

Company Reg: 03560476

VAT Reg: 708 2839 21

EA Reg: YRI 447983 CB

BLACK ROCK
ENVIRONMENTAL ASSOCIATES LTD

16 Buckingham Crescent
Clayton
Bradford
West Yorkshire
BD14 6EJ

Telephone: 01274 814384

Fax: 01274 413906

Mobile: 07831 509131

Email: hfwilcox@aol.com

HFW/cs/GA/PUS/53

Revised 28th March 2019

An Application for a Bespoke EA Permit: EAWML 405998

The Use of Waste for the Reclamation, Restoration or Improvement of Land

JP Land Restoration Services Ltd

Warmfield Fishing Grounds Development

Warmfield Lane - Kirkthorpe - WF1 5TH – SE 370 210

AN OPERATING STATEMENT

&

ENVIRONMENTAL RISK ASSESSMENT

Background

- (1) Messrs Pick Up Skips owns a section of disused railway cutting that traverses Warmfield Lane, Kirkthorpe. The cutting is steep-sided and poses environmental and physical risks: -
 - A risk of someone falling into the cutting
 - A pollution risk from fly-tipping.
 - Basal ponded water that water that can occasionally exhibit a surface film of oil. It has developed a coarse wildlife eco-system but does not support fish.

The company wishes to redevelop the site to create two Sports Fishing Lakes within the stretch of cutting.

- (2) A subsidiary of Pick Up Skips ... **JP Land Restoration Services Ltd...** is applying to the Environment Agency for a Bespoke Land Recovery Permit to authorise /regulate the land improvement operation. JPLRS is based at Pickup Yard, New Brunswick Street, Wakefield, WF1 5QR.

The company has retained Black Rock as its consultant / agent in securing the EA Permit

The Legal Status of the Site

- (3) Wakefield MC has granted planning consent (Ref: 13/03500/FUL) to re-profile the stretch by infill to create two fishing lakes. *[The consent was granted to the site's previous owner, Mr Gary Asprey.]*
- (4) Pickup Skips initially intended to apply for an *Environment Agency Standard Rules Permit SR 2010 No. 10* to cover the land improvement operation.
The EA subsequently refused to accept applications for Standard Rules Permits SR 2010 No. 10 and SR 2015 No. 39.

The reason for rejection was the presence of a "protected habitat" within 50m of the site. The protected habitat was/is the railway cutting itself, designated as a (Deciduous Woodland) Protected Habitat by the Natural England organisation.

Pick Up / Black Rock subsequently provided Natural England with full details of the land restoration project.

In response, Natural England has given written confirmation that it has no objection (*'no remit'*) to the proposed development.

- (5) The EA requires JP Land Restoration Services Ltd ("JP") to apply for a ***Bespoke EA Permit for the Use of Waste for the Reclamation, Restoration or Improvement of Land.***

JP has engaged in pre-application consultation with the Environment Agency, which has visited the site and reviewed the revised Waste Recovery Plan. **The exercise has been ratified by the EA to meet the EU classification of R10: Land treatment resulting in benefit to agriculture or ecological improvement**

The Site Setting

- (6) The development site comprises a section of a dismantled railway cutting. The railway line was removed many years ago, though land immediately to the south is within the development programme for the new HS2 rail line.

Both the programmed development site and the contiguous HS2 land are owned by Pick Up Skips & Co.

- (7) The profile of the floor along the development stretch of the cutting is a shallow bowl. The stretch retains permanent standing water at fluctuating depths of up to 1.5 metres. Whilst the water supports a wildlife eco-system, it seemingly does not support fish and can occasionally exhibit a surface film of oil.

The company wishes to re-profile the stretch to create two fishing ponds. It has retained the following companies to assist in processing the legal applications and shaping the overall programme:

- *Black Rock*
- *Ramsden / Den Architects* of Leeds to design the infill and service road profiles. These are confirmed on Den Drawings 1513701, 2618A & 2618B.
- *Simply Ecology* of Lancaster to evaluate the Ecosystem at the site and design habitat enhancements/structures
- *Altofts Tree Services* to design a replanting specification to optimise the development of favoured trees and bushes.
- *Allied Plant Ltd* of Castleford, which has quoted the cost of infill by aggregate product to confirm the financial viability of the project
- *Turtle Productions Ltd* of Glasgow, which can provide and lay secure Polymer Liner for the Fishing Ponds.

In addition, Pick Up/JP has conducted extensive consultation with officers of the Environment Agency, Wakefield MDC and Natural England. Groundsure Ltd has provided historical, geological and environmental information on the site and its immediate locality.

- (8) The operation would/will *inter alia* incorporate: -
- The laying of a new access road across the land, displacing reworked natural soil with a suitable medium to act as a running-surface for delivery vehicles.
 - The partial infill of the cutting with the displaced soil plus suitable natural and made ground excavations.
 - The creation of two Fishing Ponds and one Wildlife Pond, as approved by Wakefield MDC.

- (9) The initial infill programme would/will lay a shallow basal layer, displacing the standing water as it progressed. The basal layer will shield and protect the fishpond water from contamination by historic railtrack oils, cokes etc.
- (10) Subsequent infill layers would be inset with berms and benching to create the ponds. They would be lined with an impervious membrane to prevent unintentional seepage. The flanks of the ponds would incorporate fishing-stations and a partial reinstatement of a historic footpath that would be accessible by the public.
- (11) The mature trees at the crest of the flanks would be retained. Each felled tree would be replaced by a sapling of an indigenous species.
- (12) JP is seeking overall authorisation for the development in the form of: -
- A Wakefield MC Planning Consent, incorporating agreed Final Contours, Risk Assessment, Remedial Strategy and Design & Access protocols. [*Obtained and Qualifying Conditions Completed*]
 - An Environment Agency Bespoke Permit for the Improvement of Land
 - An Environment Agency Type U1 Exemption Certificate for the Use of Waste in Construction [*Obtained and Qualifying Conditions Completed*]
 - A CL:AIRE Agreement for the reincorporation and import of soils meeting Site Specific Remediation Criteria. [*To be determined on an individual basis for each Waste Stream*]
- (13) A new internal access road across the land, displacing reworked natural soil with a suitable medium has been built under the provisions of an existing Environment Agency U1 Exemption Certificate (Ref: EPR/VE5040/EN/A001) that authorises the acceptance of road building materials.

- (14) The drafting of this JP/Black Rock Operating Statement and Environmental Risk Assessment, has been informed and supported by contributory information in the form of:
- A Black Rock/Pick Up/JP Generic Risk Assessment Template that has been drafted for internal and external activities involving jointly conducted Earthworks exercises. This is included as an appendix to this Operating Statement document.
 - A Black Rock soil compliance template drafted for application at CL:AIRE-eligible sites and for Brownfield Redevelopment Sites
 - The Simply Ecology Report
 - Relevant correspondence with the Environment Agency
 - Specimen information from the Groundsure Site History and Environmental Report
 - Flood level profile and Floodmap
 - Altofts Tree Plan
 - Turtle Pond Liner Specification
 - Den Site Plans
 - Planning Consent
 - Specimen Correspondence from the Environment Agency, Natural England and the Parliamentary Review
 - Plans from the HS2 Design Programme and site ownership documents

THE RISK ASSESSMENT PROTOCOL

- (15) JP, Black Rock and Ramsden/Den have appraised the proposed process with regard to the relevant results against health & safety/environmental risk criteria.

Adopting a SOURCE-PATHWAY-RECEPTOR approach to Risk Assessment:

The **potential sources** are:

- *residual / historic residues*
contaminated soils in the railbed; historic land use of the locality
- *imported infill materials*
spillage, dust, noise, fire, vehicle movement/accident, landfill gas, mud on the highway.

The **potential pathways** are direct physical contact, windblown contact, leaching of historic and future contaminants, subterranean-flow and surface-flow of liquid, gas migration.

The **potential receptors** are site workers, occupants of neighbouring premises, residents, animals, groundwater and surfacewater.

