
the viability and vitality of local communities	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. **Local effects.** 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 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.		✓	✓		-	-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
	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.							
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
16. To minimise flood risk and reduce the impact of flooding	**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. This site is not at risk from the 1:20 (5%) flood event. **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		✓		✓	-	-	-

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	further risk abatement measures could help mitigate for this. A flood risk assessment would be required. **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 the bulking and transfer of municipal and commercial waste. **Plan level / regional / wider effects.** The site may also support markets outside of the plan area					+	+	0
Cumulative / Synergistic effects[85]								
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.							

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

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

- 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
- 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 – PREFERRED AREA

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 SIGNFICANT 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.** 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. Site of Importance to Nature Conservation (SINC): 11 SINCs / potential SINCs lie within 2km. Of	✓	✓	✓	✓	- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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 (Riccal Dam, Potential SINC). 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). 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. **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. 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). 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 **Plan level / regional / wider effects.** Impacts upon the Natura 2000 site at Skipwith Common							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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). 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. 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 permeability[86]. This makes any risk to Skipwith Common unlikely.							
2. To enhance or maintain water quality and improve efficiency of water use	**Proximity of water quality / quantity receptors.** Site is in a Nitrate Vulnerable Zone (NVZ). Not in a Source Protection Zone (SPZ). 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. Catchment Abstraction Management Strategies (CAMS): surface water resources available at					- ?	- ?	- ?

[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
	least 70% of the time. Groundwater is restricted. **Local effects.** 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). 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 'aquitard' which acts as a low permeability block between and aquifer and the surface so impacts are most likely to be fairly low. **Plan level / regional / wider effects.** No wider effects noted.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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. Light Vehicles: 10 two-way movements; Heavy Goods Vehicle (HGV): 100 two-way movements (sourced from screening opinion request NY/2013/0165/SCR). PRoW: Immediate access to the site is not affected by PRoW. 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.		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	Selby are undertaking a highways study that could contribute information to these sites. **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. 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 a the business park*". 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. Overall, minor negative effects are predicted over the short and medium term. **Plan level / regional / wider effects.** There may be cumulative traffic effects with site allocations further south along the A19 as it approaches the M62.							
4. To protect and improve air quality	**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. 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		✓		✓	m -	m -	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **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). **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. Mitigation (e.g. screening, damping down) is required to deal with dust and odour impacts.							
5. To use soil and land efficiently and safeguard or enhance their quality	**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 Board development high risk area. **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). **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	✓		✓		0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
	area.							
6. Reduce the causes of climate change	**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). **Local effects.** See wider effects below. **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 effects on the SA Objective, although there is some uncertainty as to any long term effects post restoration of the site.	✓		✓		-	-	?
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[87] 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%))..		✓	✓		-	-	?

[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	P	T	D	I	Score S	Score M	Score L
	Site is largely ALC Grade 3. **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. **Plan level / regional / wider effects.** Same as local effects.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified **Local effects.** Landfilling of inert waste (particularly if it could have been recycled) will work against this objective. **Plan level / regional / wider effects.** See local effects above.	✓			✓	m -	m -	0
9. To minimise waste generation and prioritise management of waste as high up the	**Proximity of factors relevant to factors relevant to managing waste higher up the waste hierarchy.** No spatial factors identified. **Local effects.** Landfilling of inert waste (particularly if it could have been recycled) will work against this objective. **Plan level / regional / wider effects.** See local effects above.	✓		✓		m -	m -	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
waste hierarchy as practicable								
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors.** 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. Site visit confirmed the site is screened by topography and woodland so is not visible. No other contribution to asset significance was observed. 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). 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. 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	✓		✓		-	-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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. **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). **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**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. 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	✓		✓		- ?	- ?	0 ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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). York green belt in Selby is 600m north. In terms of tranquillity 70% of site disturbed. Western 30% is undisturbed. **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. 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. 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							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	effects are dependent on restoration. Restoration at original ground levels would have benefits. 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. **Plan level / regional / wider effects.** None noted.							
12. Achieve sustainable economic growth and create and support jobs	**Proximity of factors relevant to sustainable economic growth.** Site is close to A19 with good access to key housing markets in York and Selby. **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. 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). **Plan level / regional / wider effects.** None noted.	✓			✓	-	-	0
13. Maintain and enhance the viability and vitality of local communities	**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). 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	✓		✓		-	-	0

