BURN ROAD CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

MARCH 5, 2025

WIGGETT CONSTRUCTION LIMITED

Contents

Burn Road - Environmental Management Plan

1.00 Background

The site at Burn Road Birchencliffe Huddersfield was granted Outline Planning permission Application Number 2018/60/91838 and granted reserved matters approval on Application Number 2021/61/94719/W.

Wiggett Construction Group Ltd (WCL) are proposing to build 25 dwellings on the site with associated infrastructure. The site topography slopes significantly in places and passing through the site is a small stream. The construction work will require almost the entire site to be stripped of vegetation and the levels to be reprofiled in a cut and fill exercise.

Outline planning condition 22 requires WCL to submit a Construction Environmental Management Plan to meet the requirements listed below.

22. No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the Local Planning authority. The CEMP (Biodiversity) shall include the following:
a. Risk assessment of potentially damaging construction activities; in respect of bats, birds, badgers, amphibians and invasive plants.
b. Identification of "biodiversity protection zones".
c. Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
d. The location and timing of sensitive works to avoid harm to biodiversity features.
e. The times during construction when specialist ecologists need to be present on site to oversee works.
f. Responsible persons and lines of communication.
g. The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.
h. Use of protective fences, exclusion barriers and warning signs.
The approved CEMP shall be adhered to and implemented throughout the construction period.

Reason: *To ensure impacts to biodiversity as a result of construction activities are avoided or minimised. This is to accord with Policy LP30 of the Kirklees Local Plan and guidance in the National Planning policy Framework. This condition is pre-commencement to*

This document will identify construction activities that could have an ecological impact and measures that will ensure the risk is removed or mitigated. In preparation of this Environmental Management Plan WCL have reviewed the guidelines in Pollution Prevention Guideline 5 – Works and maintenance in or near water.

2.00 Propose Works
The proposed site plan shows the construction of 25 new dwellings as well as road and drainage infrastructure. The works will involve stripping the site of vegetation, undertaking a cut and fill exercise of the land, installation of a box concrete culvert, highway retaining wall, construction of new highway, foundations and superstructure of the properties. New soil capping layers will be installed on the site and

3.00 Environmental Objectives

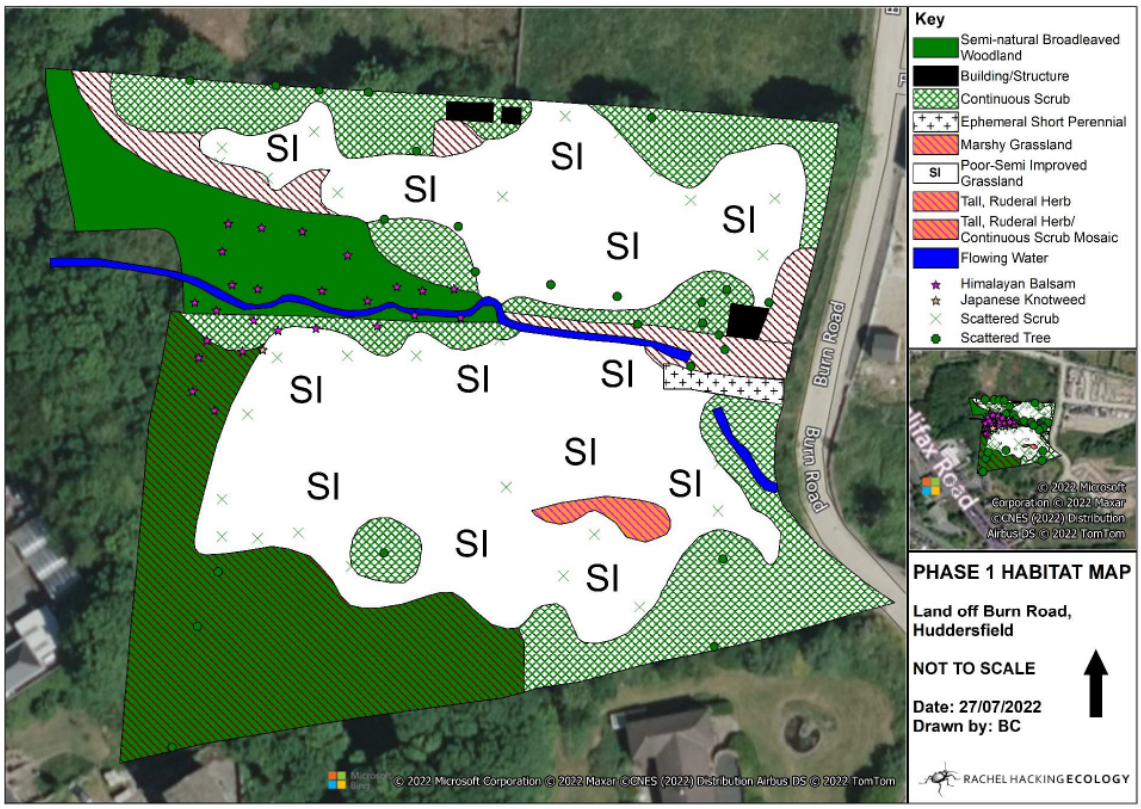
- Ensure sustainable use of natural resources.
- Minimize air, water, and soil pollution.
- Reduce waste generation and promote recycling.
- Protect biodiversity and ecosystems.
- Comply with environmental laws and regulations.
- Ensure safe and environmentally responsible construction practices.