- (16) The exposure risks posed by the residual site, and the proposed operation, could be further evaluated as: -

Long-Term Exposure / Impact

The potential effects on Site Workers; Residents; Occupants of Neighbouring Premises; Animals, Groundwater and Surfacewater.

Short-Term Exposure / Impact

The potential effects on Site Workers; Residents; Occupants of Neighbouring Premises; Animals, Groundwater and Surfacewater.

Where a perceived risk is identified, an attempt is made to break the pathway linking the source to the receptor.

The Potential Sources of Risk

Historic Sources

- (17) The only serious risk of historic contamination would appear to have come from the railway track ... likely to have accumulated minor deposits of coal, oil, diesel fuel etc.

The railbed has been disused for many years and the development section retains constant standing water. Any freely-soluble contaminants can be assumed to have been released by now. However there remains a potential for a long term release of low-solubility contaminants.

- (18) The site sits within the footprint of a major coalfield. Its subterranean geology should prudently be assumed to be inset by, or near to, deep-lying mineshafts. Colliery workings can generate contamination but any such residual contamination will be occurring well below the surface elevations of the development area.

The area immediately to the west of the cutting retains an elevated made ground plateau that has been used as grazing land for many years. Contingency excavation at the eastern flank indicates that its matrix material is the excavated overburden from the construction of the cutting, and does not comprise colliery waste.

(19) The proposed development does not involve the construction of permanent buildings.

Given the extent of historic mining operations in the locality, it would be prudent for any (future) foundations of permanent buildings to incorporate a gasproof membrane to protect against intrusion by ground-gases.

(20) The historic maps provided in the Groundsure Report show:

- The cutting was emplaced by 1892
- The immediately adjacent land has been agricultural since that period.
- The nearest properties ... on Park Avenue around 200m to the west of the cutting ... were built between 1938 and 1948.
- There are some allotments associated with the houses, but these are over 100metres from the projected infill zone.

(21) The Groundsure Environmental and Geological Reports indicate that, apart from subterranean colliery workings, the site lies does not lie within an area of historic and current industrial activity.

Local Waste Management Sites:

The Groundsure Environmental Report *inter alia* lists: -

- No IPPC ('Integrated Pollution Prevention & Control') Permits issued by the Environment Agency for the handling of hazardous materials within 500m of the site.
- No Waste Management Permits for the handling of wastes have been issued by the Environment Agency within 250m of the site. However, the outer boundary major Welbeck Landfill Site lies just beyond this radius in a northwestern direction.
- 1 x historic Unregistered deposit on the site itself (presumed to be the plateau previously detailed in Section 15)

Potential Contamination Sources under the Proposed Development

- (22) The projected infill operation would only accept the restricted range of materials that are authorised by the EA Standard Permit System and the CL:AIRE allowance for accepting greenfield natural soil excavations.

The imported materials would be expected to be WAC compliant (leachate limits) and will have differing suites of contamination limits for infill soils and growth soils.

The projected range of soils would not be expected to compromise the quality of the local groundwater system, the surfacewater system or the water in the fishing ponds.

- (23) Appropriate quarantine and removal systems will be adopted for the detection and handling of any undesirable tramp components in delivered materials.
- (24) Appropriate environmental control measures will be adopted to minimise the external escape of mud, dust, odour etc from beyond the site boundary.

The Potential Pathways of Contamination/Risk

Direct Physical Contact with Site Workers

- (25) There is a **risk of physical injury** to site personnel, site users, visitors and unauthorised entrants that will be controlled by the adoption of security and traffic management measures.

There will also be control regimes in the form of:

- A checking of analysis reports for imported waste materials
- "Goalposts" marked with an elevated string of fluttering bunting where the access route is about to cross below overhead electrical cables. This will deter import and export wagons from travelling with their cargo bays raised.
- The line of the internal access road will incorporate wider stretches to offer vehicle-passing points and designated "crossing points" for pedestrians.
- Contingency segregation and quarantine facilities for any unsuitable tramp components revealed in import loads.

- (26) The deployment of PPE and a hygiene regime will address the most likely contamination risks to site workers ... direct exposure to soil and possible tramp components (see the generic Health & Safety Risk Assessment.)

Tramp Components

- (27) There are potential health risks posed to site workers and site users by any residual presence of tramp unauthorised contaminants in aggregate feedstock materials delivered to the site ... e.g. a hidden pocket of asbestos shards in excavation and/or demolition materials delivered for crushing.

In case of such an incident occurring, JP Land Restoration Services Ltd will make contingency provision for the contingency secure isolation and quarantining of loads pending identification.

Following identification / confirmation of the contamination-profile of quarantined material, it would be exported for disposal/treatment at a suitably authorised site, in accordance with relevant environmental and transport legislation.

- (28) Any suspected tramp presence of **Asbestos** will be treated as follows:
- An advance determination of the asbestos fibre-type will be confirmed via analysis at a MCERTS / UKAS – registered laboratory
 - The asbestos bearing materials will be carefully segregated and quarantined prior to export for controlled burial as a hazardous waste.
 - The pedestrian footpath would be closed until the quarantine operation was complete.

If necessary a project-specific Method Statement document will also be prepared.

Airborne Contact with Site Workers and Pedestrians

- (29) There is an **irritant / health / environmental risk** of airborne dust and noise release from such infill operations, with potential impact on site personnel, visitors and the occupants of neighbouring premises (there are no immediately-adjacent residents).

However, the proposed infill operation will be conducted at the wind-sheltered base of a steep cutting and little dust and noise impact can be expected beyond the site boundary.

The Leaching of Historic / Future Contaminants

- (30) The proposed process materials ... soil, aggregate, tarmac planings (for site roads only) etc ... are not directly contaminative, flammable or bear significant concentrations of soluble components. None of the exposed materials fall within the category of Hazardous Waste (*i.e. there is an absence of source*).

- (31) The residual railbed has been disused for many years and the development section retains constant standing water. Any freely-soluble contaminants can be assumed to have been released by now. However there remains a potential for a long term release of low-solubility contaminants.

Ground Gas & Landfill Gas

- (32) It is possible that the subterranean railbed drainage system is acting as a conduit for mining gases. However, Black Rock has not, to date, noted any tell-tale bubbling in the retained water.

Background monitoring will be mounted before infill commences

- (33) The proposed feedstock wastes are not expected to generate significant quantities of landfill gas.
- The drainage system ... rubble in gabion ducts ... will facilitate a preferential escape route for transient subterranean gases from below the railbed.
 - Any gas would be dissipated into the open air at elevations well below the surrounding topography.
 - The nearest domestic properties are 180m away to the west.

- (34) **The infill depth will exceed 2m and EA policies dictate that continuous gas emission is monitored. Therefore, four whole-depth monitoring boreholes will be installed.**

Ground gas will be monitored for Methane, Carbon Dioxide, Oxygen and Flow rate. In addition the ambient air temperature and pressure will be recorded on each monitoring visit.

The provisional Gas Monitoring contractor is WMA Ltd of Preston.

The Potential Presence of Invasive Plant Species

- (35) Japanese Knotweed (*Fallopia Japonica*) is an invasive plant whose powerful root system can break up building foundations and carriageways. The plant is a proscribed species under the Wildlife and Countryside Act 1981. It is an offence for the land owner of a Knotweed colony to allow the plant to escape beyond his/her property.

The Simply Ecology report did not note any knotweed-infestation of the site surface. However, it is possible that, under the development exercise, contaminative soil might be imported. Any such presence will be recorded and the suspect material will be quarantined for treatment.

- (36) Knotweed eradication can commonly take two or even three years to complete. Such colonies typically require eradication by repetitive treatment with glyphosate herbicide or equivalent. The vegetation in a quarantined stockpile will not be disturbed until the colony is eradicated. When it is removed, the soil and vegetation will be sent for burial rather than risk a secondary contamination of reprocessed soil-blends
- (37) Appropriate control /eradication measures will also be adopted to address any noted presence of the alien plants Giant Hogweed (*Heracleum Mantegazzianum* and Himalayan balsam (*Impatiens Glandulifera*).

