

CONSTRUCTION METHOD STATEMENT (REVISION -)

Land Rear Of 45 West End
South Cave
East Riding of Yorkshire
HU15 2EX



INTRODUCTION

This document has been prepared to support the following planning approval:

Reference:

22/02028/PLF

Proposal:

Erection of two dwellings with associated access and infrastructure.

Location:

Land Rear Of 45 West End South, Cave East Riding Of Yorkshire, HU15 2EX

East Riding Council have stated:

No development shall take place on site, including any works of demolition, until a Construction Method Statement (CMS) has been submitted to and approved in writing by the Local Planning Authority. The approved CMS shall be adhered to throughout the demolition and construction period and shall provide for:

- I. the parking of vehicles of site operatives and visitors.
- II. loading and unloading of plant and materials.
- III. storage of plant and materials used in constructing the development.
- IV. erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate.
- V. measures to reduce mud deposition offsite from vehicles leaving the site including wheel washing facilities.
- VI. measures to control the emission of dust and dirt during construction/demolition including arrangements to monitor dust emissions from the development site during the construction phase.
- VII. a scheme for recycling/disposing of waste resulting from demolition and construction works.
- VIII. measures for the protection of the natural environment.
- IX. hours of construction, including deliveries (construction hours should be specified as Mon Fri 07:00 18:00; Sat 08:00 13:00; and no activity on Sundays and Public Holidays).
- X. the control of noise and vibration emissions from construction activities including groundworks and the formation of infrastructure including arrangements to monitor noise emissions from the development site during the construction phase.
- XI. no fires or burning of any waste/timber on site.



CONSTRUCTION MANAGEMENT PLAN

Site Location:

Land Rear Of 45 West End South, Cave East Riding Of Yorkshire, HU15 2EX

Site Management:

Contact details for the site management team will be posted on the gate/fence of the construction site.

During work hours the site team will be contactable directly by mobile telephone. Out of hours, a voicemail message will provide emergency contact details.

Construction Working Hours:

Hours of construction, including deliveries as follows:

Mon – Fri - 07:00 - 18:00 Sat - 08:00 - 13:00

No activity on Sundays and Public Holidays.

Restriction of Vehicular Traffic:

Regular site deliveries pose no threat to the condition of the proposed access road to the site.

Oversized loads will be infrequent. However, in the event that an oversized load is required, a site survey to assess the best means of delivery will be undertaken.

This will consider:

- Width of access road.
- Condition of road way.
- Possible pinch points.
- Flow of traffic.
- Volume of traffic.
- Duration of passage.

A comprehensive review of access to ensure that site material can be delivered and be dropped off without damaging the existing infrastructure will be undertaken prior to commencement of construction works on site. If in the unlikely event that damage occurs to the roadway, reinstatement work will take place in accordance with the requirements of the Highway Authority.

All loads delivered to site will be within the loading capacity of the roads.

All site traffic will be directed to the construction site access using directional signage.



Suppliers and sub-contractors will be notified in advance of the desired location for delivery. Direction and access point maps with site delivery rules and times will be sent out to suppliers and sub-contractors.

All gates on site open inwards and will not impede the public highway or footpaths at any time.



Protection of Buried Services:

All services within the site have been terminated by the appropriate utility service providers. Works outside of the site perimeter will be undertaken by the relevant utility provider/owner of the apparatus or their selected contractor.

Site Security and Boundaries:

The Contractor will be encouraged to form site access routes early on in line with their logistics plan and will enclose the site using secure 2m high timber hoarding and heras fence panels set out along the perimeter, with the main entrance having lockable gates for safety and security.

Waste, Recycling and Contaminated Materials:

The developer will establish a dedicated Waste Management Contractor team who will be tasked with the removal of all waste from site.

The developer will implement a recycling regime for materials and packaging.

It is planned that site waste will be reduced through segregation and recycling.

The developer will segregate the following materials in the material recovery programme:

- Timber
- Plastics
- Metal
- Plasterboard
- Pallets and cable drums

Due to site restrictions, all waste material will be placed in skips on site and sorted at an off-site recycling facility.

