Construction Method Statement for Earthworks, Engineering and Highway Construction

Revision 4 Dated 23 February 2021

Land to the North and South of Dearne Valley Parkway

Gateway 36, Phases 2 & 3.

Harworth Group

Contents

1.0 Introduction

2.0 Description of Works

3.0 Parking

4.0 Access for Construction Traffic

5.0 Loading and Unloading of Plant and Materials

6.0 Storage of Plant and Materials used in constructing the development

7.0 Hoarding

8.0 Wheel Washing

9.0 Water Supply / Water Storage

10.0 Dust and Dirt Control during earthworks / cut & fill

11.0 Noise Emissions Control during earthworks / cut & fill

12.0 Waste Management resulting from earthworks / cut & fill

13.0 Temporary Surface Treatment of all development plots within the site following completion of the cut & fill operations

14.0 Additional measures to protect the amenity of residents in Shortwood Villas from noise, dust or other impacts during engineering or cut & fill operations.

15.0 Integration of Construction Works

16.0 Communication

Appendix A: **Construction Works Areas Plans**

Appendix B: Part 1 Works and access plans

Appendix B1: Part 1 - Phase 2 earthworks, shortwood roundabout s278 works, and the initial 23m of road – access for construction traffic

Appendix B2: Part 1 - Phase 2 earthworks, shortwood roundabout s278 works and initial 23m of road – site compound, haulage road etc

Appendix B3: Part 1 - Photograph of dry wheel wash and haul road at access into phase 2

Appendix C: Part 2 Works and access plans

Appendix C1: Part 2 - Phase 2 remaining s38 road works – access for construction traffic.

Appendix C2: Part 2 - Phase 2 remaining s38 road works – site compound, haulage road etc

Appendix D: Part 3 Works and access plans

Appendix D1: Part 3 - Phase 3 earthworks, new s278 roundabout, and the new s38 roadworks – access for construction traffic

Appendix D2: Part 3 - Phase 3 earthworks, new s278 roundabout, and new s38 roadworks – site compound, haulage road etc

Appendix E: Tree / Pond / Habitat Protection Fencing Plan(s)

1.0 Introduction

1.1 The purpose of this Construction Management Plan is to provide detail relative to Planning Condition nr 3 from the Consent (ref: 2019/1573) received for the Gateway 36 Phase 2 & 3 development.

The conditions referred to state the following:-

No earthworks, engineering cut/fill operations or highway construction shall take place, including any works of demolition, until a Construction Method Statement for that phase has been submitted to, and approved in writing by, the Local Planning Authority. The approved Statement shall be adhered to throughout the period of engineering operations or highway construction. The Statement shall provide for:
i. The parking of vehicles of site operatives and visitors;
ii means of access for construction traffic
iii. Loading and unloading of plant and materials;
iv. Storage of plant and materials used in constructing the development;
v. The erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate;
vi. Wheel washing facilities;
vii. Details of the provision of an on-site water supply or water storage facility;
ix Measures to control the emission of dust and dirt during earthworks or cut/fill;
viii Measures to control noise emissions during earthworks or cut/fill;
x. A scheme for recycling/disposing of waste resulting from earthworks or cut/fill
xi. temporary surface treatment of all development plots within the site following completion of cut/fill operations.
xi additional measures to protect the amenity of residents in Shortwood Villas from noise, dust or other impacts during engineering or cut/fill operations

1.2 The Construction Management Plan addresses the Earthworks and Infrastructure Works only and separate submissions will be made in respect of the Plot developments. The majority of Infrastructure Works are within the Harworth Estates demise, however there are works within the council adopted Highway demise (ie s278 Agreement Works).

2.0 Description of Works

2.1 The scope of Infrastructure Works includes new highways (both s278 and s38 Agreement Works), major earthworks, new foul and surface water drainage systems, and new incoming utility services including the diversion of existing utilities, and landscaping.