The Potential Receptors of Contamination/Risk

The Local Surfacewater and Groundwater Systems

- (38) All infill operations are to be conducted on the residual railbed at the base of the cutting. The track has been removed but there remains vestigial hardstanding ... the railbed ... underlain by the original soakaway drainage system.

In 2019, an access point into the buried trackside drainage system was exposed and the system shown to be still active.

- (39) The basal infill layer will be excavated at appropriate positions to reach the original soakaway drainage system that served the railbed. These infill positions will be progressively inset with rising columns of free-draining rubble to allow surplus surface water to drain into the original trackbed drainage system.

- (40) The quality of the standing water that is permanently resident in the recumbent base of the cutting is not known, but can be confidently predicted to lie below EA grade E. The EA does not specify its precise calculation-base but the grading scale for all riverwaters runs from grade A: '*very good*' to grade F: '*bad*'.

The recumbent water:

- stands on the vestigial railbed that is likely to retain historic hydrocarbon presence
- has regularly been prone to contamination from jettisoned litter/fly tipping and sections are occasionally noted to retain a surface film of trace oil.

And can be assumed to not, in itself, present a sensitive receptor for infiltrant pollution.

However, the drainage water from the cutting passes through the rail bed and thence via subterranean routes to groundwater resources that may well be sensitive receptors.

- (41) The development proposal involves a successive:
- Displacement of the basal water as infill progresses
 - Cladding of the residual railbed with a 2.5m - 4m depth of inert infill material. This will be laid in consolidated layers and will form a relatively impervious barrier to incident water. The local ecosystem, fauna and flora would not appear to be at significant risk of waterborne contamination leaking from such infill materials.
 - Retention/improvement of trackside drainage systems that will bypass the majority of the existing railbed and reduce the area of the bed's exposure to draining freshwater.
 - Creation of fishing ponds retaining water that will be maintained and monitored at optimum ecological standard

Other Local Sensitive Water Reserves

- (42) There are no potable water extraction points or other EA-permitted groundwater abstraction points within 1 km of the site. Thus any leachate from the railbed and the proposed operation does not seemingly impact on local human drinking water supplies.

There are two River Calder surfacewater abstraction points for the former Wakefield Power Station, around 900m from the site. The water is presumed to previously been used as cooling water and dust-suppression water at the plant.

- (43) The boundary of the nearest viable aquifer is some 230m to the northwest and would be more at risk from the Welbeck LFS that sits directly above it.

The Local Amenity and Ecosystem

- (44) The Groundsure Report indicates that there are none of the following within 500m of the development site:

- Records of Sites of Special Scientific Interest (SSSI)
- Records of National Nature Reserves (NNR)
- Records of Special Areas of Conservation (SAC)
- Records of Special Protection Areas (SPA)
- Records of Ramsar sites
- Records of Ancient Woodlands

- Records of Local Nature Reserves (LNR)
- Records of World Heritage Sites
- Records of Environmentally Sensitive Areas
- Records of Areas of Outstanding Natural Beauty (AONB)
- Records of National Parks

It can thus be assumed that no sensitive cultural or ecological sites would be affected by the proposed development.

- (45) The Groundsure Report indicates that the site resides in a Nitrate Sensitive Area. However, the proposed infill medium would not be expected to exacerbate the sensitivity of underlying groundwater systems.

In practice, the partial infill of the site could improve the status quo by the absorption and N-abstraction of agricultural run-off water that currently passes straight to the railbed drainage system.

The River Calder

- (46) The Groundsure Report records that there are no EA surfacewater abstraction permits within 500m of the development site.

There are 6 x EA Discharge Consents into the River Calder, primarily relating to discontinued effluents produced by the former Wakefield Power Station and Kirkthorpe Sewage Works. None would appear to be currently impacting on river quality.

Flood Monitoring and Response

- (47) The Groundsure Report and the Environment Agency Floodmap confirm that the area is not within a designated floodplain.

The fishing ponds created by the development will incorporate: -

- Capacity to retain an increased volume of water within their bankings
- Overflow pipes offering a throttled link to the vertical draining columns set into the infill matrix.

The throttling effect of the overflow pipes will reduce the potential surge of drainage water to the drainage columns.

- (48) There is a **health / environmental risk**, with potential impact on site personnel, visitors and pedestrians on the restored footpath, (there are no residents) if the residual/existing trackside drainage system became blocked and the area became partially flooded.

There is thus a need to maintain the surfacewater drainage that is disposed of through the dismantled railbed.

Breaking the Pollution Pathway

- (49) JP/Pick Up Skips intends to maintain the subterranean railbed drainage system, but feed it via inset vertical drainage channels passing through both the infill matrix and the railbed. (*Please see Ramsden cross-sectional drawings*).

Following the improvement measures, local surfacewater and groundwater systems would be better protected from the passage of drainage water that has been exposed to the whole area of the railbed.

The overall exercise would thus provide both:

- a removal of contamination-source ... the standing water currently in intimate contact with the railbed and
- a breaking of a leaching-pathway to the underlying groundwater system.

- (50) **The derived Overall Environmental Risk Rating of the Proposed Development would be Low to Moderate.**

The Potential Flood Risk

- (51) Flood maps provided by both Groundsure and the Environment Agency confirm that the development site does not lie close to any Zone 1 Flood Plain within, or close by, any of the following categories of floodplain:

Flood Zone 1 - low probability

Definition: This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).

Zone 2 - medium probability

Definition: This zone comprises land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% – 0.1%) in any year.

Zone 3a: - high probability

Definition This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.

Zone 3b - the functional floodplain

Definition: This zone comprises land where water *has* to flow or be stored in times of flood.

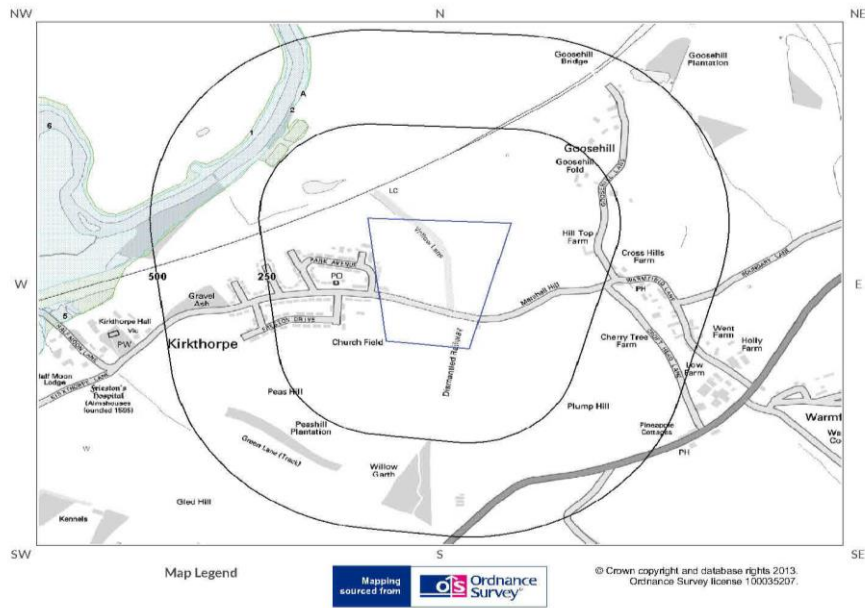
- (52) The cutting itself is noted as bearing water, and the volume /surface level can obviously fluctuate in heavy weather, particularly as the cutting receives runoff water from the neighbouring farmland.