All contractors working on site will be supplied with refuse bins by the waste management team. Once the bins are filled, the waste management team will consolidate the waste and remove from site.

The consolidated waste will be collected from the site by a licensed waste carrier.

Waste certificates will be collated for all waste deposited at Environmentally Controlled Waste Reception Centres.

Any hazardous waste that is removed from site will be monitored to record compliance with the Site Waste Management Plan.

Records will be gathered about the waste generated on site including:

- Volume Quantity to landfill/recycled.
- Type
- Cost
- Managing Impacts of Proposed Works within SPZ



Storage of materials and fuel

The storage area should be chosen, having taken into consideration the environmental factors surrounding the site. If there are watercourses or open drains, tanks should be positioned as far away as possible to minimise spillage to such areas.

Diesel and fuel tanks will be bunded and the bund capable of holding 110% of the largest tank capacity. Where it is identified that excessive rainwater is accumulating onto the refuelling area/within the refuelling area, we will erect/construct a roof structure to eliminate rainwater collection.

As an alternative, a purpose designed double-skinned storage tank to be used.

The discharge hoses should be kept in good condition and inspected on a weekly basis. The discharge nozzle should have a holding bracket to eliminate repeated small discharges after plant and vehicles have been re-fuelled. The discharge line should have an isolating valve positioned as close as possible to the tank and this discharge valve should be locked closed whenever the tank is unattended.

A hard standing will be provided for the re-fuelling area. When re-fuelling static plant and equipment, absorbent mats or granules should be available to deal with any spillage and drip trays should be used under such plant. Fuel being transported or carried around the site should be in purpose designed bowsers or carrying containers.

With regards to oils and other fluids, consideration will have to be given to health and safety aspects of these substances as well as environmental aspects. If it is safe to do so, they should be stored in a secure container where they are protected from vandalism and any spillages are contained within the container. With some substances, it is essential they are stored in open, well-ventilated areas in which case, bunding or other impermeable layer is placed under the storage area.

Excavations

The excavation works to form the foundations for the proposed plots and the installation of the drainage will be undertaken in a sequential method. Where it is identified during the excavation works that granular materials are identified, this will be recorded and the Client made aware immediately.

Where it is identified during the excavation works, granular soils are identified the following method will be adopted:

- No excavation or trenches will be formed or carried out during proposed periods of heavy rainfall.
- Should excavations experience sands and gravels then excavated trenches will be lined with 1200 gauge polythene. The polythene will extend at least 2m either side of the granular soils and at least 200mm up the side walls of the excavated trench (higher if the excavation has been taken into granular soils and they are visible in the side walls). The polythene will then be covered with 100mm of lean mixed concrete.
- The nominated Site Manager / Contractor will liaise with the Concrete Contractor in advance and schedule the concrete pour to avoid any delay.

NOTE: The Contactor will minimise delay in backfilling the excavation / trenches. Any delay in backfilling the excavation trenches due to awaiting for the Building Inspector, will be recorded and the Client notified.



Onsite plant machinery on site

Plant machinery retained on site for the development works, all test inspections certificates will be retained by the owner/operator and made readily for inspection as and when required. Defective plant on site will be removed away from the working areas, stored within the confines of the site compound and arrangements made for collection off site or maintenance on site within the designated area.

Vehicles when not being used will be stored/parked on hardstanding/crushed concrete.

Loading and unloading of materials:

Materials and plant will be unloaded within the site compound area to be noted on a site enabling plan if required.

Public Footpaths/Highways:

Where works are to be undertaken outside the boundary of the site, measures will be put in place to ensure public footpaths remain open or are subject to clear and safe diversions in accordance with the requirements of the local authority.

No property on site will be occupied until a clear and safe access has been provided from the home to the site boundary.

Welfare/Contractor Parking:

The developer will construct a central welfare which shall provide sanitary convenience for both male and female workers.

The maintenance of the workers rest area, toilets and changing rooms will be maintained to high standard to ensure the hygiene of the facilities.

All vehicles will be parked on site in holding areas set aside from the construction works.