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	Villages 'have some scope for additional residential and small scale employment growth', albeit within development limits. **Local effects.** Tourism receptors at Escrick Park Estate and the Trans Pennine Trail may be affected by 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). 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). **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**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. **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. **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		✓	✓		m -	m -	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	accurately predict effects on the Trans Pennine Trail. Mitigation could include screening as well as improvements and enhancements of the Trans Pennine Trail.							
15. To protect and improve the wellbeing, health and safety of local communities	**Proximity to population / community receptors / factors relevant to health and wellbeing.** Several farm properties and a business park lie within 1km. **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 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. **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.		✓	✓	✓	m -	m -	0
16. To minimise flood risk and reduce the impact of flooding	**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%)).		✓	✓		-	-	- ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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. . This site is not at risk from the 1:20 (5%) flood event. 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 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. **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. **Plan level / regional / wider effects.** None noted.							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
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.** No notable benefits to a changing population. **Plan level / regional / wider effects.** None noted.					0	0	0

Cumulative / Synergistic effects[88]	
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.
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.

[88] 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 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 –ALLOCATED SITE

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 connectivity	**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. SINC: 6 SINCs 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 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.	✓		✓		-	-	+ ?

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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. Networks: Site lies within 'Aire' regional GI corridor and 'Humberhead Levels' Futurescape. 'Lower Aire Valley Corridor' Living Landscape lies circa 60m from site. **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. 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. 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. 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 restoration. **Plan level / regional / wider effects**. Considering the source of any impacts, as well as potential							

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
	pathways and receptors, it is considered that there would be no significant impact on the integrity of Natura 2000 sites.							
2. To enhance or maintain water quality and improve efficiency of water use	**Proximity of water quality / quantity receptors** Site is in a NVZ (surface water and groundwater). Not in a SPZ. 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'. CAMS: Source water available at least 70 per cent of the time (and may be available at low flows (Q95 availability is 'yellow') **Local effects.** 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. 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. **Plan level / regional / wider effects.** As detailed above					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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. Light vehicles: 12 two-way movements estimated (submitter information); HGV vehicles: 56-112 two-way movements estimated (submitter information). Net change in daily two-way trip generations: Light vehicles: 0; HGVs: 0. Traffic assessment rating: green. PRoW: Immediate access is not affected by PRoW. 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 5.5 km north-west). Canal / Freight waterway: Site is 2km north of the Aire and Calder Navigation / River Aire. **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 Ferrybridge[89]. Minor negative impacts are predicted as allocating this site would extend existing traffic levels into the		✓		✓	-	-	0

[89] See Leeds City Council, undated. Marine Aggregate in the Yorkshire Region: increasing the annual tonnage used [URL: http://www.leeds.gov.uk/docs/FPI_nrw_sub_019%20034%20marine%20aggregate%20in%20the%20yorkshire%20region.pdf] for a list of possible available wharfage on the Aire.

