



Minerals and Waste Planning
Environmental Permitting
Quarry Consultant



**PLANNING APPLICATION FOR THE EXTRACTION
OF SAND AND GRAVEL AND THE RESTORATION OF THE LAND TO A
LANDFORM SUITABLE FOR ANGLING AND NATURE CONSERVATION, THE
CONSTRUCTION OF A CONVEYOR BRIDGE OVER THE RIVER CALDER, AND
THE CONSTRUCTION OF A WHARF TO THE AIRE AND CALDER NAVIGATION
TOGETHER WITH ANCILLARY ACTIVITIES AT STANLEY FERRY, WAKEFIELD**

SUPPORTING AND ENVIRONMENTAL STATEMENTS

**SUBMITTED ON BEHALF OF
WAKEFIELD SAND AND GRAVEL LTD
THORNHILL WORKS, CALDER ROAD
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PART A: SUPPORTING STATEMENT

1 INTRODUCTION

- 1.1 We are instructed by Wakefield Sand and Gravel Ltd (“the Applicant”) to submit a planning application for the extraction of sand and gravel and the restoration of the land to a landform suitable for angling and nature conservation, the construction of a conveyor bridge over the River Calder, and the construction of a wharf to the Aire and Calder Navigation together with ancillary activities (“the Application”). The location of the Site is shown on Drawing 10168/01.
- 1.2 The application is accompanied by an Environmental Statement (ES), which complies with the European Union Directive 97/11/EC “The Assessment of the Effects of Certain Public and Private Projects on the Environment” as amended. The amended Directive is implemented in England by the Town & Country Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017 No 571). Under the Directive, the development is classed as qualifying for Environmental Impact Assessment under Schedule 2.
- 1.3 The ES includes an assessment of the predicted effects of the proposed development, focusing on those effects that are likely to be significant. The approach to the Assessment and the content of the ES reflect the regulatory requirements and current good practice.
- 1.4 Stakeholders who may have an interest in the proposed development have been provided with the opportunity to comment on the proposals at various stages during the assessment process. This has included consultations with statutory and non-statutory bodies. The environmental issues raised as a result of these consultations are incorporated into the impact assessment.
- 1.5 In order to prepare the ES, the proposed development has been considered in the context of the locality of the Site, relevant planning policies, the need for the development and its potential significant environmental effects. The findings of the assessment process are documented within the ES and are summarised in a Non-Technical Summary.
- 1.6 The ES provides a description of the background to the application. Subsequent chapters describe the Site; how the Site will change with the proposal; consultations undertaken; the policy context; and an assessment of the proposals against key considerations and then conclusions.

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- 1.7 Independent consultants have been employed to address landscape, ecology, transport, hydrology and hydrogeology, heritage issues, ground stability, noise and soils and agriculture.
- 1.8 The main objectives of the ES are:
- 1 To identify and describe the existing environmental status of the land;
 - 2 To describe the proposed development including the working methods and the restoration scheme;
 - 3 To assess impacts on heritage, landscape, traffic, ecology, air quality, hydrology and hydrogeology, soils and agriculture, noise and blast vibration, and ground stability .
- 1.9 The main issues identified for consideration within the ES are therefore:
- Landscape and Visual Impact
 - Ecological Impact
 - Heritage
 - Transport
 - Hydrological and Hydrogeological Impact including Flood Risk
 - Noise
 - Air Quality (Dust)
 - Soils and Agriculture
 - Socio-economic Impacts
- In addition, ground stability has also been addressed
- 1.10 The planning application area covers 22.3 hectares and includes two fields on either side of the River Calder, which have been named Smalley Bight (northern side) and Birkwood (southern side). The application area also includes an existing access from Smalley Bight onto the A642 Aberford Road, the improvement of an existing access onto Ferry Lane from Birkwood, a conveyor bridge over the River Calder and a new wharf onto the Aire and Calder Navigation.
- 1.11 Particular features of this development will be the use of a conveyor to transport as dug mineral over the River Calder from Smalley Bight to the Site plant at the northern end of Birkwood, and the use of canal transport to convey the sand and gravel away from the Site. It is possible that the barges will be electrically powered. No sand and gravel will be transported by road, with the two road accesses only being used to access the Site by the workforce, services and to take plant in and out. The Applicant has the support of the Canal and Rivers Trust, which will receive an income from the Canal's use as well as promoting the use of the Canal for commercial transport.

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- 1.12 The Quarry will produce aggregate products including a range of different sized sands and gravel. These aggregate products will be manufactured at a plant compound at the northern end of Birkwood using a crusher, screens and a wash plant. When dispatched, the aggregate will be conveyed to the canal side and loaded into barges for transport either to a concrete block/concrete batching plant in Dewsbury, or to a new wharfage to be constructed in Leeds.
- 1.13 The Quarry will be operated by the Applicant, a Dewsbury based Company with an existing sand and gravel quarry at Forge Lane in Ravensthorpe operated by another company within the same Group, namely Dewsbury Sand and Gravel Ltd. Another sister company operates the Newlay Concrete block and concrete batching plant at Calder Road, Dewsbury, as well as block plants in Hull and Wath near Ripon. The Newlay Concrete Site is adjacent to the canal, where a new wharf would be constructed to receive the barge transport from Stanley Ferry.
- 1.14 The Quarry will provide a local source of aggregates to the local construction industry in West Yorkshire. The only other current source of sand and gravel in West Yorkshire is Forge Lane Quarry in Dewsbury, which the Stanley Ferry operation would replace. Without the resource provided by Stanley Ferry, the local construction industry would face higher costs arising from reduced competition and increased travel distances from more distant sources outside the County. The Stanley Ferry Quarry would provide a more sustainable solution for the supply of aggregates once Forge Lane Quarry is exhausted, than the more distant sources.
- 1.15 It is estimated that the Site will yield around 1.6 million tonnes, to be extracted at the rate of 150,000 tonnes per annum over a period of around 11 years. Restoration would be progressive and would be completed approximately 12 months after extraction had ceased, giving an operational period of around 12 years. A lake or lakes would be created to be used for angling and amenity purposes. In addition to providing opportunities for recreational angling and nature conservation, the two lakes will provide additional flood attenuation storage.
- 1.16 Quarrying would first take place at Birkwood, following which the conveyor bridge would be installed and Smalley Bight worked. The Site plant compound would remain at the northern part of Birkwood throughout.
- 1.17 Smalley Bight would be accessed off the A642 Aberford Road via the existing farm access just north of Stanley Grove Primary and Nursery School. Birkwood would be accessed off Ferry Lane at an existing field access immediately on the north side of the bridge over the River Calder. Both accesses would only be used by the Applicant's employees, service supplies such as fuel tankers and fitters vans, and to bring in the

site plant on low loaders at the beginning and end of operations. There might be occasional visits by low loaders during the working period if any plant needs to be replaced.

The Project Team

- 1.18 The ES has been project managed by MWP Planning, which has contributed the project description, the air quality and socio-economic assessments and the planning input. The following consultants have undertaken specific assessments for the ES and the Supporting Statement:

Landscape Assessment	Mowbray Associates Ltd of Thirsk, North Yorkshire
Ecological Impact Assessment	RDF Ecology of Rotherham, South Yorkshire
Hydrogeological and Hydrogeological Assessment	S M Foster Associates Ltd of Boston Spa, West Yorkshire
Transport Statement	Paragon Highways Consultants of Wakefield, West Yorkshire
Noise Assessment	S & D Garritt of Wadworth, Doncaster, South Yorkshire
Heritage Assessment	Peter Cardwell of Richmond, North Yorkshire
Ground Stability	ARP Associates of Leeds, West Yorkshire
Soil Assessment	Land Restoration and Management Ltd of Huddersfield, West Yorkshire

2 SITE DESCRIPTION, GEOLOGY AND MINERAL RESERVES

Site Description

- 2.1 As noted previously, the Site covers 22.3 ha and is shown in its setting in Figure 1 following. Drawing 10168/01 shows the Site in more detail with drawing 10168/02 showing the Site's topography.
- 2.2 The land occupies the valley bottom to either side of the River Calder, to the east of the A642 at Stanley and to the west of the Aire & Calder Navigation. The Site occupies two fields which are both under arable cropping. Neither field is subject to annual flooding with the Smalley Bight field being protected by levee flood defences. Immediately to the north of the Smalley Bight field is a large water treatment works.

The flood defences held during the extreme flooding events in December 2019 and February 2020.