Logistics:

All vehicle movements will be controlled by the site construction team who shall co-ordinate all construction traffic to and from site.

Spill control, prevention and environmental guidance for the construction sector

This guide sets out to identify the requirements for construction businesses of all sizes and types to better understand and meet their obligations to protect the environment and prevent spills from occurring.

Although all construction sites are different, there are some common risks that can be found on most if not all. Where plant and machinery are used, there is always the risk of fuel leaks or hydraulic oil spills. Fuel storage areas also present a risk, as do the areas used to refuel vehicles or machines. A lot of construction takes place around water, so again pollution entering into a water course is a risk that needs to be considered.



Sections of text are quoted from the www.gov.uk environment website, which features best practice guidance and regulations. Please note this document only refers to guidance and regulations in England and Wales.

Contractors are responsible for preventing your business or organisation from causing or allowing pollution to happen. Pollution is when any substance that harms or could harm people or the environment gets into the air, water or ground. If you pollute, you could get an unlimited fine, go to prison for up to 5 years, or both. You may also have to pay for the whole cost of the clean-up. Contact the Environment Agency pollution incident hotline if polluting materials have entered or could enter a watercourse or soak into the ground, e.g. from a leak or uncontained spill.

Containers of oil-based fluids at your site

You must follow the regulations for businesses if your oil container can hold 201 litres or more of:

- Petrol.
- Diesel.
- Biofuels.
- Kerosene.
- synthetic oils, for example motor oil including waste oil.
- oils used as solvents •biodegradable oils, for example lubricating or hydraulic oils.
- liquid bitumen-based products, for example waterproofing or damp proofing products, or coatings for a road surface.

The Environment Agency recommends the following capacities for secondary containment:

- at least 25% of the capacity of storage containers up to 205 litres capacity.
- at least 110% of the capacity of storage containers over 205 litres capacity.

You must make sure your secondary containment is suitable for the substances you store, including its size and construction.

You must not allow the contents of containers to get into surface water or groundwater.

The Environment Agency advises that you place your storage at least:

- 10m away from watercourses, open drains, gullies, unsurfaced areas or porous surfaces.
- 50m from wells, springs or borehole.

Unloading and moving potential pollutants

Make sure you have procedures to prevent pollutants from spilling or leaking when they're being delivered, loaded or moved around your premises.

You should:



- load and unload in suitable places on your site make sure there are no open drains to surface water and carry out a risk assessment.
- use pre-arranged routes for deliveries and movements.
- have a spill kit, suitable to the products on your site, available near storage, loading areas and transfer routes.
- supervise deliveries, and make sure the people involved know what to do if there's a spill and how to use the spill kit.

Construction, inspection, and maintenance

The developer is to assess and minimise pollution risk at site and know how you'll respond if there is an incident. This can be included within a pollution incident response plan.

To include the following:

- prevent water from entering excavations by using cut-off ditches or covering the excavation.
- collect contaminated water (e.g. run-off or water pumped out of excavations) in a system where it can be recycled or treated, e.g. using a settlement tank or lagoon.
- carry out activities involving potential pollutants, e.g., concrete or fuel, in dedicated areas which are designed so that spills, leaks, drips and contaminated run-off can be captured and disposed of.
- protect stockpiles (e.g., soil, sand, hardcore) so that materials aren't blown or washed away.

Temporary de-watering from excavations

Temporary de-watering from excavations to surface water. You usually need an environmental permit if you discharge liquid or waste water into surface water.

Conditions you must comply with the discharge must:

- be clean water, for example clear rainwater or infiltrated groundwater which has collected in the bottom of temporary excavations.
- not result in water containing fine or coarse suspended solids (silty water) entering surface water.
- not last more than 3 consecutive months (the activity may stop and restart but the clock does not restart) if the activity is likely to go over 3 consecutive months then you need to apply for a permit.

Secondary containment and bunds

You must install secondary containment around your container to catch any oil that leaks.

Secondary containment is usually either:

- a drip tray beneath the container
- a bund an outer case which holds the container.

Fixed tanks must be bunded. Other containers can be bunded or use drip trays.