However, the current and proposed base-levels of the cutting: -

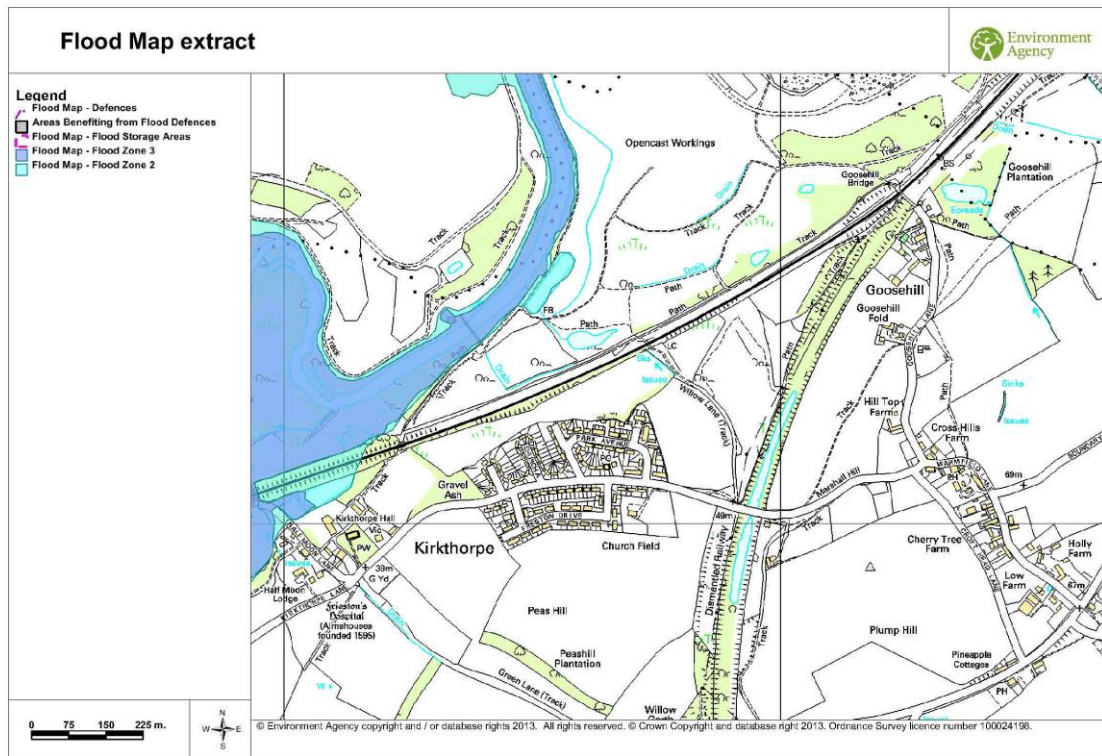
- stand well below any point of overflow onto surrounding land and
- will continue to maintain existing drainage patterns through the historic track drainage system.

- (53) It is thus indicated that the proposed redevelopment exercise will not impact or compromise any current flood control arrangements in the immediate vicinity of the site, or of the closest stretch of the River Calder.**

(54) The Groundsure Report Flood Map



The Environment Agency Flood Map



The Materials Proposed for Acceptance

Wastes Re-Used for the Construction of Roads & Drainage

- (55) Construction feedstock materials have been sanctioned by an Environment Agency Type U1 Exemption Certificate (Ref: EPR/VE5040/EN/A001) that authorised the acceptance of road building materials.

This work is complete and preliminary access to the infill zone is complete.

It is proposed that a U1 Exemption will be maintained for the use of Road Maintenance etc.

Additional Site Preparatory Works

- (56) The clearance of undergrowth and scrub trees along the base of the cutting to facilitate the land improvement exercise has been largely completed by the spring of 2019.

A number of trees are to be discretely removed; these are the scrub self-seeded sycamore, willow, ash and elder saplings in or at the edge of the residual railbed. Their removal is necessary to facilitate the construction of the Wildlife Pond and Fishing Lakes.

This is confirmed in reports prepared by Altofts Tree Services and Simply Ecology.

- (57) Some trees have been removed by Northern Powergrid. The foliage was intruding into airspace under and alongside the overhead power cables that cross the site.

The majority of the felled saplings has been / will be sent as a biomass fuel for a power station.

The remainder are being used to construct temporary over-winter herpetology habitats.

The Creation of Compensatory Habitats

(58) In agreement with the Wakefield MDC Countryside Unit, measures will be taken to enhance the existing ecosystem before the fishing grounds are constructed:

- A new Wildlife Pond will be constructed to the north of the projected fishing lakes. The Wildlife Pond is to be drainable to ensure that the development of semi-aquatic fauna and flora can be promoted.
- Woodpiles will be constructed to encourage and protect the development of any hibernating species, e.g. snakes, lizards etc.

These provisions are incorporated in the Simply Ecology Ltd report of February 2016.

The operation has commenced and will progress in a manner that maintains nesting facilities in the bird-breeding season.

The partial infill of the cutting with to create the Wildlife Pond will involve the incorporation of an initial 2m layer along a stretch to the north of the lake-construction zone. This layer will act as a barrier between the Wildlife Pond base and the residual rail bed.

(59) The Wildlife Pond construction exercise has yet to commence, but will utilise:

- displaced soil from the access-road construction programme
- suitable natural and made ground soils that will be imported.

Infill will be conducted in accordance with:

- A Bespoke Environmental Permit
- Additional soils meeting Site Specific Remediation Criteria and Highways Agency standards as fill soils or construction aggregates.
- Soils meeting SSRC Control limits and classed as *bona fide* construction products following assessment by a CL:AIRE-registered consultant.
- Soils will be laid in ~500mm - 1m deep layers that will be progressively inset with vertical drainage columns filled with free-draining rubble to allow surplus surface water to drain into the original trackbed drainage system.

The Phasing of Infill

- (60) Access / Construction will initially create the Wildlife Pond and, subsequently, the 2 x Fishing Lakes. The sequencing is a requisite attempt to maintain and enhance the existing ecosystem before work on the fishing lakes commences.

Progress will be dependent upon the suitability of source construction soils and contemporary ecological issues.

The environmental improvement works in the Wildlife Pond zone will be partially funded by savings earned from the reception of suitable Pick Up processed soils.

Wastes Imported for Infill and Restoration

- (61) All imports will be compliant with and sanctioned by an:
Environment Agency Bespoke Permit (ref: EAWML 40599)
for
The Use of Waste for the Improvement of Land

Maximum Cumulative Total 84,000 Tonnes

- (62) Wastes having any of the following characteristics shall not be accepted:
- Consisting solely or mainly of dusts, powders or loose fibres
 - Hazardous wastes
 - Wastes in liquid form

It is anticipated that any construction materials and “eligible wastes” accepted at the site will fall within the categories identified in the UK Govt guidance note: “*Waste Acceptance Procedures For Waste Recovery On Land*”:

- (63) A summary of (equivalent to) SR 2015 No. 39-eligible construction materials is included in the following table.

European Waste Code	Waste Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
10	WASTES FROM THERMAL PROCESSES
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 14	waste concrete and concrete sludge
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 03	bituminous mixtures
17 03 02	Road planings only.
17 05	soils (excluding soils from excavated sites), stones and dredgings
17 05 04	soils and stones including chalk other than those mentioned in 17 05 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF

	SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION / INDUSTRIAL WASTE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	minerals (for example sand, stones)
19 12 12	soil substitutes other than that containing dangerous substances only Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard.
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	garden and park wastes (including cemetery waste)
20 02 02	soils and stones

Natural-Ground Excavation Wastes Imported for Infill and Restoration

(64) CL:AIRE (*Contaminated Land: Applications in Real Environments*) is a government sponsored quality control organisation that *inter alia* fosters the principle of declaring re-usable natural soils from greenfield and brownfield sites to be to be building materials and not wastes.

Such classification is dependent upon the physical and chemical profile of the individual source-soil and the nominated individual reception site.

There is no fixed limit on the quantity of waste that can be accepted under a CL:AIRE sanctioning certificate. All such individual feedstock soils will be sanctioned and certificated by a CL:AIRE-Registered external Consultant as being acceptable for reception at the site.

Advance Information Required for Input Wastes & Soil Products

- (65) The projected range of soils would not be expected to compromise the quality of the local groundwater system, the surfacewater system or the water in the fishing lakes.

Appropriate quarantine and removal systems will be adopted for the detection and handling of any undesirable tramp components in delivered materials.