4.00 Environmental Aspects

4.01 Topography
The site is split into two sections by the shallow stream that passes through the site. Land on the North side of the slopes steeply towards the brook particularly in the north west corner of the site. The southern section of the site also slopes towards the brook.

4.02 Ecology and Arboriculture
Rachel Hacking Ecology have undertake habitat surveys on the site, and Trevor Bridge Associaties (TBA) have undertaken Arboricultural Survey, and provided Arboricultural Impact Assessments and Method Statements.

4.03 Habitat
The proposed development site currently comprises semi-improved grassland, continuous scrub, tall, ruderal herb and a small stream. The site is in a sub-urban location, surrounded by residential development, open agricultural and pastural land and scattered woodlands, see habitat plan below.



4.04 Trees

The arboricultural survey complies with British Standard 5837:2012 *Trees in relation to design, demolition and Construction - Recommendations*. All significant trees or groups within the site have been inspected, identified and detailed, and Root Protection Areas (RPA's) identified. An Arboricultural Impact Assessment has assess the impact on trees on the proposed development and an Arboricultural Method Statement has been provided with specific details on how a development should proceed in such a manner that avoids damage to trees being retained. It is accompanied with a tree protection plan.

4.05 Protected Species

The ecological report has investigated whether any protected species could be affected by the development. It has identified that the site would not provide a suitable habitat for the Great Crested Newt, or the water vole, and that there is no evidence of badger activity was located on the site.

The ecology report has identified that nearby trees could provide Potential Roosting Features(PRF) for bats. One Ash tree to the north west in the offsite wood areas, and one Sycamore tree south of the stream had PRF.

The report also identified that the site supports a suitable habitat for nesting birds within the woodland, scattered trees, scrub and structures, which are also protected under the Wildlife and Countryside Act 1981.

4.06 Invasive Species
Two invasive, non-native species, as listed on Schedule 9 of The Wildlife & Countryside Act 1981 (as amended), was found within the site boundaries and one was found adjacent to the site boundaries. Extensive stands of Himalayan Balsam was found throughout the site. Japanese Knotweed is located to the west of the site along the banks of the stream. Variegated Yellow Archangel Lamiastrum galeobdolon subsp. Argentatum was found adjacent to the south-east border of the site.

4.07 Site Investigation
The sites past use has been primarily agricultural and remains undeveloped, with the exceptions of some small farming sheds in the south-east and centre of the northern half.

A site investigation comprising the formation of ten dynamic sample boreholes (WS01 to WS05 in the northern half, and WS06 to WS10 in the southern half) were undertaken with the purpose of assessing the underlying ground conditions. Six environmental soil samples were taken to ascertain whether the site was contaminated.