Secondary containment does not include:

- 'double-skinned' or 'twin-walled tanks', where the tank is surrounded by a second outer skin for extra strength
- oil separators

If you use a bund, it must hold 110% of the capacity of the container. If you do not have a bund, check your secondary containment has the required capacity, depending on what kind of container it's holding.

You should use secondary containment for any containers on your site that aren't integrally bunded, including double-skinned containers. Secondary containment can help to prevent:

- solvents leaking from containers.
- spills from fires and explosions in storage areas.

If you don't provide secondary containment on your site, you may have to explain why it isn't needed during an inspection from, for example, the Health and Safety Executive, a local authority or the Environment Agency.

Secondary containment could include:

- simple spill decks and containment platforms
- safety storage platforms with spill decks
- engineered solutions, such as bunds and prefabricated systems made from steel or plastic.

Make sure that secondary containment:

- is impermeable and chemically resistant to the solvents stored in it some types of concrete are not resistant to all types of solvent.
- has clear labelling stating its contents, if it's enclosed.
- has no services passing through it (e.g. pipes or ducts).

Controlling Sediment Runoff

From the onset of works, all contractors will be required to use all possible means to ensure that the least amount of debris is carried out onto the external carriageway.

When the construction of dwelling(s) commences, the adjacent public highway will be regularly cleaned using a manual road sweep means. In addition, a mechanical road sweeper will be hired and used if the requirement is there. No tipping of sweeping arisings will be undertaken on site.

Road sweeping activity will be kept to a minimum and only used in exceptional circumstances. Road sweeping to be continually monitored through active and ongoing dialogue with the local Highway Department.

Silty water will be managed in line with the following statements, and this will include, but may not be limited to:



- Bunding to be installed along the site boundaries and where any runoff to low land is identified. Any buildup of water to be collected and removed from site.
- A designated storage area for stockpiles of topsoil & subsoil will be established along the southern boundary, away from the surface water drain, excess will be taken away from site.
- Stripping of topsoil will be kept to a minimum, only to be carried out as and when areas are to be developed.
- Site management to undertake tool box talks to create awareness to plant operators of the environmental risks of silty water.
- Minimise movement of plant on and off road to prevent tracking of materials.
- Any road gullies to have a gully guard incorporated to aid in silt management.
- Placement of terram within manholes to be inspected and replaced when necessary.

On site jet wash will clean off any loose soil or materials and will be installed by the entrances to the sites, this will minimise debris taken on to the road.

Road sweeping to be continually monitored through active and ongoing dialogue with the local Council Highway Department.

Site access during works period

The entrance to the construction phase will be via West End Farm Close.

Operatives will only be permitted to access the site working areas after receiving induction.

Site notice boards will be displayed at the site entrance and will display the project particulars, contact details, access and egress procedure, site rules and all necessary health and safety information.

Noise and Vibration

The developer will adhere to the key legislation on noise and vibration as detailed in the:

- Control of Pollution Act 1974
- Environmental Protection Act 01990 (ss79-82)
- BS 5228: 2009, Code of Practice on Construction and Open Site.

Site operations will be controlled so that all plant and machinery noise emissions (including the provision of ventilation, heating and cooling) shall be designed, installed and operated at noise levels that do not cause noise nuisance to the nearest adjacent residential properties, other than can be reasonably expected on a construction site.

The developer shall use reasonable endeavours that disruptive sound levels will be kept to a minimum.

A variety of measures will be used to effect the reduction of noise transmitted from site, this will include:

- Co-ordinated delivery times and efficient traffic management to prevent queues of traffic accessing the site.
- Ensuring all plant has sound reduction measures (mufflers, baffles or silencers).
- Utilising construction techniques that minimise the production of noise.



- Strict adherence to the site working hours.
- Positioning plant away from properties.
- Machines in use will be throttled down a to a minimum.
- Cutting operations will be kept off site as much as possible by pre-fabrication.
- Localised shrouding of plant in accordance with BS5228-2:2009.
- Use of mains electrical power wherever possible with the use of generators kept to a minimum.