FIGURE 1 GOOGLE EARTH IMAGE OF THE SITE AND ITS LOCALITY



- 2.3 The Aire & Calder Navigation runs north south on the eastern boundary of the Birkwood field, with its towpath on the eastern side of the canal. A path also runs along the western side of the canal.
- 2.4 A public right of way, Stanley No.12 passes north to south on the western boundary of the Smalley Bight Field, with Stanley No. 24 on the south side of the western part of the field. The Trans Pennine Trail is located on a former railway line to the south of the Site and utilises Stanley Footpath No. 12. Neither right of way is directly affected by the proposal and no diversions would be required.
- 2.5 Vehicular access to the Smalley Bight field is off the A642 Aberford Road, but it is proposed only to use this access to bring plant, equipment and employees onto this part of the Site. All mineral dug from the Smalley Bight field would be conveyed over the river to the east.
- 2.6 Vehicular access to the Birkwood field would be taken off Ferry Lane but as with the Smalley Bight field, it is proposed only to use this access to bring plant, equipment and employees onto this part of the Site. All mineral dug from the Site would be transported away by barge along the Aire & Calder Navigation.
- 2.7 The closest dwellings lie immediately to the west of the Smalley Bight field, including Smalley Bight Farm (115m), Smalley Bight (70m), Bungal House (204m) and a single

house on Water Lane (35m). Houses on the east side of Aberford Road are just over 200m distant as is Stanley Grove Junior and Infants School. A single dwelling on Ferry Lane is 190m south of the Birkwood Farm field, and there are a number of houses fronting onto Ferry lane further to the south which are 270m at their closest, but which do not have a direct line of sight to the Site.

- 2.8 There are a number of industrial premises and a marina on Ferry Lane to the south, together with the Stanley Ferry pub. The Stanley Ferry Aquaduct is also located to the south east of the Site. The Aquaduct is a Scheduled Monument and Grade 1 Listed Building.
- 2.9 The local road network comprises the A642 to the west of the Site which runs eastward from Wakefield towards M62 junction 30. To the south of the Site is Ferry Lane which meets the A642 to the south west and runs eastward to Altofts, becoming Birkwood Road.
- 2.10 The geology of the land consists of alluvial fill comprising clay, silt, sand and gravel. Both parts of the Site have been trial pitted and drilled to establish the geological formation present.
- 2.11 The mean thickness of the overburden/soils is estimated at 2 to 2.3m overlying a mean thickness of sand and gravel of between 6 and 6.3m. The gravel component meets most BS standards for aggregate products and the sand is suitable for both concreting and asphaltting sand products.
- 2.12 The hydrology of the Site is dominated by the presence of the River Calder which runs between the two fields. The Site's position in the valley bottom between the canal and river will dictate the depth of the water table across the Site.

Geology, Mineral Reserves and Voidspace

- 2.13 British Geological Survey (BGS) mapping, supported by historic site investigation records, demonstrate that the Stanley Ferry Site is underlain by superficial geological deposits consisting of Alluvium above River Terrace Deposits. The Alluvium consists of a variable combination of sand, silt and clay. The underlying River Terrace Deposits consist of sand & gravel. The superficial deposits are themselves underlain by bedrock consisting of Pennine Middle Coal Measures mudstone.
- 2.14 The surrounding area has an extensive history of mineral development with a history of deep and opencast coal mining and the extraction of brick clay and other minerals. Stanley Marsh Nature Reserve, located approximately 500m west of the Site, is established on land formerly subject to deep coal mining activity.

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- 2.15 Both areas of the Site were subject to detailed site investigation during the period 1986 to 1988. In the southern part of the Site, site investigation demonstrated that the superficial deposits are thickest in the south and west with a maximum thickness of 10.8m reducing towards the north east to a minimum thickness of 4.8m. In the northern part of the Site the superficial deposits achieve a maximum thickness of 9.5m at the western boundary, reducing to a minimum of 6.0m in the north east.
- 2.16 Across the Site the thickness of the Alluvium varies from a minimum of 0.1m to a maximum 5.0m with an average of approximately 2.0m. The underlying sand & gravel deposits have a minimum thickness of 3.2m increasing to a maximum of 9.7m with an average across the Site of approximately 6.0m.
- 2.17 Groundwater is present within the superficial deposits, as demonstrated by recent and historic site investigation. The superficial deposits are designated 'Secondary A' aquifer by the Environment Agency with 'high' vulnerability to groundwater contamination. The underlying bedrock mudstone is also classified Secondary A aquifer, although the designation refers to the Pennine Middle Coal Measures formation in the area in general rather than specifically to the mudstone unit beneath the Site.
- 2.18 It is anticipated that there will be a degree of hydraulic continuity between groundwater in the River Terrace Deposits and the River Calder. However, as demonstrated at other sand & gravel workings in the Calder Valley, river bed sediments tend to have low hydraulic conductivity and limit the rate at which water can move between river and aquifer.
- 2.19 It is estimated that the Site will yield around 1.6 million tonnes, to be extracted at the rate of 150,000 tonnes per annum over a period of around 11 years. Restoration would be progressive and would be completed approximately 12 months after extraction had ceased, giving an operational period of around 12 years.
- 2.20 Slope Stability Analysis undertaken in 2019 has made recommendations for the final face designs and restoration profiles. The mineral would be dug to the final profiles with soil spread over the in situ sand and gravel and alluvium as part of the restoration works.
- 2.21 A total of 6 monitoring boreholes have been installed around the Site margins, the location of which is shown on drawing 10168/03. Monitoring began in August 2019 and has continued on a monthly basis. The results recorded to March 2020 are shown in Figure 2 following.

Figure 2: Groundwater Monitoring

Date	GW level (m aod)	BH1	BH2	BH3	BH4	BH5	BH6
02/08/2019		13.5	14.57	14.5	13.94	14.83	*
10/09/2019		*	13.01	13.81	12.82	*	*
11/10/2019		13.81	13.07	13.92	13.98	14.81	14.57
11/11/2019		14.42	14.03	14.57	13.74	14.81	14.81
13/01/2020		14.17	13.5	14.75	13.33	14.23	14.22
12/03/2020		14.82	14.33	15.25	13.92	14.81	14.84

3 THE PROPOSED DEVELOPMENT

- 3.1 Drawing 10168/03 shows the Site boundaries and the access together with the plant compound and extraction areas.
- 3.2 Initial operations would establish the access road from Ferry Lane and the Site compound at the northern end of the Birkwood field where office and amenity cabins would be installed, together with the processing plant and stockpile area. The compound will need to be lit at night, with lighting designed to minimise external light spillage. Details will be submitted for the approval of the Mineral Planning Authority before the lighting is installed.
- 3.3 The processing plant will consist of a crusher and screen, a wash plant, conveyors and both as dug and processed material stockpiles. A loading hopper and a short conveyor will be erected to transport sand and gravel to the canal wharf. The conveyor will pass over the canal side path, whilst maintaining pedestrian passage underneath, where the product will drop into a barge via a chute. A cover under the conveyor will prevent material falling off onto the path.
- 3.4 Mineral and product will be handled with two wheeled loading shovels, with the excavation dug with an excavator and mineral transported to the as dug stockpile using two dump trucks.
- 3.5 A new wharfage facility will be constructed to a design to be prepared in conjunction with the Canal and Rivers Trust. If necessary, the canal edge will be reinforced and the canal dredged for a short length. The wharf will need to be of sufficient length to accommodate two barges, the one being loaded will have to be moved slowly under the loading chute as it is filled.
- 3.6 Access will be obtained from an existing gated field access off Ferry Lane just north of the River Calder bridge. The access onto Ferry Lane will be subject to temporary widening to enable plant items to be brought in with low loaders.

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- 3.7 An internal access road will be constructed on the eastern boundary of Birkwood, with the surface soils first stripped and used to form a 3m high screen mound between the access road and the Site boundary as shown on Drawing 10168/03.
- 3.8 A wharf would be built on the canal side in a location to be determined following a physical survey of the canal and with the assistance of the Canal and Rivers Trust. It will be necessary to install some lighting for the compound and river conveyor.
- 3.9 Soils would be stripped from beneath the site compound and used to assist the construction of the eastern perimeter 3m high screening mound adjacent to the canal boundary. Security fencing will be erected on any boundary adjacent to all public access areas such as Ferry Lane and the Canal path. The fencing is likely to be a 2.4m high Paladin fence in a profiled open steel mesh with green polyester coating finish. Gates will be to match.
- 3.10 A series of three settlement lagoons will be constructed by excavation at the western extreme of Birkwood, with soils used to construct adjacent 3m high screen mounds and overburden placed to the mound on the south side of the plant compound. The mineral excavated will be taken to the plant compound for processing.
- 3.11 The settlement lagoons will take used water from the washing plant and pumped water from the excavation. Clean water will be returned to the washing plant for re-use, and will be used for dust control when necessary with any excess discharge to the river. The discharge to the river will require an environmental permit to be obtained from the Environment Agency, as will the Smalley Bight discharge.
- 3.12 Two pipe runs will be placed at the side of a haul road constructed adjacent to the river, with one taking used water to the lagoons and the other, clean water to the wash plant. The details of the discharges to the river, including the permanent arrangements for storm overflows following restoration will be the subject of consents to be obtained from the Environment Agency. The design of the discharges will be completed with the assistance of discussions with the Agency at the appropriate time.
- 3.13 Mineral extraction will then start in Phase 1 as shown on drawing 10168/03, working eastwards to Phase 4 and then turning northward into Phase 5. Water will be pumped to the lagoons to keep the excavation dry.
- 3.14 Soils will be initially stripped sufficient for a year's working area and used to form the perimeter screen mounds, although sufficient area will need to be stripped to provide essential screen mounds. The objective will be to maintain as much land as possible in agricultural production for as long as possible.