The sample results concluded that metal and PAH exceedances recorded within the topsoil and Made Ground are considered a risk to Human Health. Exceedances were identified within the topsoil and the Made Ground in the northern and southern sites, without further testing and delineation, the topsoil is not considered fit for purpose and will not be able to be re-used in the development of the new residential housing. Contamination was not identified within any of the natural strata present. Delineation of the contaminated areas is advised, followed by remediation or removal of contaminated soils off-site.

5.00 Potential Environmental Impacts

Through reviewing the ecologicial, arboricultural, and site investigation reports the potential impacts have been identified.

5.01 Invasive species
The is a risk that construction operations could lead to the spread of the invasive species, throughout the site and to adjacent sites.

5.02 Disturbance of bats
Construction activities could potentially disturb bat habitats.

5.03 Disturbance of nesting birds
The felling of trees and clearance of site could disturb nesting birds.

5.04 Harm to wildlife
Wildlife passing through the site could be potentially harmed, distressed, trapped or poisoned by construction activities.

5.05 Contamination of water course
There is a risk that construction activities could directly or indirectly pollute the watercourse.

5.06 Damage to retained Trees
Construction activities could damage or pollute retained trees.

6.00 Construction Activities - Environmental Impact

WCL have reviewed the construction activities that will take place on the Burn Road site and have identified activities that affect the impacts identified above.

6.01 Potential Environmental Risks from construction activities

1. Diesel fuel for generator
2. COSHH substances on site
3. Wheel wash activities
4. Contaminated run off water from stripped site
5. Pumping water from excavations
6. Concrete foundations
7. Run off from stockpiled ground
8. Surface water sewer construction and connection to water course
9. Silt and surface water contaminants washed into surface water drainage
10. Construction of tarmac road
11. Cement Silo
12. Vandalism to site plant and equipment
13. Windblown materials into the water course
14. Construction of Retaining walls
15. Site Clearance – Invasive Species
16. Tree Felling – Nesting Birds
17. Installation of box culvert
18. Site establishment
19. Construction activities in vicinity of retained trees
20. Open excavations

7.00 Risk Assessment and Control Measures

1. Diesel store for generator.

Risk

Diesel spillage leaching into ground water/stream.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

A temporary electric supply will be provided at the earliest possible opportunity so site cabins do not need a generator.

A bauser will be required for the supply of diesel to site plant, this has a bund surrounding it which can contain 110% of its capacity and a spill kit is located within the site compound areas to soak up any diesel spills if they occur. The bauser will be located away from the water course see site compound location.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

2. COSHH substances on site.

Accidental spillage of COSHH substances leading to contaminating the watercourse or groundwater, or harm to wildlife.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

Materials of a COSHH nature are minimised in the use of construction from the outset.
COSHH materials are placed in secure storage overnight.
Work using COSHH materials in under operated under Risk Assessment and Method Statements (RAMS) to ensure safety of operatives.
Any spillages are to be immediately cleaned up by operatives.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

3. Wheel wash activities

Risk that washdown vehicles will lead to contamination of water course/ground water.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

Ensure vehicles on site are washed down 30m away from the boundary near the site entrance.

The water used in washing down the vehicles is captured and drained to a combined sewer. It is unlikely that any contaminates will be on the vehicles but any that are will be diluted by the water used.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

4. Contaminated run off water from stripped site

Risk that the in periods of heavy rainfall the existing contaminates on the site could run off into the watercourse.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	**Acceptable risk Medium 2**	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

To prevent any potential contamination affecting the stream the identification and removal of contaminated hot spots will be programme in line with the remediation strategy before wholesale site clearance work commences to eliminate this risk of contamination.