- (66) The UK Guidance Note *Waste Acceptance Procedures for Waste Recovery on Land* (Oct 2016) notes that certain waste-streams would not necessarily require testing in advance of delivery. The list is included in Section (H2) of the Annexe to the Waste Recovery Plan document.

However, it is intended that all external contractors will need to provide advance analytical details for large-scale deliveries of soil and excavation waste.

- (67) The site will not accept Hazardous Waste and soil quality will be broadly compliant with the CL:AIRE template prepared by Black Rock.

In order for any soils to be CL:AIRE-deregulated, producers must produce comprehensive analyses of their "waste" soils

A copy of the Black Rock Claire Contaminant Template is included in the Appendix to this Operating Statement document.

- (68) Pick Up / JP Land Restoration Services Ltd will itself commission validation and quality control testing of soil and water samples. Analysis will be conducted by a suitable M-Certs / UKAS-registered laboratory.

Soil analysis records will be kept in perpetuity.

The Operational Control Regime for the Proposed Development

(69) The operation of an EA-Permitted site requires oversight by the holder of a WAMITAB Certificate of Technical Competence, at a set rate of attendance.

JP/Pick Up Skips retains the services of:

- Mr Danny Addison. He will be the Site Manager and is to undertake a Wamitab COTC Level 4 for Transfer and Treatment operations. He will be in daily attendance at the site.
- Mr Christopher Pickup. He holds a Wamitab COTC Level 4 for Transfer and Treatment operations. He will be available for daily / contingency attendance at the site.
- Mr Hywel Wilcox of Black Rock. He holds COTC's (at Special / Hazardous Waste: Level 4) for Waste Landfill, Transfer and Treatment operations, and will be available for requisite attendance at the site.

(70) A responsible Site Foreman or Manager will be present at the site during each active day of the infill exercise. Twice each day, the Site Foreman or Manager will personally monitor and record his/her assessment of the immediate impact of the operation in the Site Diary. Remedial measures will be implemented immediately.

The status / presence of Noise, Dust, Mud, Litter and Odour generation will be recorded in the Site Diary, and will be available for inspection by officers of the Statutory Authorities.

Site workers and Site Users

(71) Site workers and site users are at risk of exposure to direct physical contact and windblown contact with products, vehicle accidents and spillage. These factors are dealt with by operational control regimes and the issue of ppe etc currently applied throughout Pick Up Skips (& associated companies) operations.

Potential control measures are included in the following sections:

(72) The adoption of an appropriate Hygiene Regime. Appropriate hand-washing facilities should be provided for site workers. Within the infill / deposit zones, a No Smoking/ Drinking/ Eating should be maintained.

(73) Site personnel and representatives will need to wear appropriate personal protective equipment, i.e. hard hats, safety boots, gloves, overalls plus reflective vests and/ or jackets. (Hard hats and gloves will not necessarily be worn whilst operatives are working within the enclosed cabs of heavy plant and vehicles).

Goggles and Dust Masks would be held for contingency issue. Spare ppe would be held on site for the use of visitors and/ or representatives of the Statutory Authorities.

(74) Goalposts" marked with an elevated string of fluttering bunting where the access route is about to cross below overhead electrical cables. This will deter import and export wagons from travelling with their cargo bays raised.

Local Residents, Walkers & Road-Users

(75) The occupants of neighbouring premises would not appear likely to be at risk of direct exposure to the products of the operations, other than by airborne dust and noise transmission.

Measures will be adopted to restrict unauthorised access to the working area of the site.

Site Access and Security Controls

(76) The Wakefield MDC Highways Unit was concerned to ensure that there is an adequate sightline for vehicles entering and leaving the site. The developer has discussed the issue and has installed a new junction within adopted highway land that offers improved visibility onto Kirkthorpe Lane. (See Ramsden drawings ref:2618 200B & 1513701)

- (77) The accompanying Ramsden & Co Design and Access Statement details the following associated works
- The formation of a temporary site access road, incorporating passing points for delivery wagons travelling in both directions.
 - A turning area, allowing contingency for delivery wagons to reverse to the deposition point in the cutting.
 - A compound for the location of site cabins, parking of cars and construction vehicles and materials storage.
 - The reinstatement of the historic footpath that has become inaccessible over recent years.

This infrastructure will be retained for access/usage by fishermen and pedestrians when the development exercise is complete.

Traffic Flow Issues

- (78) The proposed rate of traffic flow (50-100 movements per day on average) can be comfortably accommodated by the proposed internal access road and the existing A655 highway. At the access point, the A655 has a wide carriageway and the presence of turning delivery wagons should not obstruct the flow in either direction.
- (79) The proposed access point does not impinge on access requirements for any household residences or other commercial developments.

The site operator will ensure that no obstruction is placed across the access road in such a manner that it would hinder the access and passage of emergency service vehicles.

- (80) The line of the internal access road incorporates wider stretches to offer vehicle-passing points and designated "crossing points" for pedestrians.

Control Measures for Noise and Dust

- (81) The operations will be conducted in the base of a deep cutting, well below and at sufficient distance from the nearest houses. Any liberated noise and dust would be expected to be cushioned and attenuated by the steep walls of the cutting.

There is no intention to raise the infill depth to meet the surrounding landforms.

- (82) All plant and equipment will be fitted with engine silencers. All vehicles using the site will be fitted with silencers.

Reversing beepers will be monitored and, where possible, set at a level to minimise distraction at adjacent premises without compromising safety provisions at the site.

- (83) It is possible that mechanical processing machinery might be temporarily introduced to screen salvaged topsoil and to crush bulk masonry prior to re-use in the development programme.

Previous monitoring at other sites confirms that a satisfactory degree of noise and dust attenuation can be obtained by:

- A preferential alignment of any mechanical crusher in the base of the cutting, away from the public highway.
- The siting of stockpiles of feedstock and processed topsoil and/or aggregate to act as a barrier to the passage of dust and noise beyond the site boundary.
- The maintenance of stockpiles by shaping and press-chamfering stockpiles to minimise dust-release.
- Using a water bowser or the spraybar of a mechanical sweeper to dampen dust on the access road.

Control Measures for Mud

- (84) The site operator will engage roadsweeping services as appropriate to address any adverse impact of dust and mud on the neighbouring vicinity and/or public highway.
- (85) Appropriate environmental control measures will be adopted to minimise the external escape of mud, dust, odour etc from beyond the site boundary.

The access point onto the highway has been upgraded by increasing the splay for sight-lines and surfacing the section crossing the layby with tarmac.

The remainder of the access road is constructed from concrete (gateway to layby stretch) then bulk aggregate overlain by compacted crushed aggregate.

- (86) The operator will husband stockpiles of rubble and tarmac planings to maintain the site access road.

A gridded wheel wash unit is set alongside the access road, to be deployed in wet weather to clean vehicle wheels of free mud prior to exit onto the highway

- (87) In addition to daily rostered inspections, the state of the access road will be informally monitored by HGV drivers, who will deliver excavation waste and aggregate to and from the site. Any requirement to sweep the road of mud would be reported to the site foreman.

Control Measures for Litter

- (88) The open-air Soil/Aggregate Processing operation at the site is not intended to accept wastes with a significant presence of paper, plastic etc.

The area will be maintained in a clean and tidy condition. All loose/windblown litter will be hand-picked from both within the perimeter and from adjacent property.

Control Measures for Odour

- (89) The programmed infill feedstocks do not include readily-biodegradable components and do not generate offensive odours.

Stored Topsoil will predominantly comprise surface-stripped soil/vegetation from civil engineering projects and is not generally odorous.

If an odour problem is experienced, further deliveries of the offending material will be diverted to an alternative approved disposal or recycling point.

Control Measures for Pests

- (90) The operations would not be expected to generate of significant problems with rodents or flies. If persistent presence or infestation was apparent, an appropriate Pest Control Contractor would be engaged.

Records of any such engagements will be recorded in the Site Diary that is to be kept in the site office.

Control Measures for Invasive Plant Species

- (91) The Simply Ecology report did not note any infestation of Japanese Knotweed (*Fallopia Japonica*) on the inherited site surface. However, it is possible that, under the development exercise, contaminative soil might be imported. Any such presence will be recorded and the suspect material will be quarantined for treatment.