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- 3.15 As excavation proceeds through the phases, the side banks of what will ultimately become the Birkwood lake will be formed as shown on drawing 10168/04. Bank profiles where nature conservation will be the objective will be less steeply profiled. Overburden and soils taken from successive phases will be directly placed to form the finished profiles as excavation proceeds, subject to the formation of the perimeter screen mounds. A buffer strip will be maintained against the river and the canal boundaries, likely to be a minimum of 20m, to be determined by the geotechnical stability assessment (Appendix ES7). No extraction will take place within the buffer strip.
- 3.16 Phase 5 will intercept a culvert which takes a land drain from the east side of the Canal, under the canal to a discharge headwall in the east bank of the river, just south of the plant compound location. The culvert will be dug out and the drain allowed to discharge into the excavation void.
- 3.17 Following the completion of mineral extraction at Birkwood, the perimeter soil mounds would be removed to be placed on the lake banks. However, it will be necessary to keep some of the soil mounds in place where noise mitigation is required around the plant compound. The overburden mound will also be maintained to act as a noise screen. The two roadways on the east and river side will be maintained for the full 11 year period as access will be required throughout this time to the lagoons and between Ferry Lane and the plant compound.
- 3.18 A spillway will either be constructed or the existing concrete headwall utilised, to provide a means of controlling maximum water levels in the lake but allowing flood water to discharge into the river.
- 3.19 The plant compound will remain in place to process Smalley Bight mineral and supply product to the canal from transport off-site. The excavator and dump trucks will be transported to Smalley Bight by road to undertake operations on that side.
- 3.20 When mineral extraction at Birkwood has been completed, it will be necessary to start mineral extraction at Smalley Bight during year 6. Preparatory works will need to start prior to the completion of Birkwood in order to maintain production. These will consist of the erection of a security fence along the western edge of the Smalley Bight field, with a secure gated access. A small car park will be provided for up to 6 employees cars, together with an amenity cabin. A haul road will be constructed on the inside of the river levee bank to provide access to the western end of the river conveyor, with soils stripped from under the roadway used to form the perimeter soil mounds.
- 3.21 A conveyor and bridge will be constructed to carry the as dug mineral from the Smalley Bight field over the river to the processing plant. Mineral will be transported to the river

conveyor using two dump trucks and handled with a wheeled loading shovel. A typical cross section through the river bridge/conveyor is shown below as Figure 3 together with an image of what the structure is likely to look like as Figure 4. The bridge/conveyor will sit on a concrete structure at either side and will need to be at sufficient height to clear the levee banks on both sides. As the conveyor/bridge will not be required until 6 years after operations commence, it is suggested that the design should be submitted for approval by the mineral planning authority prior to construction. The construction of the conveyor bridge will also require an environmental permit to be obtained from the Environment Agency.

Figure 3: Typical Conveyor Bridge Cross Section

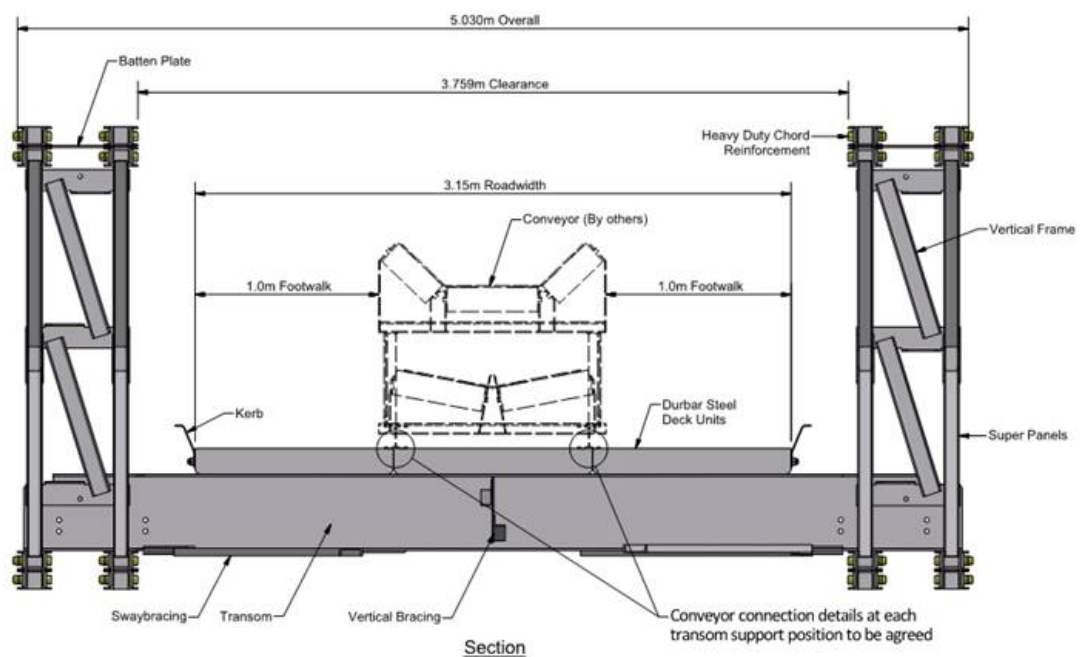


Figure 4: Typical Image of Conveyor Bridge



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- 3.22 Settlement lagoons will be constructed in the position shown on drawing 10168/03, to enable the dewatering of the excavation, with clean water discharged to the river or used for dust suppression.
- 3.23 Soil and overburden would be stripped from Smalley Bight starting with Phase 6 and used to construct a soil mound along the western side of the field, which will also function as a noise baffle mound. The initial soil strip will be sufficient to construct the western soil mound and to bare sufficient area to provide mineral for the first year's extraction. Thereafter soils will be stripped to provide sufficient mineral for a year's production and stored in the perimeter soil mounds.
- 3.24 The initial overburden strip will be placed to a tip (OB1) adjacent to the western end of the river conveyor bridge.
- 3.25 Smalley Bight will be worked progressively west to east, with overburden and soils placed in worked out areas to form the required side slopes for the water bodies that will remain after extraction has been completed. A buffer strip will be maintained against the river bank and levees, likely to be a minimum of 20m, to be determined by the geotechnical stability assessment. No extraction will take place within the buffer strip.
- 3.26 Mineral will be dug with an excavator and transported in 2 dump trucks to a stockpile adjacent to the western end of the river conveyor bridge using a haul road running parallel with the river as shown on drawing 10168/03. It will be loaded to a hopper feeding the river conveyor using a wheeled loader.
- 3.27 Mobile plant will be brought onto the Smalley Bight field using the farm access off Aberford Road, which will also be used as the access for employees cars, suppliers and fitters. The number of vans and fuel bowsers will amount to one or two per day.
- 3.28 Once the Smalley Bight field has been worked out, the river conveyor will be removed and the working area will be restored to a lake as shown on drawing 10168/04. The haul roads will be removed together with the amenity cabin and the parking area, and restored with soil from the perimeter mounds. The settlement lagoons will be capped and soiled. The overburden tip OB1 will be removed and placed back into the excavation void to assist in forming the lake bank profiles as will the remaining soils.
- 3.29 Once excavation has been completed in Smalley Bight, the Birkwood site compound and infrastructure will be removed together with the haul roads. The overburden tip OB2 will be spread over the compound area and the remaining soils spread. The conveyor to the canal will be recovered and the access strip restored and soiled. The field fence will be replaced. It is likely that the wharf itself will be retained.

3.30 The anticipated programme of working and restoration is shown in Figure 5 below.

3.31 Proposed operational hours will be 07:30 to 17:30 on weekdays and 07:30 to 13:00 on Saturdays. There would be no working on Sundays or public holidays.