Sand bags and silt fence to be installed to the side of the steam embankment, to prevent soil particles from entering the water course. Where silt fence is not practical bunds, drainage channels and sediment ponds will be utilised. The sediment pond will be cleaned out frequently to ensure effective use.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	**Acceptable risk Low 1**	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Pumping water from excavations

Where groundwater is encountered there is potential for it to spill out or leach into the watercourse.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

The site drainage and highway will be installed prior to property foundations. If ground water is identified water would be pumped into the combined sewer constructed on site. If the combined sewer is not operable water would be pumped to a tanker.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

5. Concrete foundations

All properties will have concrete strip foundations. There is potential for the concrete to spill over the foundation trench into the water course.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

The nearest foundation is 7m away from the watercourse. The foundations are constructed below the external ground levels and there is little opportunity for the concrete to spill out. However the sandbags and silt fence positioned alongside the banks of the watercourse will prevent any contamination in the unlikely event that this did occur.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

6. Dust and Run off from stockpiled spoil mounds

Risk that run off or dust from spoilt mounds will find its way into the watercourse.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

During the site clearance and cut and fill exercises, spoil mounds will be created around the site. In the event of heavy rainfall there is potential for the spoil mounds to be washed into the watercourse and potentially cause contamination. To control this risk all spoil mounds will be at least 10m from the watercourse, with sand bag and silt fence between the mounds and the water course. In dry conditions there is a risk that windblown dust from the spoil mounds will affect wildlife or find its way into the watercourse. To prevent this spoil mounds will be dampened in dry conditions to prevent dust release.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

7. Surface water sewer construction and outfall to water course

The surface water drainage requirements of Yorkshire Water require WCL to drain surface water from the new estate road, building roofs and hardsurfaces into the watercourse.

There is a risk in constructing the connection that construction pollutants, soil and aggregates etc could reach the watercourse once the drainage connection has been made.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

WCL will produce a specific RAM in conjunction with their groundwork contractor to ensure that debris from the breakthrough is undertaken safely by hand to avoid any debris falling into the watercourse.

The sequencing of work has not been confirmed but if the upstream section of surface water drainage has been installed grids, gulley's and manholes will be covered or filled with straw to prevent any construction debris from being washing through into the watercourse.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

8. Silt and surface water contaminants washed into surface water drainage.

Following the installation of the surface water sewer, and drainage system there will be a risk that construction activities and cleaning down of the estate road could contaminate the surface water.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

Gulleys and grids are to have covers and be filled with straw to soak up pollutants. Manhole covers are to be fitted immediately.

Drains to be jet washed to last manhole on site and cleared out. The drainage leg to the river is to be temporarily plugged until the risks of pollution has been removed.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

9. Construction of new tarmac estate road

As the drainage gulleys for the new estate road are connected to a surface water sewer that runs into the canal, the construction of the new tarmac estate roads is a potential pollution risk from the oils that run off during construction of the road if the gulleys are left open.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

Road gulleys are to have covers on and be filled with straw to soak up pollutants should they get through.

The drainage leg to the watercourse is to be temporarily plugged until the risks of pollution has been removed.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

10. Cement storage and use.

A cement silo will be located on site. There is a potential risk that cement could be spilled onto the ground and washed into the surface water sewer or across the surface into the watercourse.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	**Acceptable risk Medium 2**	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

Only trained personnel will operate the silo.

The silos moving parts will be removed and the silo will be secured at the end of each day so that it cannot be subject to vandalism.

The ground below the silo will be protected, or the silo will be installed on an existing hardstanding.

The silo will be located over 10m from the watercourse.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	**Acceptable risk Low 1**	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

11. Vandalism and miss use of site equipment

Construction sites attract vandalism and are subject to theft of equipment. These acts can lead to the pollution of the nearby environment including the watercourse .

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

All vehicles are fitted with immobilisers and trackers any movement that occurs outside working hours is recorded.
All plant will be secured within a fenced site perimeter.
Plant is locked and windows boarded were applicable.
CCTV is installed on site as a security measure.
Site security personnel are employed on a needs basis when equipment or plant levels are at their highest, or construction on site is at a key stage.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

12. Wind Blown

There is potential for lightweight materials to be blown from site into the watercourse and surrounding land potentially causing pollution and threats to wildlife.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

All materials not in immediate use will be stored and secured in the site compound. In the event of adverse weather mid-way through the working day. Covers will be fixed or weighted down to prevent lose materials from being blown into the watercourse.