2.2 The works are proposed to be carried out in four Parts as shown on the plan at Appendix A:

- Part 1: Phase 2 earthworks, shortwood roundabout s278 works, and the initial 23m of road
- Part 2: Phase 2 remaining s38 road works into the site.
- Part 3: Phase 3 earthworks, and the new s38 roadworks into the site.
- Part 4: New s278 roundabout

2.3 This document is part of the requirements, which the selected Contractor who will need to comply with the contract documents throughout the duration of the works. The Contractor may wish to carry out works in a slightly different manner or using a different method to that indicated in this document. We therefore reserve the right for the selected Contractor to vary some of the details of this document at the appropriate time by agreement with the Councils.

Construction works at the site be undertaken during the following periods;

a) Monday to Friday: 08:00 – 18:00
b) Saturday: 09:00 – 13:00
c) Sundays and Bank Holidays: No working

For any work undertaken outside of these periods, agreement would be sought and obtained with the Local Planning Authority prior to the commencement of such works.

3.0 Parking

3.1 All Contractors parking and visitor parking shall be restricted to within the Site Boundary. An area of the site has been dedicated as a Contractors compound areas as shown on drawings included in Appendix B2, C2 and D2.

3.2 Parking for the Part 1(ie Phase 2 earthworks, Shortwood Roundabout s278 works, and the initial 23m of road) will be provided as shown on the plan included in Appendix B2.

3.3 Parking for the Part 2(ie Phase 2 remaining s38 road works into the site) will be provided as shown on the plan included in Appendix C2.

3.4 Parking for the Part 3 (Phase 3 earthworks, and the new s38 roadworks into the phase 3 site) will be provided as shown on the plan included in Appendix D2.

3.5 Parking for the Part 4 works (new s278 roundabout) will be within the site compound provided in Part 3 as these works are being undertaken at the same time. See Appendix D2.

3.5 Adequate space will be provided within these areas for Contractors and visitors parking. If additional parking is required, then this is already catered for within the site compound area adjacent the parking areas shown on drawings B1 and B2.

4.0 Access for Construction Traffic

Part 1 Works: Phase 2 site earthworks; Shortwood Roundabout s278 works; first 23m of spine road

4.1 Access and egress to site, for all construction traffic, will initially be via Upper Hoyland Road as shown on the drawing provided as Appendix B1a. This route will be utilised to establish the site accommodation and compound area and facilitate the commencement of the bulk earthworks and the initial earthworks and drainage associated with the S38 entrance from Shortwood Roundabout.

4.2 The main access and egress to site, for HGV delivery vehicles, will swap to the S38 entrance off Shortwood Roundabout, when the construction of this entrance is suitably advanced and partially completed (i.e. up to and including the Type 1 subbase layer). This access and egress will operate via the 'works entrance' and exit to the Lane 1 lane closure which is currently in place as shown on the drawing provided as Appendix B1b. Use of this closed lane road space will ensure construction traffic does not cause any obstruction or delay to traffic using the Dearne Valley Parkway.

Part 2 Works: Phase 2 site remaining s38 road works into the site

4.3 When the S38 entrance has asphalt applied to it, at least up to and including the binder layer, the entrance will then become operational as a junction off and onto Shortwood Roundabout for construction traffic and deliveries as shown on the drawing provided as Appendix C1, with temporary road markings and signage being in place where required. At this stage, the temporary fencing and gates associated with the development will be set back by a sufficient distance from the junction, to allow HGVs to pull off Dearne Valley Parkway / Shortwood Roundabout without causing an obstruction or delay.

4.4 The Upper Hoyland Road route will continue to be used throughout the scheme but only for smaller service vehicles to the compound area, staff cars and vans

Part 3 Works: Phase 3 site earthworks; new s38 roadworks into the site

4.5 Construction traffic will access the site for the Part 3 works (Phase 3 earthworks, and the new s38 roadworks into the phase 3 site) via the route shown on drawing contained in Appendix D1 (ie round the back of the car supermarket). Once these works are completed, the temporary car park and compound area and haulage road (highlighted on Appendix D2 drawing) will then be removed.