Air Quality and Dust Management Plan

Reasonable care will be taken not to cause the primary environmental nuisances of noise and dust pollution. Below are some actions that will be carried out to abate these problems:

- Ensure that all materials transported to and from site are in enclosed containers or fully sheeted.
- Ensure stock piles of topsoil etc are kept damp in dry windy conditions.
- During dry periods the works are to be damped down to control the generation of dust.
- Ensuring materials have a minimum of packaging.
- Ensuring all polystyrene and similar lightweight materials are weighted down.
- Making sure all dust generating materials are adequately packaged.
- Ensuring all vehicles leaving the site have their loads covered where spoil or demolition materials are being removed.
- Provide regular road cleaning using road sweepers or brushes to control dust and must.
- Keeping the loading drop heights of spoil into trucks as low as possible.
- Implementing an effective procedure to deal with complaints from third parties to ensure issues are dealt with efficiently and quickly.
- Ensuring all contaminants kept on site are safely stored with the necessary procedures put in place for leaks and spillages etc.
- Use of mains electrical power wherever possible with the use of generators kept to a minimum.
- A waste management system will be implemented on site.
- Use of suitable hard bonded surface to temporary haul roads such as tarmacadam to keep dust levels to a minimum during dry periods.
- The burning of rubbish or surplus materials on site will be strictly prohibited.
- The developer should provide hard surfacing and effectively dust suppressed haul routes to prevent machines/vehicles tracking over loose ground and appropriate speed limit around site to prevent resuspension of dust on roads from vehicle movements. Effective cleaning of hardstanding and bowsing of haul roads shall take place when necessary.

Emergency Services Routes and Access by Third Parties

Access for emergency services on site will be via the site access routes and emergency escape routes. Local emergency services may be notified of the access points before work starts on site and in due time before access arrangements are relocated.

Police Requirements



No specific Police requirements are envisaged. However, regular contact will be maintained with the Police on such matters as abnormal load licences and be fully co-operative with any unforeseeable matters.

Site Security

Fire escape routes, firefighting stations, alarm points, muster points and practice drills within the works will be in accordance with standard Health and Safety Procedures and agreed with local fire officer.

Site management will be responsible for seeing that all plant and materials are stored safely and securely after the workday ends.

Protection of Third Parties

Wherever possible, all site activities will be contained within the site boundary and a comprehensive traffic management plan will be implemented to ensure no disruption is caused to traffic or pedestrians on the adjoining roads or walkways. Specific loading and unloading areas will be designated inside the site boundary.

Notifications

- During the mobilisation period communications will be set up with the following authorities:
- Notice will be served to the Health and Safety Executive.
- Meeting with Building Control and Planning Authorities.
- Meeting with local Environmental Health Officer.
- Meeting with local Police and Fire Brigade.
- Liaison with local residents.
- Notification to the emergency services giving full details of the construction works.
- Highways Authority.

On Site Storage

"Just in time" deliveries will reduce the volume of on site storage requirements.

Secure storage of materials, plant, chemicals, and gasses will be controlled in accordance with the developers Health and Safety Procedures and Environmental Policy.

Craneage and Hoists

The majority of unloading and distribution will be by tele-handler/manual handling.

Craneage will be provided with mobile cranes suitably sized for the required works. All lifting works will be subject to the production of a Lifting Plan. Cranes will at no time over sail the public highway, footpaths or neighbouring properties.

Induction/Site Rules/Consultation



Every worker who enters the project will receive a specific project induction before they are allowed to leave the compound and commence work on site.

Inductions will provide an introduction to the project, a description of the project risks and a review of the individual's competency. Site access will be only permitted following site induction from the site management personnel.

Induction talks for operatives new to the site will include site rules which cover among other things:

- Behaviour toward others on site and nearby.
- Drugs and alcohol.
- Smoking areas.
- PPE and safety issues.
- Welfare facilities and use of.
- Security issues.
- Emergency procedures.
- Good and bad practice.

Regular 'tool box talks' will be undertaken by the Principal Contractor outlining a variety of relevant Health and Safety issues.