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	future (rather than being completely new impacts). **Plan level / regional / wider effects**. None noted.							
4. To protect and improve air quality	**Proximity of air quality receptors.** No AQMAs within 5km (however Wakefield's AQMA along the M62 (for NO_2) lies 7.25km north-west. Not within a Hazardous substances consultation zone. 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. **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. **Plan level / regional / wider effects.** Effects are considered local in nature.		✓	✓	✓	-	-	0
5. To use soil and land efficiently and safeguard or enhance their quality	**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 Board development high risk area. **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. **Plan level / regional / wider effects.** None noted	✓		✓		0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
6. Reduce the causes of climate change	**Proximity of factors relevant to exacerbating climate change.** Priority Habitat deciduous woodlands lie adjacent to the site. **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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 CO_2 emissions from transportation.	✓			✓	-	-	-
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[90] 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. 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. 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). **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	✓		✓		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	P	T	D	I	Score S	M	L
	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. **Plan level / regional / wider effects.** None noted.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified **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. **Plan level / regional / wider effects.** See local effects above.	✓			✓	+	+	0
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.** 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. **Plan level / regional / wider effects.** Considered to be the same as local effects.	✓		✓		-	-	0
10. To conserve or enhance the historic environment and its setting, cultural heritage	**Proximity of historic environment receptors.** No Conservation Areas within 1km. Registered Park and Garden- Ledston Hall and Park (Grade 2*, ID 1,001,221) lies 4.5km north-west outside of plan area. 1 Scheduled Monument within 2km, Ferrybridge near Knottingley (ID 1,005,799) 1.8km south-west. Listed Buildings - 16 Listed Buildings within 1km (all Grade 2), closest to site- Poole Manor Farmhouse (Grade 2, ID 1,167,503) 165m north. Named Designed Landscapes (within 2km): Site lies within Byram Park (Deer Park- Lancelot 'Capability'	✓		✓		0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
and character	Brown), Frayston Park 1.3km west. 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. 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. **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. 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. **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and	**Proximity of landscape / townscape receptors and summary of character.** 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.	✓		✓		0	+	+ ?

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
townscapes	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). 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. **Local effects.** 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 original ground levels. 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. 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. 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.							

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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). **Plan level / regional / wider effects.** None noted.							
12. Achieve sustainable economic growth and create and support jobs	**Proximity of factors relevant to sustainable economic growth.** Site is close to the strategic road network with good access to housing markets in Castleford (5km), Leeds (18km) and Selby (13km). **Local effects.** 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. **Plan level / regional / wider effects.** None noted.		✓		✓	0	0	0
13. Maintain and enhance the viability and vitality of local communities	**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. 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'.					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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). **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**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. **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. **Plan level / regional / wider effects.** None noted.					0	0	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.** 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. **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.		✓		✓	-	-	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
	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.							
16. To minimise flood risk and reduce the impact of flooding	**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%)).. 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. This site is not at risk from the 1:20 (5%) flood event. **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. **Plan level / regional / wider effects.** None noted.	✓	✓	✓		-	-	?

[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.

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
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.** No notable benefits to a changing population. **Plan level / regional / wider effects.** None noted.					0	0	0
Cumulative / Synergistic effects[92]								
Planning context	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 1.8 km south, while Knottingley is about 2km south. 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'*. 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.							
Other Minerals and Waste Joint Plan Sites	WJP06 3.6km south-east and MJP27 is 4.6km.							