Part 4 Works: New s278 roundabout

4.6 Construction traffic will access the site for the Part 4 works (new s278 roundabout) via the existing adopted highway. Traffic management proposals shall be agreed with Barnsley Council highways department, together with street works licence prior to any of the s278 works being commenced on the adopted highway.

5.0 Loading and Unloading of Plant and Materials

5.1 There will be a requirement for deliveries throughout the construction of the Infrastructure Works. Contractors will ensure that plant and material suppliers select appropriate delivery vehicles which will only enter the site as long as the delivery can be received and offloaded in a safe and appropriate manner.

5.2 All vehicles entering and leaving the site will access through the site entrances as follows:

- Appendix B1 highlights the access points for Part 1 works (ie Phase 2 earthworks, shortwood roundabout s278 works, and the initial 23m of road).
- Appendix C1 highlights the access point for Part 2 works (ie Phase 2 remaining s38 road works into the site).
- Appendix D1 highlights the access point for Part 3 works (ie Phase 3 earthworks, and the new s38 roadworks into the site).
- Part 4: New s278 roundabout will be accessed off the existing dual carriageway as per the traffic management proposals issued to the Highways officer for approval.

5.3 A gatehouse will be provided at each of the site entrances which will be manned throughout working hours. An onsite car park which will accommodate 30 no. cars is located within the site compound, the car park facility will be used for any persons wanting access site to undertake works or visit. Any other form of vehicle delivering to site will be held in the 'holding bay' at the site entrance. Information regarding traffic management restrictions and health and safety regulations on site will be passed to the driver before the vehicle can proceed onto site.

5.4 Sufficient space will be provided, and incoming deliveries will be planned daily and managed in such a way to give each delivery of material a 2hr time slot when undertaking one off deliveries, any delivery which is frequent such as aggregate, will be ordered in line with any other delivery time slot for the day, the holding bay previously mentioned will be able to accommodate 2no. wagons at any one time and the delivery will be managed in such a way that 3 wagons can be on site in any one time, 1 wagon dispatching and 2 wagons in holding bay the holding bay is located just before the dry wheel wash to allow for the wagon coming off site to access the dry wheel wash, thus preventing any queuing / waiting on the highway.

5.5 Once within the site, vehicles will be directed to the relevant offload area via appropriate signage. Any loading / unloading areas will be pedestrian free zones. Suitable audible and visual devices will be used on any plant / machinery and all personnel on site will wear suitable protective equipment. When reversing all vehicles will be assisted by a banksman.

6.0 Storage of Plant and Materials used in constructing the development

6.1 All plant and materials will be stored within the site boundary, most likely within the site compound area. High value plant and materials may be stored in a lockable compound. Security arrangements will be put in place by the Contractor throughout the duration of the works to ensure all plant and machinery are secure when there is no presence on site.

6.2 Any oil and chemical tanks stored on site shall be sited on an impervious base and surrounded by a protective bund.

6.3 No machinery / plant or construction material shall be stored within areas that are fenced for the protection of trees, ponds or surrounding terrestrial habitats (ie the tree protection drawing contained in Appendix E.)

7.0 Hoarding

7.1 The site boundary will not be secured by any further measures than already exist (ie timber fence to some of the site boundaries) other than the use of a mix of timber hoardings and heras fencing at the site entrance and site compound areas together with vehicle and pedestrian access gates at the site entrance. The security gates will be locked outside of working hours and no personnel will be allowed on site without authorisation from the Contractor.

7.2 Boundary hoardings / fencing that are being provided will be robust and comply with the relevant British Standards and will be maintained by the Contractor throughout the duration of the works.

7.3 The Contractor will be responsible for security of the site and shall maintain adequate signage to ensure the health and safety of staff and visitors.