Knotweed colonies typically require eradication by repetitive treatment with glyphosate herbicide or equivalent.

The vegetation in a quarantined stockpile will not be disturbed until the colony is eradicated. When it is removed, the soil and vegetation will be sent for burial rather than risk a secondary contamination of reprocessed soil-blends

- (92) Appropriate control /eradication measures will also be adopted to address any noted presence of the alien plants Giant Hogweed (*Heracleum Mantegazzianum* and Himalayan balsam (*Impatiens Glandulifera*).

Control Measures for Landfill Gas / Ground Gas

- (93) The current development programme does not involve the siting of any permanent buildings, where foundations would need to be designed and constructed in a manner that would both: -

- resist movement due to mining subsidence *and*
- offer protection against the ingress of ground gasses into occupied buildings and structures.

However, should such development be programmed in the future, an appropriate Phase II intrusive site investigation would be mounted, involving liaison / consultation with the Wakefield MDC Planning Unit, the Wakefield MDC Environmental Health Unit, the Environment Agency and other statutory authorities.

- (94) The proposed feedstock wastes are not expected to generate significant quantities of landfill gas.
- The drainage system ... rubble in gabion ducts ... will facilitate a preferential escape route for transient subterranean gases from below the railbed.
 - Any gas would be dissipated into the open air at elevations well below the surrounding topography.
 - The nearest domestic properties are 180m away to the west.

- (95) **The infill depth will exceed 2m and EA policies dictate that continuous gas emission is monitored. Therefore, four whole-depth monitoring boreholes will be installed.**

Ground gas will be monitored for Methane, Carbon Dioxide, Oxygen and Flow rate. In addition the ambient air temperature and pressure will be recorded on each monitoring visit.

The provisional Gas Monitoring contractor is WMA Ltd of Preston.

Control Measures for Tramp & Unsuitable Materials

- (96) The Kirkthorpe facility is programmed to receive inert and non-hazardous wastes, road planings, soil and green waste. If non-compliant/unsuitable materials are identified either at the excavation point, or, upon delivery, they will be segregated for further investigation.
- (97) If a suspect material that cannot be immediately identified should be encountered, the Site Operator will engage the services of a specialist contractor to identify the material and coordinate appropriate disposal measures.

A lockable skip will be held at the site for contingency use as a secure quarantine facility

General Environmental Control Systems

(98) The proposed land recovery operation is intended to be authorised by a formal Bespoke Permit issued by the Environment Agency under the provisions of the Environmental Permitting (England & Wales) Regulations 2010.

The EA Permit will: -

- require the site operator to appoint a technically competent waste to attend the site on a prescribed frequency.
- incur regular inspection by EA Officers to ensure that only authorised materials were accepted and for compliance with Waste Management documentation etc.

Site Security Provisions

(99) The western boundary of the site is the only position where unauthorised vehicular access could be obtained.

- The site entrance is protected by two lockable steel gates
- The remainder of the western boundary offers protection in a combination of close-set form of trees and rustic fencing.
- It is not proposed to erect permanent metal fencing that would detract from the surrounding rural aspect.

Hours of Operation

(100) Monday – Friday	7.30am To 6pm Waste Acceptance ceases at 5pm
Saturday	7.30am To 2pm Waste Acceptance ceases at 1pm
Sunday & Bank Holidays	Closed for Waste Acceptance

Site Signage

(101) In compliance with the Environmental Permitting Regulations, the gateway will be fitted with a site noticeboard confirming

- The Operator's name address and contact numbers
- The EA Permit Number & EA contact numbers
- The hours of Operation.

(102) Next to the site noticeboard, Pick Up Skips / JP Land Restoration Services Ltd will affix warning signs:

- advising that visitors must beware of oncoming traffic
- instructing that site visitors must wear appropriate ppe.

(103) **The Site Noticeboard**

JP LAND RESTORATION SERVICES Ltd			
Warmfield Fishing Grounds Development			
Warmfield Lane - Kirkthorpe - WF1 5TH – SE 370 210			
Tel: 0800 917 7192		Emergency Tel: 07927 975 286	
Environment Agency-Permitted Waste Management Site			
EA Permit: EAWML 405998			
Opening Hours	Monday - Friday	Saturday	Sunday Bank Holidays
	7.30am To 6pm	7.30 am To 2pm	Closed
Environment Agency Contact	EA Regional Office		
	Lateral - 8 City Walk - Leeds – LS11 9AT		
	General Telephone Enquiries: 03708 506506		
Emergency Telephone Contact: 0800 80 70 60			
No Unauthorised Out-Of-Hours Entry			
SITE VISITORS & DELIVERY DRIVERS MUST REPORT TO THE SITE OFFICE			

(104) The access road will be fitted in both directions with warning signs for a 10mph speed limit.

The access road will be fitted in the exit direction with warning signs to give way to oncoming traffic.

The goal posts will be fitted with additional signs saying "Danger! Overhead Cables"

The Site Rules for All Site Users

(105) Two additional noticeboards will be erected, one just inside the site entrance and one at the carpark. Both will display the *Site Rules ...* a code of practice to be enforced by the site management.

SITE RULES

For

OPERATIVES - DRIVERS - VISITORS - CONTRACTORS

- 1. REPORT TO THE SITE OFFICE IMMEDIATELY ON ENTRY DURING STANDARD HOURS**
- 2. PRODUCE ALL RELEVANT DOCUMENTATION**
i.e. WASTE CARRIER Reg NUMBER, DELIVERY NOTE, WASTE TRANSFER NOTE, HAZARDOUS WASTE CONSIGNMENT NOTE etc AS APPROPRIATE.
- 3. OBEY ALL INSTRUCTIONS GIVEN BY SITE CONTROL PERSONNEL.**
- 4. OBEY THE 10 MPH SPEED LIMIT AND BE ALERT TO ALL OTHER SITE USERS.** GIVE WAY TO TRAFFIC / MACHINERY ALREADY MANOEUVRING IN THE OPERATIONAL AREA.
- 5. USE PERSONAL PROTECTIVE EQUIPMENT WHILST ON SITE.**
NB 1: THE PPE REQUIREMENTS FOR PICK UP SKIPS Ltd PERSONNEL ARE SPECIFIED IN THE RELEVANT COMPANY POLICY DOCUMENTS.
NB 2: EXTERNAL PERSONNEL ARE EXPECTED TO WEAR A MINIMUM OF, HIGH-VISIBILITY JACKET OR VEST, OVERALLS & SAFETY FOOTWEAR. A HARD HAT MUST BE WORN BY PEDESTRIANS AND BY DRIVERS OUTSIDE THEIR VEHICLES/MACHINES.
- 6. EMPTY AND LOAD CONTAINERS ONLY IN THE MANNER DIRECTED AND IN COMPLIANCE WITH CONTAINER LABELLING & SHEETING SYSTEMS.**
- 7. DO NOT SMOKE, EAT OR DRINK WITHIN THE WASTE-HANDLING AREA.**
A HYGIENE REGIME IS MAINTAINED FOR YOUR SAFETY.
- 8. IMMEDIATELY REPORT ANY DANGEROUS SITUATION OR ACCIDENT TO THE SITE SUPERVISOR OR NOMINATED MANAGER.**
- 9. ENSURE THAT PAPERWORK IS COMPLETED**
DELIVERY NOTE AND WASTE TRANSFER NOTE COPIES FOR WASTE DELIVERIES SHOULD BE PREPARED FOR RETENTION IN THE SITE REGISTER AND TO TRAVEL WITH THE VEHICLE LOAD.
- 10. BEFORE LEAVING THE SITE, CHECK YOUR VEHICLE IS SAFE FOR THE HIGHWAY** e.g. NO LOOSE LOAD CONTENT; NO PUNCTURES; LOAD SHEETS FOR SKIPS, NO STONES TRAPPED BETWEEN TANDEM WHEELS etc.