Health and Safety

The developer will treat safety as a highest priority and will develop a successful programme of initiatives in order to improve Health and Safety awareness and performance on the project. These will work by actively encouraging operatives to think in a manner that assesses personal safety and the safety of others. The layout of the site accommodation will ensure that all staff, visitors and operatives will have the ability to store and retrieve the correct PPE before entering the construction area.

First Aid

The site management will be qualified First Aiders and the site will have first aid attendance at all times.

Construction Activities

The construction of the development will be carried out in accordance with detailed method statements and risk assessments approved by the site management team and in accordance with this Construction Environmental Management Plan.



Noise and Dust On Construction Sites:

The contractor must ensure compliance with current legislation on noise and dust control and in particular the Environmental Protection Act 1990 and the Control of Pollution Act 1974. The relevant Codes of Practice which set out procedures for dealing with the control of noise on construction and demolition sites are contained in BS5228: 2009 "Noise And Vibration Control On Construction And Open Sites" together with the specific requirements described below.

The contractor shall employ "best practicable means" to minimize noise vibration and dust from within the site, compound area and roadways. In particular the contractor shall:

- Consider at an early stage the most appropriate siting of the plant and compound areas relative to noise sensitive properties such as occupied residential dwellings, hospitals, hotels, shops, schools or offices.
- Select the quietest available plant to ensure that "site noise" (as defined in BS5228 Part 1) is kept to a minimum.
- Ensure that all plant and equipment is maintained to eliminate unnecessary noise.
- Make full use of suppressers, silencers and other mechanical means of reducing noise where these are commercially available.
- Ensure that plant, which is used intermittently, is shut down, or throttled back, during periods of non-use.
- Where operations require the use of compressors, breakers, pumps, generators, mobile crushers and other similar plant, the following conditions shall apply:
- Compressors shall be silenced by all effective means and covers shall remain closed except when access is required.
- Breakers shall be fitted with mufflers and, where commercially available, damped tools and accessories shall be used.
- Any operations involving the use of compressors or breakers shall be acoustically screened.
- Pumps and generators shall be acoustically screened and sited so as not to cause a nuisance to a noise sensitive building.
- Any proposed blasting or piling shall be discussed with the Environmental Health Officer prior to commencement.
- Mobile crushers must be permitted under the Pollution, Prevention and Control Regime and due notification must be given of their movement into the area.
- Adequate water supply for dust suppression shall be provided when crushers are in use.
- The hours of construction shall be in accordance with those outlined within the planning approval.
- Where operations require the use of temporary traffic signals the electric power shall be directly from the Regional Electricity Company's mains source wherever possible.
- Where possible stone cutting shall be carried out away from any noise sensitive premises. If bench saws/abrasive wheels or other stone cutting equipment is on site it should be adequately screened & provided with dust suppression.
- "Best practicable means" shall be employed to prevent dust nuisance arising as a result of the works and shall include watering or any other necessary measures, which may be required from time to time.
- Ensure roads and footpaths adjacent to the site are kept clean of construction materials, mud and spillage.



- Ensure skips are emptied before they become overfilled and cover skips where dust and wind borne litter could be a nuisance.
- Burning of any material on site is not permitted unless exemption is granted by the Environment Agency.



APPENDIX A

Enabling Plan:

To follow



APPENDIX B

Contamination Risks and Mitigation Measures:

(Table 8 – Hydrogeological Conceptual Site Model and Risk Assessment)