7.4 Any fencing erected will ensure protection of trees, ponds, habitats and species within the development area in accordance with drawing contained in Appendix E (which was also submitted with the information contained for the condition discharge approval of Planning conditions 5 and 9).

7.5 With the exception of the main entrance, given the location of the infrastructure works i.e. within the wider development with no public access, it is not proposed to install any decorative displays or viewing facilities for the public.

7.6 No hoarding shall be erected on or within the extent of the public highway without the prior approval of the Local Highway Authority and the necessary licencing being obtained.

8.0 Wheel Washing Facilities

8.1 Dust dirt, and mud control is essential and will almost certainly be required at various stages of development. Contractors will be required to take measures to minimise the presence of air borne dust during construction. The Contractor will take all reasonable measures to avoid mud being deposited on public roads. Adjacent roads and footways will be regularly inspected and cleaned.

8.2 Given the size of the site and location of the works the risk of dust and dirt affecting neighbouring residential properties is minimal however the Contractor will be responsible for reducing dust and dirt at source. The following measures will be undertaken by the Contractor: -

- Haul routes will be constructed with suitable hardcore or stone material. The Haul routes will be provided with a metalled surface for a minimum of 30metres into the site in order to assist in keeping the public highway free from mud and debris.
- Design controls will be implemented for construction equipment and vehicles, and appropriately designed vehicles are to be used for materials handling
- The site will be regularly inspected, and site boundaries checked for dust deposits and removed as necessary. In addition, local roads are to be checked and cleaned when necessary but at least daily.
- The provision of easily cleaned and properly drained hardstanding for vehicles entering, parking on and leaving the site
- The use of approved mechanical road sweepers, to clean hard-standings and any mud or debris deposited by site vehicles on roads or footpaths in the vicinity of the site
- Secure sheeting of lorries carrying spoil or other particulate materials
- An onsite vehicle wheel wash facility will be utilised when necessary to prevent mud being deposited on the adopted roads adjacent the site.
- A dry wheel wash facility will be set up and in use at all times adding further measures to prevent debris/mud entering the highways, the dry wheel wash will be monitored daily and cleaned on an as and when basis, the dry wheel wash will not be allowed to be becomes ¾ full prior to cleaning out. All cleaning out will be undertaken taking in to account deliveries for the day and off peak times for deliveries is when the cleaning out process will be undertaken which will take 2hrs to move scrap out debris that is present and place the wash bay back in to its original position.

  The Contractor will take all reasonable measures to minimise sedimentation of highway drainage systems. This will include the use of sediment traps and/or barriers to prevent mud and/or contaminated materials entering the system.

8.3 Particular care will be taken to ensure dust and pollution control within the A6195 adjacent to the site.

8.4 Further measures will be implemented by the Contractor to prevent / control surface water run-off and pollution from the site onto the Adopted highway, in particular the A6195.

8.5 Locations of the wheel wash facilities are included on the site compound drawings and site access drawings included in Appendix B and C.

8.6 We acknowledge the use of road sweepers is a generally accepted method of cleansing, however given that depositing debris on the highway is an offence under Section 148 of the Highways Act, the use of sweepers is a secondary reactive measure and in not be relied upon as a regular occurrence.

9.0 Water Supply / Water Storage

9.1 If possible, a temporary "mains" water supply will be used, but given timescales with Covid 19 and the time taken to obtain quotes and actual installations from Statutory Utility Companies, it may be that a metered standpipe form a nearby YW washout to service the compound and welfare facilities. However, should either of these alternatives not be feasible, we will utilise a 500-gallon water bowser / tank to supply the welfare facilities with running water. All wastewater and effluent will be piped to an effluent tank, which will be located underground adjacent the welfare set up. A local and approved supplier / waste carrier will undertake regular water refills and effluent tank emptying as and when required. Drinking water will be provided via water coolers placed in the canteen and office facilities.