**ALL PEOPLE NOT FOLLOWING THE SITE RULES
DO SO AT THEIR OWN RISK**

(106) Twice each day, the Site Foreman or Manager will personally monitor and record his/her assessment of the immediate impact of the operation.

The status / presence of Noise, Dust, Mud, Litter and Odour generation will be recorded in the Site Diary, for inspection by officers of the Statutory Authorities.

(107) The Site Operator will endeavour to ensure that its Duty of Care is exercised in: -

- determining the origin and contamination profile of any waste that is to be removed.
- segregating contaminated and non-contaminated materials at source.
- sending all reject or site-generated waste materials to suitably-licensed and/or eligible transfer, treatment or landfill facilities.
- producing and retaining the relevant Waste Transfer Notes for Inert and Non-Hazardous Wastes, plus Consignment Notes for Hazardous Wastes.

(108) The site will only accept pre-authorized deliveries. Producers of "Regular" waste streams will be required to produce six-monthly analyses of representative samples of their waste soil or rubble.

All deliveries will be monitored on arrival and deposit by Pick Up Skips / JP Land Restoration Services Ltd site personnel.

Pick Up Skips already operates a longstanding waste transfer and treatment station in Wakefield. The Pick Up workforce is familiar with:

- the requirement for wastes to be checked and handled in an appropriate manner
- the environmental and financial benefits of segregating and recovering recyclable components from mixed waste streams.

When the site is not in use, its gates will be locked and security against vehicular access will be maintained.

(109) The Site Operator and its representatives will maintain necessary liaison with nominated representatives of its Clients, its Consultants, the Statutory Authorities and the Emergency Services with regard to its Remedial Processing programme and allied responsibilities.

The Site Operator will maintain informal liaison arrangements with neighbouring residents, to ensure that amenable conditions are maintained

Site Records

(110) Pick Up Skips/JP will be responsible for maintaining the record system for the Fishing Ponds Development site.

The site office will hold copies of the: -

- Site Rules
- Work Instructions
- Management Team Reports
- Site Diary
- Emissions Control Plan

These will be available for examination by visitors, delivery drivers and site personnel.

(111) It is likely that operational/security circumstances will demand that archived document storage will be maintained off site.

In such instance the records will be available for inspection by the Environment Agency at the Pick Up Skips HQ in Wakefield.

HQ-retained information will include: -

- | | |
|---|-----------------------------------|
| • Import Quantities/Tonnages | • PPE Issues |
| • Output Quantities /Tonnages | • Training Records |
| • Site Accident Book | • Historical Site Diaries |
| • Waste Transfer Notes | • Historical Waste Transfer Notes |
| • Consignment Notes | • Maintenance Records |
| • Copies of Registered Carrier Certificates | • Site Diary Entries |
| • Historical Visitors Book | • CoTC Attendance |

JP Land Restoration Services Ltd, Pick Up Skips Ltd and Black Rock trust that the provisions detailed in this document are sufficient for the purposes of the Environment Agency. Its contents remain the intellectual property of Black Rock.

Should any points be identified for further clarification or discussion, I would be grateful if you could contact me directly at the above address.

Hywel Wilcox

Director

Black Rock Environmental Asstes Ltd

On behalf of:

JP Land Restoration Services Ltd

Pick Up Skips & Co

Circulation

Mr Jim Pickup

Mr Daniel Addison

Mr Alan Powell

JP Land Restoration Services Ltd

JP Land Restoration Services Ltd

Ramsden / Den Architects

Appendix 1

A Provisional SSRC Template for Soil Contamination

These are proposed / provisional Site Specific Remediation Criteria (SSRC) Soil Contamination Limits to Adopt/Apply for CL:AIRE sites.

The soil acceptance criteria for import soils will be compliance with the nominated Atkins At Risk Contamination Limits, with the exception of:

- Black Rock's nominated limits for growth-zone soils
- Any breaching of threshold limits for Hazardous Waste Status

Individual Variations might be agreed as necessary to address particular circumstances at specific production & reception sites.

1.

Heavy Metals

Metal	SSRC Concentration [mg/kg]	
Cadmium	<i>CLEA Residential Soil</i>	10
Mercury in topsoil	<i>UK Agricultural Soil</i>	1
Mercury in subsoil	<i>Reasonable Local Limit</i>	8
Arsenic in topsoil	<i>C4SL Residential Soil</i>	37
Arsenic in subsoil	<i>C4SL Public Open Space 2</i>	170
Lead	<i>C4SL Residential Soil</i>	200
Lead under hardstanding or below growth soil depths.	<i>C4SL Public Open Space 2</i>	1300
Nickel in Topsoil	<i>UK Agricultural Soil</i>	75
Nickel in Subsoil	<i>CLEA Residential Soil</i>	130
Copper in topsoil	<i>UK Agricultural Soil</i>	135
Copper in subsoil	<i>Reasonable Local Limit</i>	400
Chromium in Topsoil	<i>CLEA Allotment Soil</i>	200
Chromium in Growth Subsoil	<i>UK Agricultural Soil</i>	400
Chromium VI in growth soil	<i>C4SL Residential Soil</i>	21
Zinc in Topsoil	<i>UK Agricultural Soil</i>	300
<i>NB: Atkins At Risk Limit for Zinc is 16900mg/kg. Allowances can be made Topsoil concentrations above 300mg/kg</i>		
Zinc in Growth Subsoil	<i>Dutch Intervention Value</i>	720

2

Nominated Organic / Inorganic Components

Parameter	ATRISK Value [mg/kg]		Proposed Deviation from ATRISK 6% TOC and/or 1% TOC	Proposed SSRC Concentration [mg/kg]
	6% TOC	1% TOC		
Monohydric Phenols	1930	162	<i>Dutch Intervention VReasonable Local Limits ... lower than ATRISK and CLEA Residential Soil Values.</i>	40
Free Cyanide	34	34		20

3

Asbestos

Asbestos in Soils*	Description	Potential Disposal Route	None
Import Soils		None Allowed for Acceptance if present at any concentration	
<i>* A possible scenario if Asbestos is excavated on a site:</i>			
Asbestos	Discrete Visible Pieces of Cement, Board or Insulation	Export as Hazardous Waste	
Asbestos	Dispersed Fibres in Soil at <1000mg/kg	Bury under hardstanding at least 1m from all exposed surfaces. Export as Non-Hazardous Waste if no Hazardous Waste Components are co-present	

4

BTEX Petroleum Hydrocarbons

BTEX Derivative	ATRISK Value [mg/kg]	
	6% TOC	1% TOC
Benzene	0.87 mg / kg <i>C4SL Residential Soil</i>	
Toluene	610	86.9
Ethylbenzene	350	38.2
o-xylene	250	18.9
m-xylene	240	17.9
p-xylene	230	17.2

5

Total Petroleum Hydrocarbons (TPH)

TPH Derivative	ATRISK Value [mg/kg]	
	6% TOC	1% TOC
TPH Aliphatic C5-C6	259	30.1
TPH Aliphatic C6-C8	14700	69.8
TPH Aliphatic C8-C10	144	9.79
TPH Aliphatic C10-C12	4140	1390
TPH Aliphatic C12-C16	5260	5100
TPH Aliphatic C16-C35	145000	145000
TPH aromatic C5-C7	0.87 mg / kg <i>C4SL Residential Soil</i>	
TPH aromatic C7-C8	-	86.9
TPH Aromatic C8-C10 <i>Excluding BTEX</i>	177	14.8
TPH Aromatic C10-C12	389	57.3
TPH Aromatic C12-C16	687	142
TPH Aromatic C16-C21	804	272
TPH Aromatic C21-C35	1220	888
Total TPH in Growth Subsoil & Topsoil		999 mg/kg
Total TPH in Imported Topsoil		800 mg/kg

6

Polycyclic Aromatic Hydrocarbons (PAH)