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

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 – ALLOCATED SITE

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	**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. SINC: 4 SINCs 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 1.3km from an East Riding Candidate or Designate Local Wildlife Site.		✓	✓		0 ?	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
connectivity	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. 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. **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. 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. 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. **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.							
2. To enhance or maintain water quality and improve efficiency of water use	**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. 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		✓		✓	0 ?	0 ?	0 ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	by 2027'. 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. CAMS: Site is in 2 areas where surface water is available for licensing at least 95 per cent of the time. **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). **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.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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 application details NY/2009/0113/FUL); HGV vehicles: 118 (based on scale up of application details NY/2009/0113/FUL) Net change in daily trip generations: Light vehicles: 2; HGVs: 8. PRoW: See objective 14 below. Rail: 200m from track and 600m from railhead at MJP44; Strategic Road: M62 is 700m north. J35 is circa 7km north-west depending on route taken; Canal / Freight waterway: adjacent to Aire and Calder		✓	✓		0 ?	0 ?	0 ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	navigation. **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". 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. **Plan level / regional / wider effects.** None noted.							
4. To protect and improve air quality	**Proximity of air quality receptors.** Nearest AQMA is Wakefield Council M62 AQMA for NO_2 which lies 7.2km west. Not within a Hazardous Substances Consultation Zone. No health centres or clinics with 1km. Closest residential property is Heck Hall Farm 150m south-west, with 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. **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		✓		✓	0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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. **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.** ALC Grade 3. In terms of land stability development does not lie within or adjacent to a Coal Board development high risk area **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. **Plan level / regional / wider effects.** None noted.		✓	✓		0	0	0
6. Reduce the causes of climate change	**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. **Local effects.** As climate change is a global issue, effects are reported in wider effects below. **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.		✓	✓	✓	?	?	+ ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
7. To respond and adapt to the effects of climate change	**Proximity of factors relevant to the adaptive capacity[93] 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. ALC Grade 3. As the northern and middle sections appear to already be in use there is no impact here. CAMS: Site is in 2 areas where surface water is available for licensing at least 95 per cent of the time. **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 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. **Plan level / regional / wider effects.** None noted.					0	0	0
8. To minimise the use of resources and encourage	**Proximity of factors relevant to the resource usage of a site.** No spatial factors identified **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.		✓		✓	m +	m +	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	P	T	D	I	Score S	Score M	Score L
their re-use and safeguarding	**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 factors relevant to managing waste higher up the waste hierarchy.** No spatial factors identified **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. **Plan level / regional / wider effects.** None noted.	✓		✓		m +	m +	0
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**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'). Named Designed Landscapes (within 2km): None within plan area or in search area within East Riding. 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. 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. The North Yorkshire HLC Project database records number HNY708 identifies this site allocation as an	✓		✓		- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	S	M	L
	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. **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) – '*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. 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). **Plan level / regional / wider effects.** None noted.							
11. To protect and enhance the quality and character of landscapes and townscapes	**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. 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	✓	✓	✓	✓	--	--	--

Sustainability Objective	Key Observations on Significance	Score						
		P	T	D	I	S	M	L
	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'. **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. 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-industrialised with previous features lost and much man-made modification, with unsightly ad hoc development.[94]. 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							

[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
	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. 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. 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. A landscape regeneration strategy would be beneficial for the wider landscape. This could cover a wider area including East Riding. **Plan level / regional / wider effects.** None noted.							
12. Achieve sustainable economic growth and create and support jobs	**Proximity of factors relevant to sustainable economic growth** Site is close to Junction 34 of M62 with reasonable access to potential fuel sources. **Local effects.** 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. **Plan level / regional / wider effects.** None noted.					+	+	+
13. Maintain and enhance	**Proximity of factors relevant to community vitality / viability** 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					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
the viability and vitality of local communities	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. 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). **Local effects.** 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. **Plan level / regional / wider effects.** None noted.							
14. To provide opportunities to enable recreation, leisure and learning	**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). **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		✓	✓	✓	-	-	-

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	the nearest paths impacted at a moderate level, because of visibility of the upper storeys of main buildings and upper stories of the stack[95]. 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. 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. **Plan level / regional / wider effects.** None noted.							
15. To protect and improve the wellbeing, health and safety of local communities	**Proximity to population / community receptors / factors relevant to health and wellbeing** Several farm properties and what appears to be an industrial estate lie within 1 km. **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. **Plan level / regional / wider effects.** None noted.		✓	✓	✓	0 ? 	0 ? 	0 ?
16. To minimise flood risk and reduce the impact of	**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. **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					0	0	0

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
flooding	"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. **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 (though there is some overlap with WJP07 in this plan. **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. **Plan level / regional / wider effects.** None noted.		✓	✓		?	?	?

Cumulative / Synergistic effects[96]	
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.