Figure 5: Anticipated Working and Restoration Programme

	Birkwood			Smalley Bight		
	Set up	Excavation	Restoration	Set up	Excavation	Restoration
2021		Lagoons/P1				
2022		P1				
2023		P2	P1			
2024		P3	P2			
2025		P4	P3			
2026		P5	P4			
2027			P5		P6	
2028					P7	P6
2029					P8	P7
2030					P9	P8
2031					P10	P9
2032					P10	P10
2033	Removal of plant compound/lagoons/haul roads/river conveyor/wharf & wharf conveyor; Complete landscape restoration			Removal of lagoons/haul roads/river conveyor; Complete landscape restoration		

4 THE RESTORATION SCHEME

4.1 The maximum depth of working will be around 11m below existing ground levels. Groundwater levels are being monitored and so far have been between 4.9m and 2.59m below ground level, with a maximum range in each borehole of up to 1m. The restoration scheme will therefore centre on two water bodies set within a landscaped perimeter, one on each side of the river. The depth of water in the lakes will vary summer to winter but is likely to be around 6m.

4.2 The side slopes of the water bodies will be dug to the desired finished profile subject to being covered with overburden and soils. The finished profile will be suitable for a mix of nature conservation and angling on both sides of the river. There is no available infill material and so the margins of both lakes would be based on the total area of mineral extraction, with the objective of maximising mineral yield whilst accommodating lake margin profiles suited to the intended afteruses.

4.3 Figure A2C, taken from the Landscape and Visual Impact Assessment which is part of the Environmental Statement accompanying this application, illustrates the proposed

restoration scheme. Drawing 10168/05 shows the proposed side profile where fishing pegs would be provided. Shallower profiles with scrapes and deepened out areas will be created where nature conservation will be the desired outcome.

- 4.4 More detailed drawings would be submitted to the Mineral Planning Authority for approval before any restoration works began.

Restoration Scheme

- 4.5 As previously noted, the restoration scheme aims to provide a lake on each side of the River Calder, with bank profiles suitable for a mix of angling and nature conservation. The restored land will be free draining with no need for positive drainage.
- 4.6 There is a degree of uncertainty about the mineral reserve itself and the restoration water table level. The restoration scheme is therefore of necessity, based on a concept plan which may require amendment to the details as the excavation proceeds. The scheme is shown on Figure A2C which is taken from the Landscape and Visual Impact Assessment forming Appendix ES2 of the Environmental Statement.
- 4.7 Overburden will be spread over the mineral profile to a depth of 250mm followed by a similar depth of topsoil. Both overburden and topsoil will be spread below the waterline to a depth required for vegetation growth. The topsoil will be spread using an excavator to minimise compaction, with samples taken to determine whether any mineral deficiencies will need to be corrected.
- 4.8 All soil handling will only be carried out in suitable weather conditions when soil moisture conditions are suitable and the topsoil is in a dry and friable condition.
- 4.9 The landscape design incorporates a number of elements including:
- Broadleaved oak and birch woodland with a rich understorey of shrub species;
 - Wet (carr) woodland providing a mix of willow species with alder;
 - Scrub to provide habitat and cover;
 - Individual trees to provide softening of the lake edges;
 - Marginal vegetation providing a transition between land and water;
 - Ponds and scrapes to provide temporary habitats in times of flood;
 - Wet grassland providing wildlife connection between the marginal vegetation and scrub and an opportunity for the introduction of a greater variety of species;
 - Rough meadow grassland with selected areas mown for access;
 - perimeter paths; and
 - fishing pegs.

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- 4.10 Planting and sowing would take place during the first appropriate season following the stabilising of the soils around the lakes. The establishment grass sward would be sprayed off prior to woodland, tree and scrub planting with an 80cm diameter circle cleared for each plant station. All plants and seed would be of British origin.

Tree and Shrub Planting

- 4.11 A native oak and birch woodland with understorey mix is proposed which promotes robust, rapid establishment and habitat gain via the balanced use of pioneer species. A small percentage of wild service tree *Sorbus torminalis* and spindle tree *Euonymus europaea* would also be included in the mix to help establish a new community of these plants. Plants would comprise whips and pot-grown stock which would be pit planted using top soil as backfill. The proposed D1 mix is as below.

Mix D1: Oak and birch woodland				
Tree species (70% of mix)	%	Planting group	Planting centres	Notes
<i>Quercus robur</i>	35	3 - 5	2.5m staggered	Apply plastic tree shelter and stake
<i>Betula pendula</i>	15	3 - 5	2.5m staggered	Apply plastic tree shelter and stake
<i>Betula pubescens</i>	10	3 - 5	2.5m staggered	Apply plastic tree shelter and stake
<i>Sorbus aucuparia</i>	10	3 - 5	2.5m staggered	Apply plastic tree shelter and stake
Shrub/understorey species (30% of mix)	%	Planting group	Planting centres	Notes
<i>Crateagus monogyna</i>	14	3 - 5	1.5m staggered	Apply spiral guard & cane
<i>Prunus spinosa</i>	5	3 - 5	1.5m staggered	Apply spiral guard & cane
<i>Ilex aquifolium</i>	3	3 - 5	1.5m staggered	Apply plastic shrub shelter and stake
<i>Fragula alnus</i>	2	3 - 9	1.5m staggered	Apply spiral guard & cane
<i>Rosa canina</i>	2	3 - 9	1.5m staggered	Apply spiral guard & cane
<i>Viburnum opulus</i>	2	3 - 9	1.5m staggered	Apply spiral guard & cane
<i>Euonymus europaea</i>	1	3 - 9	1.5m staggered	Apply spiral guard & cane
<i>Sorbus torminalis</i>	1	3 - 9	1.5m staggered	Apply spiral guard & cane

- 4.12 A native wet woodland mix is proposed which would add to the diversity of the proposed woodland on site and provide a transitional habitat between the open water and the proposed oak and birch woodland as specified at Mix D2 following.
- 4.13 The alder, birch and alder buckthorn plants would be a combination of 40-60cm transplants and pot-grown stock and pit planted using top soil as backfill. The willow species would be sourced locally if possible as 600mm high cuttings. Cuttings should be planted between mid-November and the beginning of April.

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- 4.14 Individual trees would be a mix of large willow species with alder as proposed at D3 Mix below. The trees would be 60-90cm feathereds which would be pit planted using top soil as backfill.

Mix D2: Wet (carr) woodland				
Tree species	%	Planting group	Planting centres	Notes
<i>Alnus glutinosa</i>	35	3 - 5	3m staggered	Apply plastic tree shelter and stake
<i>Betula pubescens</i>	20	3 - 5	3m staggered	Apply plastic tree shelter and stake
<i>Salix caprea</i>	15	5 - 7	2m staggered	
<i>Salix cinerea</i>	10	5 - 7	2m staggered	
<i>Salix viminalis</i>	10	5 - 7	2m staggered	
<i>Frangula alnus</i>	10	3 - 5	1.5m staggered	Apply plastic shrub shelter and stake
Mix D3: Individual trees				
Species	%	Planting group	Notes	
<i>Alnus glutinosa</i>	40	Plant as a mixed group in the locations shown	Apply plastic tree shelter and stake	
<i>Salix alba</i>	30		Apply plastic tree shelter and stake	
<i>Salix fragilis</i>	30		Apply plastic tree shelter and stake	

- 4.15 A native scrub mix D4 is proposed comprising small native trees and shrub species. The trees would be transplants which would be pit planted using top soil as backfill.

Mix D4: Scrub				
Species	%	Planting group	Planting centres	Notes
<i>Crateagus monogyna</i>	50	3 - 5	1.5m staggered	Apply spiral guard & cane
<i>Prunus spinosa</i>	20	3 - 5	1.5m staggered	Apply spiral guard & cane
<i>Salix caprea</i>	10	3 - 5	1.5m staggered	Apply spiral guard & cane
<i>Sambucus nigra</i>	5	3 - 9	1.5m staggered	Apply spiral guard & cane
<i>Malus sylvestris</i>	5	3 - 9	1.5m staggered	Apply spiral guard & cane
<i>Rosa canina</i>	5	3 - 9	1.5m staggered	Apply spiral guard & cane
<i>Viburnum opulus</i>	5	3 - 9	1.5m staggered	Apply spiral guard & cane

Aftercare Requirements

- 4.16 Planting would be tended for 60 months (the aftercare period) from the date of completion of all works.
- 4.17 Throughout the aftercare period all planting areas would be kept weed free. This would be achieved by the use of a suitable herbicide or by regular cultivation. A minimum of three visits for weed control would be required during the growing season.
- 4.18 All plastic shelters, spiral guards and stakes/supports would be maintained in firm positions within the ground. Subject to growth, shelters, guards and stakes/supports would be removed from plants after three to five years once the plants were established. All items removed would be disposed of off-site before the end of the aftercare period.
- 4.19 Plants that failed to thrive, were removed, uprooted or destroyed or that died during the aftercare period would be replaced with equivalent plants as soon as possible during the following planting season. Replacements would be of the same size and species as that originally specified unless otherwise agreed. Defects would be made good by the end of the planting season of the year in which the defect was identified.