Perimeter fencing will be installed around the site with fence rap, to prevent materials and dust spreading beyond the site boundary.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

13 Construction of Highway Retaining Walls

The proposed development requires highway retaining walls to be constructed in mass concrete in the vicinity of the watercourse. There is a potential risk that concrete could spill into and pollute the watercourse.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

WCL are proposing to use interlocking concrete blocks as a permanent formwork to the mass concrete. This will create a barrier that should prevent concrete spilling out.
Concrete pours will be done in layers with maximum depth 500mm to provide better control on concrete pours.
Sandbags and silt fence will also be used alongside the watercourse as further protection.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

14 Site Clearance – Invasive Species

In clearing the site there is a risk that WCL could cause the spread of invasive species both within the site and offsite.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

WCL establish a HERAS fence perimeter around the Japanese Knotweed stand and will subcontract the removal of the invasive species on site to a specialist contractor. The removal work will be undertaken ahead of the main site clearance to eliminate the risk of spreading the invasive species.

The contractor will follow RAMS procedures required to prevent the spread of invasive species offsite.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

15 Tree Felling – Nesting Birds

There are a number of trees that will be felled or pruned as part of the development. Undertaking these work during the bird nesting season could pose a risk to nesting birds.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	**Acceptable risk Medium 2**	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

Where possible WCL will undertake works outside of the March – September nesting season. If this is unavoidable a qualified Ecologist will survey the trees prior to felling to identify nests and whether they are live. Where the ecologist confirms that no nests are present the tree will be felled within 24hrs.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	**Acceptable risk Low 1**	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

16 Installation of box culvert

A new box culvert will be installed under the proposed highway to enable the water course to travel under the road.

There is a risk of polluting the water course whilst installing the culvert.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

To prevent the watercourse from being polluted, WCL will avoid interference with the current path of the stream by installing the culvert alongside it.
The stream will only be diverted through the culvert when it is fully installed.
Sandbags/coffer dam arrangement will separate the culvert working area from the water course during construction.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

18. Site establishment

WCL site establishment will consist of office, welfare facilities, storage cabins and material set down areas. The site setup has potential to generate noise from generator, operatives. Tree roots could also be damaged by site cabins, and material storage.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

The Arboricultural Impact Assessment report will be reviewed. Fencing will be erected to create Root Protection Zones around trees across the entire site to prevent the site setup and construction activities affecting retained tree roots.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

19. Construction activities in the vicinity of retained trees

Construction works proposed for the site will require movements of plant, machinery, and operatives. The works will also include excavations for foundations, service installation and drainage.

There is potential for damage to retained tree roots from these activities.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	**Acceptable risk Medium 2**	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

The Arboricultural Impact Assessment report will be reviewed. Fencing will be erected to create Root Protection Zones around trees across the entire site to prevent the site setup and construction activities affecting retained tree roots.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	**Acceptable risk Low 1**	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

20. Open excavations

The works will include excavations for foundations, service installation and drainage. In some cases these excavations will be left open overnight. Whilst deep excavations will be battered back and barriers put in place to prevent operatives and tresspassers coming to harm, it will still be possible for wildlife to enter and get trapped suffer distress.

Risk before controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

Controls

The duration of open excavations is to be minimised to reduce the risk wildlife entering excavations. Barriers used around excavations are to prevent wildflife from crawling underneath and sandbags are to be used to fill any gaps.

Planks to be placed in excavations to enable wildlife to walk out safely.

Risk after controls

Very Likely	Acceptable risk Medium 2	Unacceptable risk High 3	Unacceptable risk Extreme 5
Likely	Acceptable risk Low 1	Acceptable risk Medium 2	Unacceptable risk High 3
Unlikely	Acceptable risk Low 1	Acceptable risk Low 1	Acceptable risk Medium 2
What is the chance it will happen	Minor	Moderate	Major

7.00 Roles and Responsibilities

In delivering the measures identified in the CEMP the following roles will be undetaken

- Contract Manager: Oversees CEMP implementation and ensures compliance.
- Construction Site Managerr: Inducts all operatives to site and ensures daily adherence to environmental protocols on-site.
- Workers and Contractors: Attend site duction and follows environmental guidelines and report incidents.
- Regulatory Authorities: Monitor compliance with legal requirements.