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

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

- 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

WJP03 Southmoor Energy Centre, Former Kellingley Colliery – ALLOCATED SITE

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	Planning application (NY/2013/0128/ENV) for this development was granted planning permission in February 2015 No extra capacity is proposed as part of this submission in addition to that already permitted Estimated date of commencement - February 2020 (based on requirement for implementation specified in decision notice for planning application NY/2013/0128/ENV)

SA FINDINGS SUMMARISE SIGNFICANT 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	**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.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
geo-diversity and improve habitat connectivity	Sites of Importance for Nature Conservation (SINC): 2 potential SINCs (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 northern tip of site. Natural England were consulted on application NY/2013/0128/ENV but had no specific comments on this allocation. **Local Effects.** According to the Environmental Statement (ES) "*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*"97. **Plan level / regional / wider effects.** None noted.							
2. To enhance or maintain water quality and improve efficiency of water use	**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,					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	P	T	D	I	Score S	Score M	Score L
	Don and Rother – no surface water available / no groundwater available. **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 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. **Plan level / regional / wider effects.** None noted.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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) Access: New access onto A645 Weeland Road in accordance with decision notice for planning application NY/2013/0128/ENV. 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. Public Right of way (PRoW): Site not affected by PRoW **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)					m-	m-	m-

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	thresholds used in the assessment in most cases, but on the A645 in particular may be above the 10% thresholds used[98]. 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 negligible[99]. **Plan level / regional / wider effects.** None noted.							
4. To protect and improve air quality	**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). **Local effects.** The Non-Technical Summary that accompanies the ES for this site states: "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. 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.					-	-	-

[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	P	T	D	I	Score S	Score M	Score L
	An net increase in vehicles using the site is expected to result in a minor negative effect. **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.** Agricultural Land Classification (ALC): Grade 3 (though site is mostly hard standing / former industrial land); Contaminated Land: *"Due to the industrial past and present land uses within the* Application *Site there is the potential for contamination hotspots to be present"*[101]. **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 "*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 negligible significance"*. **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		✓	✓		- ?	- ?	- ?

[101] Ibid

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
	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 effects[102]. As magnitude has been identified as low (defined as "*a discernible adverse effect that is however unlikely to significantly alter human health*"[103] according to the ES) we have rated this as minor negative with uncertain effect in this assessment.							
6. Reduce the causes of climate change	**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). **Local effects.** See wider effects below. **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 tCO_2e/pa would be gained from producing energy from C and I waste and 99,540 tonnes CO_2e/pa would be gained from deriving energy from Municipal Solid Waste. This figure takes account of transporting the waste up to 155km. 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 positive[104].	✓		✓		m+	m+	m+
7. To respond and adapt to the	**Proximity of factors relevant to the adaptive capacity[105] of a site.** Flooding: <5% of this site to the north west is located in Flood Zone 2[106]/ <5% of the site is also subject to medium risk (1:100		✓	✓		+	+	+

[102] Barton Wilmore / Peel Environmental, 2013b
[103] Barton Wilmore / Peel Environmental, 2013b
[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]

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
effects of climate change	(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 locations that provide overall flood risk reduction or environmental benefits'. ALC Grade 3 (though site is mostly hard standing / former industrial land). **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. **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 footprint[107]..							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors noted. **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. **Plan level / regional / wider effects.** None noted.		✓	✓		m+	m+	m+

[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.
[107] The methane produced during the process of recovering energy from waste is burned as fuel, and therefore releases CO_2 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 CO_2. 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
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 waste one step up the waste hierarchy, producing heat and electricity. **Plan level / regional / wider effects.** None noted.		✓	✓		+	+	+
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**Proximity of historic environment receptors.** 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. **Local effects.** 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 2.5 km 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. **Plan level / regional / wider effects.** None noted.					0	0	0