Marginal and Aquatic Vegetation

- 4.20 Marginal and aquatic vegetation areas would be planted up with common reed as plug plants which can be obtained either as 110cc and 230cc root trainer cells as Mix D5 below. This would provide a foundation habitat for natural colonisation by other marginal species.

Mix D5: Marginal/aquatic vegetation			
Species	Common name	Usage	%
<i>Phragmites australis</i>	Common reed	Taller marginal	100

- 4.21 The development of aquatic vegetation in the ponds and scrapes could be speeded up if required by planting a selection of low marginal plants as specified in Mix D6 below.

Mix D6: Ponds and scrapes			
Species	Common name	Usage	%
<i>Iris pseudacorus</i>	Yellow iris	Taller marginal, marshy shallows and seasonally flooded scrapes	15
<i>Lythrum salicaria</i>	Purple loosestrife	Taller marginal, marshy shallows and seasonally flooded scrapes	15
<i>Cardamine pratensis</i>	Cuckooflower	Marshy shallows and seasonally flooded scrapes	10

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<i>Mypotis scorpioides</i>	Water forget-me-not	Low marginal plants	10
<i>Lychnis flos-cuculi</i>	Ragged robin	Marshy shallows and seasonally flooded scrapes	10
<i>Carex acutiformis</i>	Lesser pond sedge	Low marginal plants	10
<i>Mentha aquatica agg.</i>	Water mint	Low marginal plants	5
<i>Alisma plantago-aquatica</i>	Water plantain	Low marginal plants	5
<i>Caltha palustris</i>	Marsh marigold	Low marginal plants, marshy shallows and seasonally flooded scrapes	5
<i>Ranunculus flammula</i>	Lesser spearwort	Low marginal plants, marshy shallows and seasonally flooded scrapes	5
<i>Stachys palustris</i>	Marsh woundwort	Low marginal plants, marshy shallows and seasonally flooded scrapes	5
<i>Lycopus europaeus</i>	Gypsywort	Low marginal plants, marshy shallows and seasonally flooded scrapes	5

Wet Grassland Seed Mix

- 4.22 A suitable mix for the wet grassland areas could be Emorsgate EM8 Meadow mixtureⁱ for wetlands as detailed as Mix D7 below.

Mix D7: Wet grassland		
Wildflowers (20% of mix)		
Latin name	Common name	%
<i>Achillea millefolium</i>	Yarrow	0.2
<i>Achillea ptarmica</i>	Sneezewort	0.2
<i>Betonica officinalis - (Stachys officinalis)</i>	Betony	1
<i>Centaurea nigra</i>	Common knapweed	2.5
<i>Filipendula ulmaria</i>	Meadowsweet	2
<i>Galium verum</i>	Lady's bedstraw	2
<i>Leontodon hispidus</i>	Rough hawkbit	0.5
<i>Leucanthemum vulgare</i>	Oxeye daisy	0.5
<i>Lotus corniculatus</i>	Birdsfoot trefoil	0.7
<i>Lotus pedunculatus</i>	Greater birdsfoot trefoil	0.5
<i>Plantago lanceolata</i>	Ribwort plantain	1
<i>Primula veris</i>	Cowslip	1
<i>Prunella vulgaris</i>	Selfheal	1.5
<i>Ranunculus acris</i>	Meadow buttercup	2

<i>Rhinanthus minor</i>	Yellow rattle	1.5
<i>Sanguisorba officinalis</i>	Great burnet	1.5
<i>Silaum silaus</i>	Pepper saxifrage	0.5
<i>Silene flos-cuculi</i> - (<i>Lychnis flos-cuculi</i>)	Ragged robin	0.4
<i>Succisa pratensis</i>	Devil's-bit scabious	0.5
Grasses (80% of mix)		
Latin name	Common name	%
<i>Agrostis capillaris</i>	Common bent	10
<i>Alopecurus pratensis</i>	Meadow foxtail (w)	1
<i>Anthoxanthum odoratum</i>	Sweet vernal-grass (w)	3
<i>Briza media</i>	Quaking grass (w)	2
<i>Cynosurus cristatus</i>	Crested dogstail	24
<i>Deschampsia cespitosa</i>	Tufted hair-grass (w)	1
<i>Festuca rubra</i>	Slender-creeping red-fescue	32
<i>Hordeum secalinum</i>	Meadow barley (w)	1
<i>Schedonorus pratensis</i> - (<i>Festuca pratensis</i>)	Meadow fescue (w)	6

Rough Meadow Grassland

- 4.23 A rough grassland margin would be developed between the woodland and marshy areas using a mix such as Emorsgate EM2 Standard general purpose meadow mix¹ as specified at Mix D8 below.

Mix D8: Rough meadow grassland		
Wildflowers (20% of mix)		
Latin name	Common name	%
<i>Achillea millefolium</i>	Yarrow	0.3
<i>Centaurea nigra</i>	Common knapweed	3.5
<i>Daucus carota</i>	Wild carrot	1.3
<i>Galium verum</i>	Lady's bedstraw	3
<i>Knautia arvensis</i>	Field scabious	0.5
<i>Leontodon hispidus</i>	Rough hawkbit	0.2
<i>Leucanthemum vulgare</i>	Oxeye daisy	0.5
<i>Lotus corniculatus</i>	Birdsfoot trefoil	0.5

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<i>Malva moschata</i>	Musk mallow	2.5
<i>Plantago lanceolata</i>	Ribwort plantain	1
<i>Primula veris</i>	Cowslip	1
<i>Prunella vulgaris</i>	Selfheal	1.7
<i>Ranunculus acris</i>	Meadow buttercup	1.5
<i>Rhinanthus minor</i>	Yellow rattle	2.5
Grasses (80% of mix)		
Latin name	Common name	%
<i>Agrostis capillaris</i>	Common bent	8
<i>Cynosurus cristatus</i>	Crested dogstail	40
<i>Festuca rubra</i>	Slender-creeping red-fescue	28
<i>Phleum bertolinii</i>	Slender cat's-tail	4

Establishment grass sward / soil bund grass mix

- 4.24 All woodland and scrub areas would be sown with a mixture of fine grasses to stabilise the soils and to allow effective weed control prior to ground preparation and spraying out for the woodland planting. The soil bunds would also be seeded with this mix as soon as possible after formation to provide 'greening up' to reduce the visual effects of the linear nature of the bunds within the landscape.
- 4.25 The seed mix would be Emorsgate EG25 Basic old fashioned grazing mixture² as specified at Mix D9 below.

Mix D9: Establishment grass sward / soil bund grass mix		
Latin name	Common name	%
<i>Agrostis capillaris</i>	Common bent	2
<i>Cynosurus cristatus</i>	Crested dogstail	16
<i>Dactylis glomerata</i>	Cocksfoot	12
<i>Festuca rubra</i>	Strong-creeping red-fescue	16
<i>Phleum bertolonii</i>	Smaller cat's-tail	8
<i>Phleum pratense</i>	Timothy	5
<i>Poa pratensis</i>	Smooth-stalked meadow-grass	12
<i>Poa trivialis</i>	Rough-stalked meadow-grass	5

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<i>Schedonorus arundinaceus (Festuca arundinacea)</i>	Tall fescue	8
<i>Schedonorus pratensis (Festuca pratensis)</i>	Meadow fescue	16

4.26 Sowing on ground prone to winter flooding is preferably undertaken either in the early autumn or in spring once the land has drained. Most plants need time to grow mature enough to withstand flooding.

4.27 The seed should be surface sown in the autumn or spring at a rate of 4g/m² (40kgs/hectare) and can be applied by machine or broadcast by hand. To get an even distribution, divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed but firm in with a roller or by treading to give good soil/seed contact.

Aftercare

4.28 In the first year of establishment, newly sown meadows should be mown regularly to a height of 40-60mm, removing cuttings if dense. This will control annual weeds and help maintain balance between faster growing grasses and slower developing wild flowers.

4.29 Cutting in the spring and early summer should be avoided as the mixture contains yellow rattle which should be allowed to flower, then in mid-summer cut back and the cut vegetation removed. Any residual perennial weeds such as dock should be carefully dug out or spot treated.