PAH Derivative	ATRISK Value [mg/kg]	
	6% TOC	1% TOC
Naphthalene	8.71	0.58
Acenaphthene	2130	588
Anthracene	18,300	8270
Benzo(a)anthracene	8.54	4.52
Benzo(a)pyrene	5 <i>C4SL Residential Soil</i>	
Benzo(b)fluoranthene	9.86	7.72
Benzo(g,h,i)perylene	103	96.2
Benzo(k)fluoranthene	9.86*	7.72*
Chrysene	927	585
Dibenzo(ah)anthracene	1.0	0.838
Fluoranthene	2160	822
Fluorene	1930	615
Indeno(1,2,3-cd) pyrene	9.75	7.31
Pyrene	1550	563
Phenanthrene**	440	95
Acenaphthylene**	920	170
<i>*Provisional values unless exceeded when separate analyses of the Benzo(b)fluoranthene and Benzo(k)fluoranthene Compounds will be commissioned.</i>		
<i>**Not listed in Atkins Atrisk. Taken from S4UL system</i>		
Total PAH in (Growth) Subsoil	999 mg/kg	
Total PAH in Topsoil	100 mg/kg	

Hywel Wilcox

CL:AIRE Qualified Person

Appendix 2

Pick Up Skips & Co / JP Land Restoration Services Ltd
A Risk Assessment for General Earthworks & Soil-Processing Operations

Activity	Potential Risk	Risk Level	Precaution/Control Measures
DELIVERY / RECEPTION OF CONSTRUCTION & EXCAVATION WASTES	Pollution of Groundwater	Low	<p>The Kirkthorpe facility is programmed to receive inert and non-hazardous wastes, road planings, soil and green waste. If non-compliant/unsuitable materials are identified either at the excavation point, or on delivery, they will be segregated for further investigation.</p> <p>If a suspect material that cannot be immediately identified should be encountered, the Site Operator will engage the services of a specialist contractor to identify the material and coordinate appropriate disposal measures.</p> <p>A lockable skip will be held at the site for contingency use as a secure quarantine facility.</p>
	Pollution of Surfacewater	Low - Medium	
SITE SECURITY	Unauthorised entry on to the site	Medium	<p>The Site Operator will ensure that the site access gate is secure from unauthorised vehicular access and any breaches in demarcation-zone fencing are to be repaired during works being conducted in that section of the site.</p> <p>The gates will be locked when the site is not in operation.</p>

Activity	Potential Risk	Risk Level	Precaution/Control Measures
TRAFFIC MANAGEMENT AND SITE ACCESS	Potential impact on the local transport infrastructure.	Low-Medium	<p>Exported deliveries will travel on a hardstanding internal road before reaching the public highway. This route does not involve close-passage past domestic properties.</p> <p>Goalposts" marked with an elevated string of fluttering bunting where the access route is about to cross below overhead electrical cables. This will deter import and export wagons from travelling with their cargo bays raised.</p> <p>The line of the internal access road will incorporate wider stretches to offer vehicle-passing points and designated "crossing points" for pedestrians.</p> <p>The Wakefield MDC Highways Unit is concerned to ensure that there is an adequate sightline for vehicles entering and leaving the site. The developer has discussed the issue and proposes to install a new junction within adopted highway land that offers improved visibility onto Kirkthorpe Lane.</p> <p>The Site Operator will deploy a mechanical roadsweeper to address any instances of mud being carried onto the highway by vehicles exiting the site.</p>

Activity	Potential Risk	Risk Level	Precaution/Control Measures
THE INFILL & PROCESSING OF CONSTRUCTION AGGREGATES	Dust / Odour being generated within the site boundary	Medium-High	<p>Twice each day, the Site Manager / Site Foreman will personally monitor and record his/her assessment of the immediate impact of the operation.</p> <p>The status / presence of Noise, Dust, Mud, Litter and Odour generation will be recorded in the Site Diary, for inspection by officers of the Statutory Authorities.</p>
	Dust / Odour being generated and travelling beyond the site boundary.	Low - Medium	<p>Mechanical Processing operations will be moved, shielded or suspended if found to cause irritant dust escape beyond the site perimeter.</p> <p>The public highway and internal roads will be manually or mechanical swept whenever necessary.</p> <p>In periods of dry weather, if irritant dust is generated by vehicle movement, spraywater will be used as a suppressant on site roads.</p> <p>Mechanical roadsweeping services would be engaged as appropriate to address any adverse impact of dust and mud on the neighbouring vicinity and/or public highway.</p> <p>Goggles and Dust Masks would be held for contingency issue. Spare ppe would be held on site for the use of visitors and/ or representatives of the Statutory Authorities.</p>

Activity	Potential Risk	Risk Level	Precaution/Control Measures
THE INFILL & PROCESSING OF CONSTRUCTION AGGREGATES (cont)	Noise being generated and travelling beyond the site boundary.	Medium	<p>All plant and equipment will be fitted with engine silencers. All vehicles using the site will be fitted with silencers.</p> <p>Reversing beepers will be monitored and, where possible, set at a level to minimise distraction at adjacent premises without compromising safety provisions at the site.</p>
WASTE DISPOSAL	Risk to the Environment	Low-Medium	<p>The Site Operator will endeavour to ensure that its Duty of Care is exercised in: -</p> <ul style="list-style-type: none"> • determining the origin and contamination profile of any waste that is to be removed. • segregating contaminated and non-contaminated materials at source. • sending all waste materials to suitably-licensed and/or eligible transfer, treatment or landfill facilities. • producing and retaining the relevant Waste Transfer Notes for Inert and Non-Hazardous Wastes, plus Consignment Notes for Hazardous Wastes.
FIRE RISK	Potential impact on Siteworkers and the local amenity	Low-Medium	<p>The site will retain fire extinguishers suitable for coping with fires arising within the site office, any weighbridge electrical equipment and the engines of vehicles and machinery</p>

Activity	Potential Risk	Risk Level	Precaution/Control Measures
GENERAL HEALTH & SAFETY PROVISIONS	Risks to on site workers, visitors and the general public due to exposure to machinery, contaminants and the elements.	Medium	<p>The Site Operator will issue all operatives with suitable Personal Protective Equipment (PPE) and provide recorded Induction Training.</p> <p>The Site Operator and its representatives will maintain necessary liaison with nominated representatives of the Contractors and Consultant, the Statutory Authorities and the Emergency Services with regard to its Remedial Processing programmes and allied responsibilities.</p>
OVERALL ENVIRONMENTAL IMPACT	Potential impact on the local amenity	Low-Medium	<p>None of the land exhibits any architecture, flora or fauna of any notable distinction.</p> <p>The completed development will</p> <ul style="list-style-type: none"> • maintain a waterborne eco-system, with cleaner water • impart minimal impact on the local ecosystem • introduce a greater diversity of life-forms • sympathetically blend with the landscape <p>It will thus increase the overall amenity offered to local residents.</p> <p>The operations would not be expected to generate of significant problems with rodents or flies. If persistent presence or infestation was apparent, an appropriate Pest Control Contractor would be engaged. Records of any such engagements will be recorded in the Site Diary that is to be kept in the site office.</p>

Activity	Potential Risk	Risk Level	Precaution/Control Measures
OVERALL ENVIRONMENTAL IMPACT (cont)	Potential impact on the local amenity	Low-Medium	The Site Operator will maintain informal liaison arrangements with neighbouring residents, to ensure that amenable conditions are maintained.
FUTURE DEVELOPMENT AT THE SITE	Potential impact on Siteworkers and the local amenity	Low - Medium	<p>The current development programme does not involve the siting of any permanent buildings, where foundations would need to be designed and constructed in a manner that would both: -</p> <ul style="list-style-type: none"> • resist movement due to mining subsidence <i>and</i> • offer protection against the ingress of ground gasses (e.g. carbon dioxide, methane and radon) into occupied buildings and structures. <p>However, should such development be programmed in the future, an appropriate Phase II intrusive site investigation would be mounted, involving liaison / consultation with the Wakefield MDC Planning Unit, the Wakefield MDC Environmental Health Unit, the Environment Agency and other statutory authorities.</p>

Hywel Wilcox
Black Rock
On behalf of
Pick Up Skips
JP Land Restoration Services Ltd

HFW/jrw/GA//PUS / 021

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