10.00 Dust and Dirt Control during earthworks / cut& fill

10.1 Due to the time of year when the works are undertaken (ie programmed for Autumn / Winter of 2020 / 2021), dust and dirt will be controlled naturally in most instances. A tractor and bowser will be on site as and when the earth is drying up and causing uncontrolled dust emissions this will be used to dampen down all areas.

The Contractor will control water on site and this will include both temporary measures and utilising elements of the permanent works, such as attenuation ponds. Natural water / rain fall will be collected via temporary and permanent drainage and stored within attenuation pond locations and potentially used as dust suppression water as and when required, should the works have to be undertaken in summer months (which at the moment is not the case).

11.0 Noise Emissions Control during earthworks / cut & fill

11.1 Best practical will be adopted at all times to reduce the likelihood of nuisance issues. The Contractor will follow guidance of BS5228:1999+A1:2014 Parts 1 and 2 with the following measured employed as a minimum requirement:

- Wherever possible noise will be controlled at source;
- Careful selection of working methods and programme;
- Where applicable, selection of quietest working equipment available;
- Ensuring that regularly maintained and appropriately silenced equipment is used;
- Handling all materials in a manner which minimises noise, such as minimising drop heights;
- Stationary plant, such as crushers, should be screened or located as far as possible from identified receptors as far as practicable;
- Noise during the night-time relating to any generators employed on site should also be considered. Where possible generators should be screened or located as far as possible from identified receptors;
- use rubber linings in, for example, chutes and dumpers to reduce impact noise;
- Switch all audible warning systems to the minimum setting required by the Health and Safety Executive. Reverse warning alarms should be fitted with white noise (broadband) systems;
- In terms of on-site employees, appropriate actions will take place with regard to the Noise at Work Regulations including the requirement for the use of ear defenders and appropriate warning notices.

11.2 Operatives will be trained to employ appropriate techniques to keep site noise to a minimum, and will be effectively supervised to ensure that best working practice in respect of noise reduction is followed. All employees will be advised regularly of the following, as part of their training:

- the proper use and maintenance of tools and equipment;
- the positioning of machinery on site to reduce the emission of noise to the neighbourhood and to site personnel;
- the avoidance of unnecessary noise when carrying out manual operations and when operating plant and equipment;
- the protection of persons against noise;
- the operation of sound measuring equipment (selected personnel).

11.3 Special attention will be given during training to the use and maintenance of sound-reduction equipment fitted to power tools and machines.

11.4 No piling is envisaged. However, should the proposed foundation design change and piling is required, measures to control vibration will be adopted following the guidance provided within BS5228:1999+A1:2014 Part 2.

12.0 Waste Management resulting from earthworks / cut & fill

12.1 The Contractor will employ measures to minimise disposal of waste generated during the construction period. The Contractor will re-use and recycle any waste materials as far as is reasonably practical. Waste soils that are suitable for reuse will be reused on the site in accordance with the Definition of Waste Code of Practice (DoWCoP) and site Materials Management Plan.

12.2 The Contractor will comply with all relevant guidance and legislation including the following:-

- Environmental Protection (Duty of Care) Regulations 1991;
- Environmental Protection Act 1990, Part II;
- The Waste (England and Wales) Regulations 2011;
- List of Wastes (England) Regulations 2005;
- Hazardous Waste Regulations, 2005;
- Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991;
- A Simple Guide to Site Waste Management Plans (Environment Agency Net Regs Guidance) 2011;
- Environmental Permitting (England and Wales) Regulations 2010;
- Clean Neighbourhoods and Environment Act 2005; and
- Definition of Waste: Development Industry Code of Practice, CL:AIRE 2011.

12.3 The contractor will be responsible for developing a detailed Waste Management Plan for all waste streams other than soil which is suitable for reuse on the development. The WMP will contain details of the procedure for assessment, separation and storage of waste materials for re-use, recycling or disposal. The WMP will identify recycled material content, methods of waste minimisation and recycling

12.4 The Contractor will be responsible for -complying with the measures set out within their WMP and the site MMP as well as providing supporting evidence for the MMP including details of soil excavation, movement, stockpiling and placement locations, waste transfer tickets, testing and treatment details if required.