4.30 In the second and subsequent years, aftercare should undertake traditional meadow management based on three cuts a year. A main summer hay cut back to 50mm via a strimmer or tractor mower should be undertaken in July/August after flowering. The 'hay' should be left in situ to dry and shed seed for 1-7 days then removed from site. The re-growth should then be mown or grazed through to late autumn/winter to and again in spring if needed.

4.31 The grass areas near the fishing platforms would be mown more regularly to enable safe access.

4.32 Any areas of failed grass will be cultivated and reseeded in the next seeding season.

4.33 A Detailed Aftercare Programme will be submitted to the Mineral Planning Authority (MPA) before the end of each August during the 5 year aftercare period. Aftercare meetings will be convened before the end of November each year in order to discuss the detailed proposals for the forthcoming year, and to review the results of the previous year. These annual meetings should be attended by representatives of the Site landowner/operator and the MPA.

5 FLOOD RISK ASSESSMENT

- 5.1 A Flood Risk Assessment has been prepared by S M Foster Associates Ltd of Boston Spa, West Yorkshire and is attached as Appendix SS1.
- 5.2 The proposed development is classified as 'water compatible' development under the definitions included in the National Planning Policy Framework (Framework). The Site is located in Flood Zones 2 and 3 and therefore considered to be at medium to high risk of fluvial flooding from the adjacent River Calder. The Site also benefits from protection provided by existing flood defences.
- 5.3 Minerals have to be worked where they are located and therefore there is no choice over suitable alternative locations. On the basis that sand and gravel quarries are considered to be water compatible development and that, by definition, there can be no suitable alternative locations for development, it is concluded that the proposed development passes the Sequential Test. There is no requirement to apply the Exception Test.
- 5.4 Flood hazard assessment has demonstrated that the proposed development would be at low risk of flooding from surface water or as a consequence of drainage infrastructure. However, the Site is at medium to high risk of fluvial flooding and potentially at risk of groundwater flooding. As the majority of the development is subsurface, and as the development is considered to be water compatible, no specific flood risk management measures are proposed.
- 5.5 Surface water would be managed within the site boundary in accordance with the principles of sustainable drainage (SuDS). The substantial storage volume available during both the operational and restoration phase of the development would lead to a net reduction in the peak rate and volume of surface water discharge from the Site, with beneficial impact on downstream flood risk.
- 5.6 The proposed development would lead to a substantial increase in the volume of available floodplain storage on both banks of the River Calder. As a consequence, the development has the potential to make a positive contribution to reduction in downstream fluvial flood risk. The development would be designed to minimise any obstruction to flood flow across the Site.
- 5.7 It is concluded that, subject to implementation of the proposed mitigation measures, the proposed development could be undertaken in accordance with the provisions of the Framework and the requirements of both the Environment Agency and Wakefield Council with regard to development and flood risk.

6 PLANNING POLICY

6.1 Policy Context

6.1.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 (“the Act”) requires that all planning applications should be determined in accordance with the development plan unless material considerations indicate otherwise. In this instance, the statutory development plan consists of:

- The Wakefield Core Strategy and Development Policies 2009
- The Wakefield Site Specific Policies Local Plan 2012
- The Wakefield Leisure, Recreation and Open Space Local Plan 2017

6.1.2 The West Yorkshire Local Aggregate Assessment 2018 provides evidence of the supply of and need for aggregate minerals and forms a useful background document.

6.1.3 National policy as set out in the National Planning Policy Framework 2019 (Framework) is also an important material consideration.

6.2 The National Planning Policy Framework (2019)

6.2.1 The Framework sets out the purpose of the planning system as contributing to the achievement of sustainable development.

Sustainable Development

6.2.2 At the heart of the Framework is a presumption in favour of sustainable development. In essence this means that development proposals that accord with the development plan should be approved. Where the development plan policies lack relevance, planning permission should be granted unless the adverse effects of doing so would outweigh the benefits when assessed against the Framework policies taken as a whole. The corollary is that where there is conflict with an up to date development plan, planning permission should be refused unless material considerations are strong enough to outweigh the conflict and justify approval.

6.2.3 A definition of sustainable development is set out in the Framework’s introduction, and is taken from the World Commission on Environment and Development in 1987:

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

The Framework describes the three dimensions to sustainable development as economic, social and environmental, and seeks positive improvements in the quality of the built, natural and historic environment.

6.2.4 Paragraph 11 of the Framework sets out the presumption in favour of sustainable development, which for decision-taking means:

"approving development proposals that accord with an up-to-date development plan without delay; or

where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:

- i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or*
- ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."*

6.2.5 The proposed Stanley Ferry sand and gravel quarry would supply aggregate to the West Yorkshire market as a succeeding source of sand and gravel to Forge Lane Quarry in Dewsbury. Forge Lane is at present the only source of sand and gravel in West Yorkshire and is likely to be exhausted by 2021. The West Yorkshire Local Aggregate Assessment 2018 identified a continuing under supply in West Yorkshire and the surrounding region for sand and gravel. This was in relation to the quantity of aggregates required to fully meet economic requirements. This situation has continued to the present day.

6.2.6 The Sand and Gravel landbank of 6 Years and 1 Month identified in the 2018 Assessment was below the minimum landbank of 7 years required by paragraph 207 of the NPPF, indicating that the release of additional reserves is required. Sand and gravel reserves and extraction rates in West Yorkshire remain very low. The position since 2018 will have worsened as reserves at Forge Lane Quarry are now close to exhaustion.

6.2.7 A grant of planning permission for Stanley Ferry would provide a significant uplift to the West Yorkshire sand and gravel landbank, providing a total of 1.6 million tonnes. This is equivalent to a 14.5 year landbank. The provision of the mineral resource would contribute to the economic and social needs of the present and because of the limited environmental impact, would do so without compromising the wellbeing of future generations. The proposal is in accordance with an up-to-date development plan and therefore as a sustainable development, the Framework presumption in favour should apply.

Sustainable Transport

6.2.8 Because the Applicant has a concrete block, concrete batching plant and asphalt plant at the side of the canalised River Calder in Dewsbury, it is proposed to use the Aire and Calder Navigation and the Calder and Hebble Navigation to transport the processed sand and gravel to a new wharf in Dewsbury. At a later date when a

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proposed new wharf in Leeds is constructed, it may be possible to barge to Leeds as well.

- 6.2.9 The Applicant intends to build and operate up to five barges and it may be possible to use electric power instead of a conventional engine.
- 6.2.10 The local road network will only be used to bring the mobile and fixed plant to each side of the Site at the beginning and end of operations, and if any plant needs to be replaced. In addition, the workforce will need to use their cars at the beginning and end of each working day. Fitters and fuel tankers will also need to visit the Site periodically, perhaps on a weekly basis.
- 6.2.11 Paragraph 111 of the Framework requires that "*All developments that will generate significant amounts of movement should be required to produce a travel plan, and the application should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed*". Such an assessment is not required as traffic movements will not be significant; however, a Highway Statement has been provided.
- 6.2.12 Paragraph 109 also notes that "*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe*". In this case, the residual impacts are not severe.

Climate Change and Flooding

- 6.2.13 The proposed development is classified as 'water compatible' development under the definitions included in the Framework. The Site is located in Flood Zones 2 and 3 and therefore considered to be at medium to high risk of fluvial flooding from the adjacent River Calder. The Site also benefits from protection provided by existing flood defences.
- 6.2.14 Flood hazard assessment has demonstrated that the proposed development would be at low risk of flooding from surface water or as a consequence of drainage infrastructure. However, the Site is at medium to high risk of fluvial flooding and potentially at risk of groundwater flooding. As the majority of the development is subsurface, and as the development is considered to be water compatible, no specific flood risk management measures are proposed.
- 6.2.15 The proposed development would lead to a substantial increase in the volume of available floodplain storage on both banks of the River Calder. As a consequence, the development has the potential to make a positive contribution to a reduction in

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downstream fluvial flood risk. the development would be designed to minimise any obstruction to flood flow across the Site.

6.2.16 It is concluded that, subject to implementation of the proposed mitigation measures, the proposed development could be undertaken in accordance with the provisions of the Framework and the requirements of both the Environment Agency and Wakefield Council with regard to development and flood risk.

The Natural Environment

6.2.17 Paragraph 170 states that the planning system should contribute to and enhance the natural and local environment including by:

"preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability."

6.2.18 The proposed development has no impact on any designated ecological sites and can be operated without any significant noise or other environmental impacts on the adjacent residential areas.

6.2.19 Paragraph 175 advises that biodiversity should be conserved and enhanced. To this end an ecological assessment has been included with the Environmental Impact Assessment accompanying this application.

6.2.20 Paragraph 170 also requires planning decisions to recognise the economic and other benefits of the best and most versatile agricultural land. The land within the application area is of moderate quality for agriculture being graded at 3b and its permanent loss is not considered significant.