[108] Barton Wilmore / Peel Environmental, 2013b

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
11. To protect and enhance the quality and character of landscapes and townscapes	**<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. 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. Intrusion: site is in a 'disturbed' area; Light Pollution: relatively high light pollution (in an area with 6-20 radiance). 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. 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*		✓	✓		-	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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, including views of the Proposed Development would be largely screened". 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. 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. **Plan level / regional / wider effects.** Effects are reported above..							
12. Achieve sustainable economic growth and create and support jobs	**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. **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	✓		✓	✓	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	P	T	D	I	Score S	Score M	Score L
	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 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] **Plan level / regional / wider effects.** Effects are reported above.							
13. Maintain and enhance the viability and vitality of local communities	**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. **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. **Plan level / regional / wider effects.** None noted.	✓	✓	✓		m+	m+	m+

[111] Barton Wilmore / Peel Environmental / Fitchner, 2013

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
14. To provide opportunities to enable recreation, leisure and learning	**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 discussed in the past. **Local effects.** According to the 'Sustainability Appraisal' *"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"*[112]. A Section 106 agreement will also secure the provision of funds to deliver green infrastructure to improve local environmental quality. **Plan level / regional / wider effects.** None noted.					0	0	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.** 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. **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		✓	✓		- ?	- ?	- ?

[112] Barton Wilmore / Peel Environmental / Fitchner, 2013

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	accidents and contamination issues either during clean up or operation). **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.							
16. To minimise flood risk and reduce the impact of flooding	**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. <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. 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. This site is not at risk from the 1:20 (5%) flood event. 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'. **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.					0	0	0

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	**Proximity to factors relevant to the needs of a changing population.** Site does not conflict with other allocations. **Local effects.** The site will manage waste and provide energy, which is essential for a changing population. **Plan level / regional / wider effects.** None noted		✓	✓	✓	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	Other Minerals and Waste Plan Sites: WJP21, MJP24 and WJP25 are within 5km but all relatively distant (over 2km). No cumulative

[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]

Joint Plan Sites	effects are predicted.
Historic minerals and waste sites	Historic minerals and waste sites: Although there are historic landfill sites in the vicinity, as well as the Gale Ash Disposal Site (2.3 km south) 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

- 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 – ALLOCATED SITE

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 SIGNFICANT 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	**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)) 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;					0	0	0

Sustainability Objective	Key Observations on Significance					Score		
		P	T	D	I	S	M	L
connectivity	Ecological Network: None. **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 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 site[115]. **Plan level / regional / wider effects.** There are no predicted effects on nationally designated sites or other constraints of wider than local importance. As this site already has planning permission it is assumed that mitigation is inherent to the proposal so there will be no significant effects.							
2. To enhance or maintain water quality and improve efficiency of water use	**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. **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					0	0	0

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

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	planning application for the site, in which flood risk and drainage were 'scoped out' on account of those issues not leading to significant environmental effects[116]. **Plan level / regional / wider effects.** Although a very small corner of the site falls within the outer 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. As this site already has planning permission it is assumed that mitigation is inherent to the proposal so there will be no significant effects.							
3. To reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	**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 1.6 km north of Whitley Bridge Station; Canal / Freight waterway: Site is 1.7 km North of the Aire and Calder Navigation; Railhead / Wharfe: None mapped, but Eggborough rail depot close by. Access: Existing access onto Selby Road (C410) approximately 125m off the A19. 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. Public Right of Way (PRoW): None on site / footpath at other site of A19.		✓	✓		-	-	- ?