12.5 Should any waste need to be removed offsite, the Contractor will be required to investigate the possibility to minimise waste arisings at source and where waste generation is unavoidable, to maximise the recycling and re-use of materials. All waste will be stored in labelled skips or containers and material to be re-used will be sorted on site. It may be necessary for some waste to be taken off site for segregation by others. The amount of waste re-used, recycled or disposed off site will be recorded by the Contractor.

12.6 Any waste taken off site will be taken to a licensed waste disposal facility by a registered waste carrier. The Contractor will ensure that all waste and disposal facilities are appropriately licensed. Where potential hazardous or contaminated ground is encountered the Contractor will carry out sample testing to classify the materials. The waste soils shall be classified in accordance with the Landfill (England and Wales) (Amendment) Regulations 2004, the Hazardous Waste Regulations 2005 and provided with a six figure European Waste Catalogue code as described by the List of Wastes Regulations (England) 2005. The Contractor will use a qualified specialist for treatment of any such materials and the disposal of the material will be dealt with under all relevant regulations.

12.7 Measures will be taken to ensure any waste leaving the site is protected to prevent waste deposits onto the public highway.

12.8 The following documentation must be completed and held on-site by the Contractor in a designated file:

- Targets for waste minimisation and recycling;
- Quantities of waste produced, reused, recycled and sent to landfill;
- Waste Transfer Notes (Controlled Waste);
- Hazardous Waste Consignment Notes;
- Waste carrier's registration licences; and
- Other relevant Environmental Permits and licenses if required for disposal sites.

13.0 Temporary Surface Treatment of all development plots within the site following completion of the cut & fill operations

13.1 All areas of cut and fill will be left compacted and sealed with the use of a heavy roller to prevent any disturbance from inclement weather in accordance with good earth work practises

14.0 Additional measures to protect the amenity of residents in Shortwood Villas from noise, dust or other impacts during engineering or cut & fill operations.

14.1 The Contractor will undertake base line dust and noise monitoring prior to commencing on site and then periodically during the duration of the Contract. The date will be stored and compared against the base line date and the Local Authority limits and advice. Further mitigation measures will be implemented to negate any issues as far as reasonably practicable. The Contractor will also adhere to the working days and times detailed within the planning consent.

Letter drops will be undertaken prior to works commencing, at the initial onset deliveries will be significantly busier than any time during these works, the works are far enough away from the residents and believe this should not pose any significant noise nuisance during the day and noise of the traffic passing a daily basis will create will drown out most of the noise that is produced.

All haulier and supplier will be advised and informed of the delivery route requirements and the sensitivity of the route and the surrounding residential area into the site. All delivery drivers will be required to complete a supplier / haulier induction which will convey the required advice and guidance prior to deliveries taking place.

15.1 Integration of Construction Works

15.1 It is not expected that any concurrent construction works will be undertaken at the same time as the wider infrastructure works. However, should this change, the council will be notified of any necessary changes to this Construction Management Plan.

15.2 This Construction Management Plan will be updated as any individual plot development contracts are let, if required.

16.0 Communication

16.1 A sign board, clearly located at the site entrance will be erected by the infrastructure Contractor which will provide details of the company and a single point of contact on site.

16.2 The infrastructure Contractor will implement a complaints procedure and the point of contract provided will be responsible for dealing with any complaints received. The contractor will be required to keep a log book on site off all complaints received, the date received and the details and date of the response provided.

Appendix A

Construction Works Areas Plans

Appendix B

Part 1 Works and access Plans

Appendix C

Part 2 Works and access plans

Appendix D

Part 3 Works and access plans

Appendix E

Tree / Pond / Habitat Protection Fencing Plan(s)