6.2.21 Overall, the proposed development returns the quarried land to angling and amenity and does not cause any significant harm. The development is appropriate for its location.

Minerals

6.2.22 The Framework recognises in Paragraph 203 that:

"It is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation."

6.2.23 Paragraph 205 goes on to state:

"When determining planning applications, great weight should be given to the benefits of mineral extraction, including to the economy. In considering proposals for mineral extraction, minerals planning authorities should:

- a) as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage Sites, scheduled monuments and conservation areas;*
- b) ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality;*
- c) ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source, and establish appropriate noise limits for extraction in proximity to noise sensitive properties;*
- e) provide for restoration and aftercare at the earliest opportunity, to be carried out to high environmental standards, through the application of appropriate conditions. Bonds or other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances"*

6.2.24 Aggregate minerals are specifically covered by Paragraph 207, of which the relevant parts are as follows:

- "c) making provision for the land-won and other elements of their Local Aggregate Assessment in their mineral plans taking account of the advice of the Aggregate Working Parties and the National Aggregate Coordinating Group as appropriate. Such provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate;*
- d) taking account of published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates;*
- e) using landbanks of aggregate minerals reserves principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans;*
- f) maintaining landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised.; and*

g) ensuring that large land banks bound up in very few sites do not stifle competition."

6.2.25 The guidance set out in the Framework has been followed throughout in the design of this proposal, which is capable of meeting all of the policy objectives.

6.2.26 The Technical Guidance to the Framework sets out detailed considerations to be applied to Mineral Working, including those dealing with dust, noise, surface stability, restoration and aftercare. The proposed working method has incorporated the need to minimise dust impacts, however, the mineral will be largely moist when excavated due to the high water table. Water based dust control systems will be fitted to crushing and screening plant as will be required under local authority environmental permitting controls. The operator will ensure that the Site operates under a full dust control system which will provide effective controls.

6.2.27 A noise assessment has been prepared which has predicted that impacts will be within the 55db(A) limit set in the Technical Guidance. Noise impacts will be therefore be within accepted limits and the Site can comply with the Technical Guidance.

6.2.28 The restoration proposal returns the land to a mixed angling and amenity use. There is no doubt therefore that a satisfactory restoration can be achieved.

6.2.29 Of major significance is the advice in Framework paragraph 205 that great weight should be given to the benefits of the mineral extraction, including to the economy, and in Paragraph 207 that competition should not be stifled by the consideration of aggregate landbanks. In this case, the Quarry will serve a local market and its absence would force the construction industry to travel further afield to obtain aggregate supplies. Operations at this Site would generate employment and make a contribution to the local economy.

6.2.30 The benefits arising from the proposed Quarry significantly outweigh environmental impacts and therefore the proposed development is a sustainable development. As a sustainable development, the Framework presumption in favour should apply.

6.3 The Wakefield Core Strategy, Site Specific and Development Policies Local Plan

6.3.1 Policy CS 16 of the Core Strategy deals with mineral working. The parts relevant to this proposal are as follows:

"In conjunction with other authorities, the Council will maintain an appropriate contribution towards the regional supply of aggregates and provide an adequate and steady supply of other minerals:

1. Aggregates

a. Known mineral resources of economic value will be identified as Mineral Safeguarding Areas within the Upper Magnesian Limestone belt in the

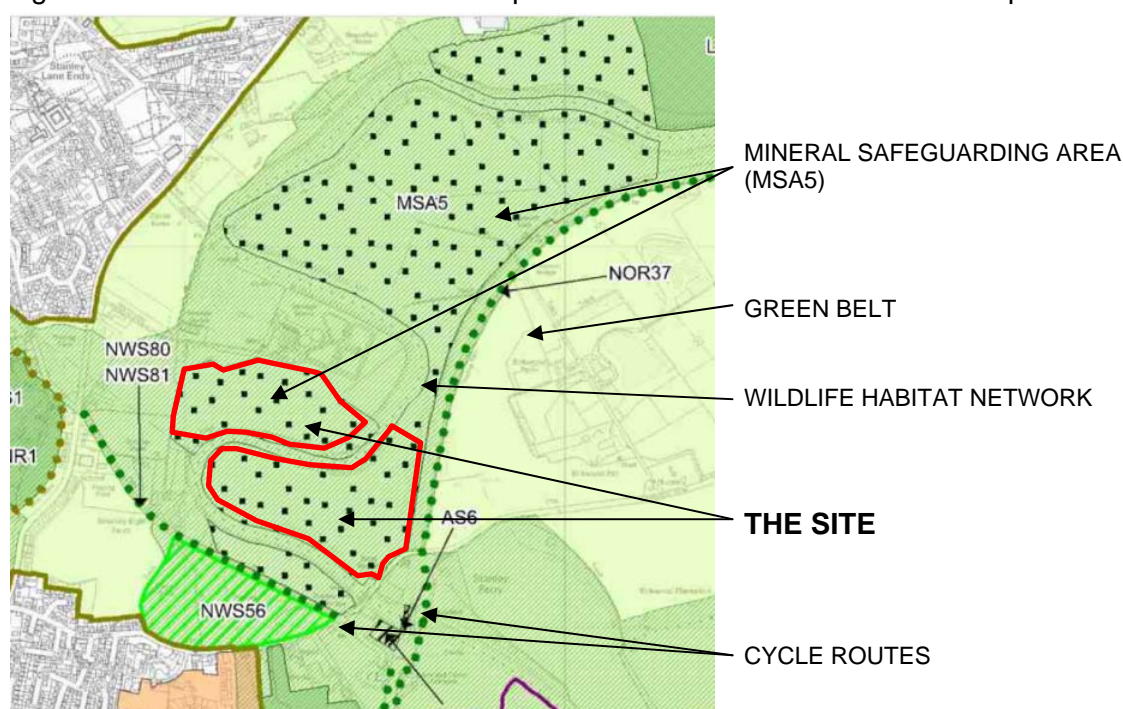
Knottingley and Darrington area, adjacent to existing mineral extraction sites. The known remaining unworked deposits of alluvial sand and gravels are identified in the Lower Calder Valley between the settlements of Horbury and Calder Grove and to the north of Stanley Ferry and the M62. Mineral Safeguarding Areas will be protected from development that could result in their sterilisation;

6.3.2 The Local Plan Policies Map, indicates that the Site lies entirely within a Mineral Safeguarding Area (MSA5) as can be seen in Figure 6 below. MSA 5 is identified on page 169 of the Site Specific Policies Local Plan as:

"STANLEY FERRY, WAKEFIELD - SAND AND GRAVEL

Due to the location of minerals, development cannot be met elsewhere and in this instance is in the Green Belt. The site will contribute towards the regional supply of aggregates and provide an adequate and steady supply of sand and gravel. The proposal conforms to the Core Strategy."

Figure 6: Extract from Wakefield Site Specific Policies Local Plan Policies Map



6.3.3 Although the Site lies within the Green Belt, which is acknowledged in the description of MSA5, the Local Plan notes that the extraction of sand and gravel within MSA5 conforms to the Core Strategy.

6.3.4 The Core Strategy sets out how the national and regional guidelines for aggregate provision are apportioned between the Region's Mineral Planning Authority Areas. The figure for West Yorkshire for the period to 2016 was 5.5 million tonnes of sand and

gravel. Wakefield Council is committed to working together with the other authorities to meet this apportionment.

- 6.3.5 Reserves of sand and gravel with planning permission are acknowledged as very low within West Yorkshire. Paragraph 10.60 notes that the Strands at Horbury Bridge is the only major site listed, although the Applicant's quarry at Forge Lane in Dewsbury is currently operational and nearing completion. The Applicant has investigated the Strands, but the mineral owner has not made the site available. The Stanley Ferry Site is the only site within West Yorkshire which is currently available and can replace production from Forge lane Quarry, thereby maintaining West Yorkshire's contribution to meeting the regional demand for sand and gravel aggregates.
- 6.3.6 Paragraph 10.60 also notes that the Calder Valley sand and gravel reserves may become more important, particularly if water borne methods of haulage are used to local wharves. This proposal does set out the use of the canal network to transport the mineral product to the Applicant's site in Dewsbury, and the canal could also be used to transport to a new wharfage proposed in Leeds.