[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	P	T	D	I	Score S	Score M	Score L
	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 " *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".* 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. **Plan level / regional / wider effects.** None noted.							
4. To protect and improve air quality	**Proximity of air quality receptors.** Air Quality Management Areas (AQMAs) or Hazardous Substances Consents Sites: No AQMAs 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. **Local effects.** The Environmental Statement (ES) concludes that '*the plant will require an Environmental Permit from the Environment Agency and the gasification process must meet strict*		✓	✓		- ?	- ?	- ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
	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'. 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, 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. **Plan level / regional / wider effects.** There were no potential air quality impacts identified at a regional level within the ES.							
5. To use soil and land efficiently and safeguard or enhance their quality	**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. **Local effects.** Much of this site is hard standing, with relatively areas of landscaping. Proposals at 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. **Plan level / regional / wider effects.** Considered the same as local effects – neutral.					0	0	0

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
6. Reduce the causes of climate change	**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). **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. **Plan level / regional / wider effects.** According to the Non-Technical Summary of the site's Environmental Statement "*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)".* 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.	✓		✓	✓	+	+	+ ?
7. To respond and adapt to the effects of climate	**Proximity of factors relevant to the adaptive capacity[117] 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					0	0	0 ?

[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
change	locations that provide overall flood risk reduction or environmental benefits'. ALC Grade 3. Much of this site is a redundant former Arable Biomass Renewable Energy (ARBRE) facility. **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. **Plan level / regional / wider effects.** None noted.							
8. To minimise the use of resources and encourage their re-use and safeguarding	**Proximity of factors relevant to the resource usage of a site.** No spatial factors noted **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 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.. **Plan level / regional / wider effects.** Considered the same as local effects..		✓	✓	✓	+	+	+ ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
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.** See plan level effects below. **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..	✓	✓	✓		m +	m +	m + ?
10. To conserve or enhance the historic environment and its setting, cultural heritage and character	**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. **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 topic[118]. During the consideration of this site for planning permission, North Yorkshire County Council's Development Management Archaeologist wrote that '*the proposed development has no known archaeological constraint*'[119]. **Plan level / regional / wider effects.** None noted.					0	0	0

[118] GPP Planning Ltd, 2014.
[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	P	T	D	I	Score S	Score M	Score L
11. To protect and enhance the quality and character of landscapes and townscapes	**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. 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'. Intrusion: Site is in a 'disturbed' area; Light Pollution: Site is quite highly light polluted (in an area with 3 to 6 radiance). **Local effects.** A Landscape and Visual Impact Assessment (LVIA) was carried out on the site which concluded that *"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 local landscape character, landscape of the Application Site and visual amenity of the surrounding area"*[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.					0	0	0

[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	P	T	D	I	Score S	Score M	Score L
	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.							
12. Achieve sustainable economic growth and create and support jobs	**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. **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. **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.		✓	✓	✓	m +	m +	m + ?
13. Maintain and enhance the viability and vitality of local communities	**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 south, Kellington is circa 1.3km west; Hensall is 2.1km west. **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. **Plan level / regional / wider effects.** None noted.		✓		✓	+	+	+ ?

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	Score M	Score L
14. To provide opportunities to enable recreation, leisure and learning	**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. **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. **Plan level / regional / wider effects.** None noted.					0	0	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.** 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 about 20m north / a substation lies 430m east. **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 adverse[122]. In addition, planning conditions restrict operational times that should help minimise effects. The NIAs at Junction 34 may also experience a minor elevation in noise, but not at a particularly		✓	✓		-	-	- ?

[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	P	T	D	I	Score S	M	L
	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. **Plan level / regional / wider effects.** None noted.							
16. To minimise flood risk and reduce the impact of flooding	**Proximity to flood zones.** Flood Zone: 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 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'. **Local effects.** The site produced a Flood Risk Assessment which was submitted with the planning application and found that "*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*"[123].					0	0	0

[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]

Sustainability Objective	Key Observations on Significance	P	T	D	I	Score S	M	L
	An additional Strategic Flood Risk Assessment (SFRA) Sequential Test[124] undertaken alongside the development of the Joint Plan has also concluded that this site would 'Pass'. **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.** Site does not conflict with other allocations. **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 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. **Plan level / regional / wider effects.** See local needs above.					+	+	+ ?
Cumulative / Synergistic effects[125]								
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.							

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

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.

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.