8.00 Monitoring and Reporting

To ensure the measures identified in the risk and control measures section we will undertaken

- Regular site visits and inspections.
- Incident reporting and corrective action implementation.

9.00 Emergency Response Plan

Emergency details are contained within our Construction Health and Safety Plan.

- Procedures for spill containment and cleanup during construction.
- Fire prevention and response measures at the construction site.
- Emergency contact information and response teams listed in site office.

10.00 Training and Awareness

To ensure that are staff are aware:-

- All employees to undertake Environmental Awareness training on environmental policies, best practices, and safety measures.
- Regular updates on regulatory changes and compliance requirements, provided to relevant staff.

11.00 Summary

This Construction Environmental Management Plan serves as a proactive approach to minimizing environmental impacts during construction. Regular reviews and updates will be conducted to assess compliance, effectiveness of measures and potential improvements.

WCL have reviewed the site construction operations and identified the twenty construction activities that could impact on the environment and undertake a risk assessment, and identified measures to mitigate the impacts to acceptable levels.

Appendix A – Ecological Protection Plan

Accommodation Schedule:

- House Type B - 4 Bed (6 Person)
- House Type D - 3 Bed (5 Person)
- House Type F - 4 Bed (7 Person)
- House Type G - 2 Bed (4 Person)
- Apartment Type E - 2 Bed (3 Person)

Proposed Solar Panels to South/South East Facing Roofs.

Affordable Housing Proposal;

- Plots 11-13 are 3 Affordable rented flats.
- Plot 14 – Shared Ownership
- Plot 15 – First Home

- 1B Birdbox from NHBS or similar - 1B Schwegler Nest Box (12 No.)
- 2F Bat box from NHBS or similar - 2F Schwegler Bat Box (12 No.)
- HH Hedgehog house from NHBS or similar

Ecological Protection Plan Legend

- Perimeter Fencing – Indicated by yellow lines
- Tree Root Protection Zones – Indicated by green hatch
- Japanese Knotweed 7m exclusion area - Indicated by blue circle, yellow dot at enter indicates location identified.
- Silt Trap Fence – Indicated by blue dashed lines
- Site Compound Area- Indicted by red hatch
- Wheel wash facility – Indicated by blue hatch.
- Operative Car Park Area – Indicated by Yellow hatch

Gate Type G1: 1800mm high timber single leaf gate comprising of naturally finished external grade timber to match adjacent fencing.

Boundary Treatment: A
1500mm high precast concrete post and timber infill panel fending with 1200mm high naturally finished featheredge timber infill panels with a 300mm high precast concrete kicking panel beneath. Where party fencing occurs between two properties, a 1800mm high by 2-panel wide privacy screen is to be Installed.

Boundary Treatment: B
2100mm high precast concrete post and timber infill panel fending with 1800mm high naturally finished featheredge timber infill panels with a 300mm high precast concrete kicking panel beneath.

Boundary Treatment: C
950mm high dry stone wall to match similar existing surrounding walls.

Gate Type G2: 950mm high timber single leaf gate comprising of naturally finished external grade timber to match fence type A/B.

REV	DATE	AMENDMENT	BY	CHKD
P	10/11/23	Bat/Bird Boxes and Hedge Hog details added as Landscape Design	GG	GG
O	06/10/23	Proposed Solar Panes added to roof layout	GG	GG
N	25/07/23	Affordable Housing denoted and key added	GG	GG

PROJECT:	Burn Road, Huddersfield				
CLIENT:	Wiggett Construction				
DRAWING:	Proposed Site Layout - Roof Plan				
DRAWN BY:	GC	CHECKED BY:	GG	DATE: 26/10/2021	SCALE: 1:200 @ A1
STATUS:	Planning			DRAWING No: 1354/P/002	REVISION: P

HNAarchitects
Architecture | Planning | Design
HOLLINWOOD BUSINESS CENTRE, ALBERT STREET, OLDHAM, OL8 3QL
TEL: 0161 688 1820
E-MAIL: garry@hna-architects.co.uk : michael@hna-architects.co.uk