Green Belt

- 6.3.7 The Core Strategy Policy on the Green Belt, Policy CS12, closely follows the national Framework. As noted in paragraph 146 of the Framework, "*Certain other forms of development are also not inappropriate in Green Belt provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land within it.*" These include mineral extraction and engineering operations. Paragraph 144 goes on to note that "*substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.*"
- 6.3.8 In dealing with openness, spatial and visual impacts are the essential considerations. Spatial impacts relate to the absence of development, and the Site will remain undeveloped after restoration has taken place. The use of the land for the purposes of mineral extraction is a temporary and not a permanent use of the land. There will therefore be no permanent spatial impact arising from the proposed mineral extraction.
- 6.3.9 In February 2020, an important precedent was set for mineral working in the 'openness' of the green belt via a judgement made by the Supreme Court on an extension to Jackdaw Crag Quarry, near Tadcaster, North Yorkshire. The appeal by North Yorkshire County Council (NYCC) and Darlington Quarries was found in the appellant's favour with regard to NYCC's understanding of the meaning of the word 'openness' when reviewing mineral working in the green belt. In the context of the

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quarry extension it was ruled that the impacts of the quarry development such as perimeter soil mounds did not themselves detract from the openness in the Green Belt.

6.3.10 A Landscape and Visual Impact Assessment is included within the attached Environmental Statement. The Assessment concluded that the visual impact of the proposed mineral extraction operations would be moderately adverse for the duration of the operations, but minor beneficial after restoration.

6.3.11 The Site Specific Policies Local Plan accepts that the primary benefit to offset against any harm caused is the supply of aggregate into the West Yorkshire construction market. It includes a statement that the extraction of sand and gravel from this Site is in accordance with the Core Strategy. It is therefore not inappropriate development in the Green Belt.

Sustainable Transport

6.3.12 Core Policy CS4 deals with sustainable transport. It notes that "*Development will be located in accordance with the spatial development strategy so that the need to travel is reduced and essential travel needs can be met by the use of transport modes other than the car. In particular development will be located where: a. it can be served by alternative modes of transport other than the car, such as public transport, walking and cycling; and b. the traffic generated can be accommodated by existing or known improvements to highways and where it will not create or add to problems of safety, congestion or damage to the environment.*"

6.3.13 It is proposed to move all mineral away from the Site using the canal network, either to a wharf in Dewsbury where the mineral will be taken into an existing site which can use the products to manufacture building blocks, concrete and asphalt, or to a new wharf to be constructed in Leeds. Only employee cars, suppliers and fitters and the occasional low loader will access the Site from the local road network.

6.3.14 The use of the canal network is in accordance with policy CS4 as it is a form of sustainable transport.

Leisure, Recreation and Open Space

6.3.15 Leisure and recreation is covered by Core Policy CS11 which promotes the provision of good quality leisure and recreation facilities.

6.3.16 The proposed restoration scheme is centred on nature conservation and angling, with the latter being a very popular leisure pursuit. The two lakes would provide a welcome addition to angling facilities in the North East area of Wakefield.

Wildlife Habitat Network

- 6.3.17 Core Policy CS10 supports the establishment of green corridors, linking designated ecological and geological conservation sites and habitats listed as Biodiversity Action Plan priorities. The West Yorkshire Wildlife Habitats Network (Network) aims to allow migration, dispersal and genetic exchange of species in the wider environment, and includes links to adjoining districts. Within this Network nature conservation interests will be protected and opportunities taken to restore and enhance existing habitats, create new habitats and manage the landscape to improve both biodiversity and landscape quality.
- 6.3.18 The ecological assessment set out in the accompanying Environmental Statement has concluded that the loss of the two fields that form part of this proposal will not significantly detract from the value of the Network. The more significant habitats within the Site's vicinity would be retained and protected during the quarrying operations.
- 6.3.19 More importantly, the restored Site will contribute significantly more ecological value and connectivity to the Network in the future and will strengthen the value of the designations in this area. It would also provide better links between protected sites to the north, west and south of the Site. The proposed restoration scheme will also provide better ecological connectivity once restored through the creation of much higher value habitats than those which it replaces.
- 6.3.20 A number of other policies contained in the various policy documents are relevant to the consideration of this proposal. The Development Policies document includes Policy D5 on the ecological protection of watercourses and water bodies. This policy states:
"The Wakefield District Local Biodiversity Report identifies watercourses and water bodies as important ecological assets. Development on or adjacent to watercourses and water bodies will not be permitted unless it can clearly be demonstrated that there will be no significant harm to any ecological features. Where development is permitted proposals shall include:
- a. environmentally sensitive engineering methods;*
 - b. appropriate wetland features and landscaping; and*
 - c. appropriate management schemes for the planning and use of areas of water."*
- 6.3.21 The proposed scheme causes minimal temporary damage where the river conveyor bridge is to be constructed, but the installation will be removed as part of the restoration scheme and any damage made good. There will also be a limited impact on the canal where the wharf would be constructed, but again this will be temporary and any structures will be removed if required as part of the Site's restoration.

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- 6.3.22 The two lakes which will be created by the Site's restoration will feature enhanced biological diversity as well as recreational activities appropriate to the location.
- 6.3.23 There would be minimal loss of trees and woodland as required by Development Plan Policy D7. The location of the river conveyor bridge and the wharfage facility would be selected to minimise damage to any mature trees.
- 6.3.24 Development Plan policy D8 requires that development within the countryside "*shall contribute towards the protection, maintenance and enhancement of the character of the district's landscape, its biodiversity, and where appropriate, the recreational quality of the area.*" The Landscape and Visual Impact Assessment which forms part of the accompanying Environmental Statement has assessed the development's impact on the landscape. The Assessment concluded that the landscape effects of the proposed mineral extraction operations would be temporarily moderately adverse for the duration of the operations, but minor beneficial after restoration.
- 6.3.25 The proposed restoration scheme incorporates both biodiversity enhancement as well as recreational facilities, therefore satisfying the policy objectives.
- 6.3.26 Development Plan policy D17 covers development affecting archaeological sites and states that:
- "1. Development that affects the site or setting of a Class I or Class II archaeological site will only be permitted if there are exceptional circumstances of overriding public interest and suitable protective and mitigation measures can be implemented to safeguard the archaeological value of the site.*
 - 2. In the case of Class III sites permission will only be permitted where:*
 - a. The archaeological remains will be preserved in situ through careful design, layout and siting of the proposed development; or*
 - b. When in-situ preservation is not justified or feasible, appropriate provision is made by the developer for excavation and recording before and/or during development and for the post-excavation analysis, publication, and archive deposition of any findings.*
 - 3. Where development proposals affect sites of known or potential archaeological interest, an appropriate archaeological assessment and evaluation will be required to be submitted as part of the planning application. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed assessment is likely to affect them."*

6.3.27 Policy D18 on Development Affecting Historic Locations is also relevant. It states that:

Development within or likely to affect the district's Historic Parks & Gardens, Historic Landscapes, Conservation Areas of Sites or Historic Battles will only be permitted where there is no adverse impact on:

- a. open spaces, views, landmarks and landscape that contribute to their character, appearance and setting;*
- b. the character of any buildings or structures having regard to local scale, proportion, details and materials;*
- c. the preservation of features of architectural, archaeological and historic interest.*

The Council will require that plans for development clearly illustrate the impact of the proposal on any features of architectural, archaeological and historic interest in the area. Such applications must be supported with full details of the proposal. "

6.3.28 The Archaeological and Heritage Assessment which forms part of the accompanying Environmental Statement concluded that there was no evidence of any archaeological features within the Site, but proposed further investigation by geophysics as well as a watching brief during mineral excavation.

6.3.29 The Assessment also concluded that because there was either no or restricted intervisibility with either Stanley Ferry Aqueduct and the nearby Aqueduct Cottage to the south-east, and 420 Aberford Road to the north-west. It is not predicted that the proposed development would have any adverse effects upon their heritage significance. The proposed development therefore satisfies the policy objectives.

7 CONCLUSION

7.1 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that all planning applications should be determined in accordance with the Development Plan unless material considerations indicate otherwise. The Government's National Planning Policy Framework also sets a presumption in favour of sustainable development at the heart of the planning system whilst maintaining the need to accord with the Development Plan.

7.2 The proposal has been shown to achieve an acceptable level of impacts on the environment. It complies with the requirements for sustainable development by meeting a local demand for aggregates.

7.3 The Development Plan contains a number of policies against which a subjective professional judgement on compliance has to be made. This appraisal has demonstrated that the proposed development is fully in compliance with key

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Development Plan policies, is classed as a sustainable development and that the benefits outweigh any harm caused.

DRAWINGS

Drawing 10168/01	Site Plan
Drawing 10168/02	Topographical Survey
Drawing 10168/03	Scheme of Working
Drawing 10168/04	Bank Profile for Angling
Figure A2C	Restoration Scheme

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APPENDIX

SS1 FLOOD RISK ASSESSMENT