Contaminant Source	Migration Pathway	Receptor	Receptor Discussion	Risk	Mitigation Measures	Residual Risk
Possible septic tank/cess pit/former wells	Vertical migration via pore water	Burnham Formation	The nature, depth and condition of this feature is presently unknown, however it is unlikely that if it is present if extends beyond the weathered zone of the Upper Burnham Chalk. The feature will need to be investigated and removed as part of the development	Low to moderate	The feature will be investigated and removed as part of the development. New drainage will not utilise septic tanks/cess pits or soakaways.	Negligible
	Vertical migration via historic wells	Burnham Formation	The presence of historic wells could provide a pathway for contaminants to migrate to a greater depth within the aquifer. One of the historic well locations is shown relatively close to the indicated septic tank/cess pit location.	Moderate	The potential septic tank/cess pit will be investigated and removed as part of the development which will remove this potential source. Following the topsoil strip best efforts will be made to locate former wells and to ensure that these features are appropriately treated and cannot act as preferential pathways.	Negligible
On-site use and storage of fuels and oils during construction	Vertical migration via historic wells	Burnham Formation	There is the potential for localised spillage of fuels and oils during use of plant on site. It is very unlikely given the low permeability ground conditions that a fuel release due to surface spillage would migrate any distance vertically into the underlying aquifer.	Low to moderate	During the construction phase of the development, appropriate measures will be required to store and contain any fuels and building materials stored on site. Reference to should be made to the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) and the Control of Pollution (Oil Storage) (England) Regulations 2001 when storing fuel on site. Recommendations include: Leak detection systems, suitable provision of bunded storage for fuel, drip trays for use in a designated fuelling area and provision of a spill kit on site.	Negligible
	Vertical migration via historic wells	Burnham Formation	The presence of historic wells could provide a potential pathway for contaminants to migrate to a greater depth within the aquifer.	Moderate	In addition to the measures detailed above, best efforts will be made to locate the former wells on site to ensure that these features are appropriately treated and cannot act as preferential pathways.	Negligible
Leakage from foul drainage	Vertical migration via pore water	Burnham Formation	Incorrectly installed or damaged foul drainage could result in a source of contamination. However, given the low permeability of the underlying glacial till and weathered shallow chalk the likelihood of significant vertical migration of contaminated water is considered to be low. However, on the basis of proposed invert levels which may result in local excavation into the top of the Burnham chalk formation, this pathway cannot be entirely ruled out on the basis of the underlying geology. Foul drainage will need to include specific precautionary elements within the design due to the sensitive location of the site.	Low	A site specific scheme for foul sewer construction will be submitted to and agreed in writing with the local planning authority prior to construction. At present, several stipulations are included within the outline planning consent which must be included in the foul sewer construction which include: The requirement for a secondary Cured in Place Plastic (CIPP) liner (or equivalent technology). Any foul sewer chambers, manholes or pumping stations will require a full concrete surround. Details of lining measures including tie-in details will need to be provided to and agreed in writing with the LPA. It is possible that alternative mitigation measures could be agreed, however, these would be subject to further detailed discussion with the local planning authority.	Negligible
	Vertical migration via historic wells	Burnham Formation	The presence of historic wells could provide a potential pathway for contaminants to migrate to a greater depth within the aquifer, however, the location of recorded wells are not in the location of proposed main foul sewers. The likelihood of unrecorded wells, although not impossible is very low.	Low	In addition to the above, best efforts will be made to locate the former wells on site to ensure that these features are appropriately treated and cannot act as preferential pathways. Decommissioning of any wells/boreholes to be in accordance with Appendix D Environment Agency - Good practice for decommissioning redundant boreholes and wells.	Negligible
Contaminated surface water runoff	Vertical migration via pore water	Burnham Formation	There is the potential for surface water runoff from roads, driveways or other areas of hardstanding to be contaminated with fuels or oils or other substances resulting from surface spillage. However, based on current drainage proposals, surface water will disposed to Yorkshire Water Sewer at an agreed discharge rate and will therefore not be discharged to ground in the vicinity of the site.	Negligible	Subject to appropriate design and construction of the surface water collection and attenuation system there will be no pathway for potentially contaminated surface water to impact the underlying aquifer and no further mitigation measures are required. Appropriate agreement with Yorkshire Water will be required regarding the acceptable discharge rate and quality of water discharged to their	Negligible
	Vertical migration via historic wells	Burnham Formation	Recorded locations of historic wells are not within the vicinity of proposed drainage infrastructure. Given that proposals are for disposal of surface water to sewer, impacted surface water is not a viable source of contamination via this pathway.	Negligible	sewerage system. Decommissioning of any wells/boreholes to be in accordance with Appendix D Environment Agency - Good practice for decommissioning redundant boreholes and wells	



Document Revisions: