

Churchill

Retirement Living



CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

REV C

FOR

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Construction Environmental Management Plan

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CONTENTS

- 1 INTRODUCTION**
- 2 CONSTRUCTION PROCESS**
- 3 MEASURES, MANAGEMENT & CONTROL PROCESSES**
- 4 ENVIRONMENTAL IMPACT MEASURES**
- 5 CONSTRUCTION WORKER TRAVEL PLAN**
- 6 SUMMARY AND CONCLUSIONS**

Appendices

- 1. Site Set up Plan**
- 2. Preliminary Ecological appraisal**
- 3. Feedback form and procedure**
- 4. Hoarding design**
- 5. Vehicle tracker**
- 6. Traffic management layout (Demolition only)**

Construction Environmental Management Plan

1 INTRODUCTION

1.1 Introduction

This Construction Environmental Management Plan (CEMPS) has been prepared to address the Method of Demolition and Construction, Construction Set Up, Hours of Work and General Health and Safety.

The CEMP outlines and mitigates any potential impacts of the construction process on the receptors surrounding the development site, the environment within and around the site.

It is Churchill Retirement Living's (CRL) intention that its work will be carried out in accordance with all relevant statutory provisions and all reasonable practicable measures will be taken to avoid any risk to its employees or others who may be associated or affected thereby.

1.2 Location

The site is located approximately 0.2 km to the south of Gravesend train station. The National Grid Reference for the site is TQ 6470 7380. The site is bounded to the north by Woodville Place with a gate allowing access to the site. Wrotham Road is present to the west, Windmill Street to the east and Zion Place to the south. Residential properties are located to the east, south and west of the site, with the Gravesham Council building to the north. The River Thames is located approximately 0.8 km to the north of the site.

1.3 Existing Development

The site is roughly rectangular in shape with an area of approximately 0.3 ha. The site is generally flat, but the level is split into two, with a lower level/basement within the northern half of the site and a higher level/ground floor on the southern half of the site. The difference in ground level is approximately 2.5 m. The former police station sub-structure has been left in place and appears to act as a retaining wall to at least the northern half of the boundaries with Windmill Street to the east and the side road adjacent to Wrotham Road to the west. The site comprises a demolished plot of land with a thick, heavily reinforced, concrete slab surface. Along the boundaries of the site, remain the outer walls of the former buildings, approximately two-storeys in height and of concrete construction, with brick surfacing on the exterior of the walls. The site is currently being used as a builder's yard, as various building materials are being stored within addition.

1.4 Proposed Development

The proposed development will seek to demolish the existing buildings and the Construction of 75 one and two bed saleable apartments for the retirement sector including associated communal, parking and amenity areas.

Construction Environmental Management Plan

1.5 Context & Scope

The principal aim of this CEMP is to ensure that demolition, excavation and construction works are organised and delivered in a manner that safeguards the highway impact, highway safety and the receptors of the area surrounding the development site whilst protecting the environment.

1.6 Report Structure

The different phases of work and requirements for construction in terms of access routes and vehicular activity are identified in **Section 2** of this report. In addition, the Section also sets out the construction methodology and any temporary highway suspensions required in order to facilitate the work.

Section 3 focuses on the proposals to ensure that a suitable management strategy and structure is in place to control activity on site as well as a suitable reporting procedure for local residents and stakeholders.

Section 4 identifies how the environmental impacts of the development in relation to transport will be managed and mitigated.

Travel Plan measures are outlined in **Section**

2 CONSTRUCTION PROCESS

2.1 Introduction

This section outlines the proposed development schedule, construction methodology and the way in which deliveries will be controlled with regards to the local highway network.

Site management and supervising staff have responsibility for implementing the Company's Health and Safety Policy and will ensure that Health and Safety considerations are always given priority when planning and during the day to day supervision of the work.

All Employees and Sub Contractors are expected to co-operate with Churchill Retirement Living in carrying out their duties and will ensure that their work, so far as is reasonably practicable, is carried out without risk to themselves or others.

It is our objective to ensure that accidents and ill health arising from work activities are minimised and that due consideration is given to local residents and members of the public.

Construction Environmental Management Plan

Churchill Retirement Living has appointed a firm of external safety advisers to visit and give advice on the requirements of the relevant statutory provisions and safety matters generally.

2.2 Development Schedule

The proposed development is scheduled to commence February 2023 with a duration anticipated at approximately 18 months. There will be five main phases to construction of the development;

Phase 1 – Demolition of Existing structures

Phase 2 – Groundwork's

Phase 3 – Superstructure and Roof

Phase 4 – Internal Works

Phase 5 – Landscaping and Utilities

It should be noted however that the construction programme may be subject to change.

Prior to any demolition or construction works being carried, a local highway condition survey will be carried out and recorded by means of dated photographs, these records are to be stored for future reference. Once all development work has been completed, a further survey will be carried out and comparisons made with the original survey. Any damage or change to the highway condition will then be sent to County Highways for further discussion.

The development is to be carried out in accordance with the Arboricultural method statement and Tree Protection Plan Ref: 21203-2 Demolition and development works shall be carried out following the principles of the Tyler Grange Preliminary Ecology Appraisal 14480_R02a_MJ_CW

2.3 Scaffolding & Hoarding

Access to the site will be taken from Woodville Place, this area will remain presentable and tidy at all times and will be secured throughout the development process with proprietary solid hoarding panels, boundaries with Windmill Lane, Zion Place and Wrotham Road will also be secured with frontline solid hoarding. The hoarding will be erected prior to demolition works.

Vehicle access gates are to be manned and kept closed at all times, except for when providing vehicle access and egress. Approaching delivery vehicles would be met by one of our banksmen and a tower crane would unload from within the site.

The benefits of hoarding the site will be to increase site security as well as protect members of the public, particularly during the demolition

Construction Environmental Management Plan

stage of the development. Hoarding will also have environmental benefits in terms of reducing the impact of dust generated on the surrounding environment and reducing noise pollution from the site.

Mandatory safety signage will be displayed around the development for the general public and visiting vehicles. Mandatory safety signage will also be displayed on access gates for construction staff entering the site. The external hoarding will be kept clean and tidy at all times.

2.4 Delivery of Plant & Materials

All materials associated with the development process will be stored within the site boundaries. Skips and other plant will also be stored within the curtilage of the site. A dedicated loading and unloading area for plant and materials will be created.

It is envisaged that there will be approximately four deliveries to the site per day over the course of the construction period. Articulated delivery vehicles are likely to account for 30% of all deliveries.

The Company will employ qualified Banksmen whose duties will include the management of delivery vehicles. Banksmen will wear high visibility clothing at all times and will direct vehicles and pedestrians when delivery vehicles require access and egress the site. A tower crane is to be deployed to assist with the construction process. The vast majority of material deliveries will be off-loaded by the crane and distributed directly to its designated area of installation, however, a dedicated storage area will be provided for when this is not possible.

Macadam temporary roads and hard standings will be provided for storage areas, traffic and pedestrian routes. This will provide a clean surface for manoeuvre and prevent vehicles from carrying mud and debris onto the public highway.

All deliveries to the site will have to book in advance with the Site who will keep a record of the schedule and all deliveries. All deliveries will then be met by one of our Banksmen who will assist vehicles entering, exiting and manoeuvring in and out of the site.

The Banksmen will co-ordinate the transfer of materials from the loading area. Through this arrangement it is hoped that the dwell time of the delivery vehicles can be reduced to less than 30 minutes, where possible.

Churchill Retirement Living will adopt a procedure to maintain the cleanliness of the carriageway. At the initial stages of the project when vehicles are entering site and are unlikely to be running on hard surfaces, wheel washing procedures will be implemented along with regular road cleaning. A soakaway will be created in which to drain run off from the wheel washing facility. It is not possible to stipulate a specific road cleaning regime as this would depend on various aspects such as whether conditions. Nonetheless, the adjacent highway will be kept clean at all times. As the project develops and before the main

Construction Environmental Management Plan

construction commences, the permanent hard surfaces will be in place along with temporary hard running surfaces where needed, which will prevent mud and other contaminants being carried onto the carriageway.

Signage will be placed as required to advise road users and pedestrians of the construction site ahead. Deliveries will be coordinated where possible to avoid simultaneous arrivals and congestion on the surrounding roads.

Dedicated pedestrian routes will be provided offering safe, direct access to the site office from the pedestrian entrance and routes will be adequately signed.

2.5 Working Hours

All work will be conducted between 07:30 to 18:00 hrs Monday - Friday and between 08:00 to 13:00hrs on a Saturdays, there will be no Sunday or Bank Holiday working on site. Demolition and enabling works will last for approximately 6 weeks. The construction period is anticipated to last for approximately 18 months.

Due to the close proximity of surrounding residential buildings and business premises, and the associated traffic congestion at the beginning and the end of the day. Churchill Retirement Living will seek to restrict material deliveries to the site through this period. No HGV movements to or from the site shall take place between the hours of 8:30 – 9:15 am and 4:00 – 6:00 pm nor shall the any HGVs associated with the development be laid up, waiting, in the surrounding residential streets during these times. These conditions will be conveyed to all relevant parties when placing material and subcontract orders.

For any noisy works where there is a direct impact upon surrounding properties within the specified times, the site manager will make contact with the neighbours to consult on the duration, extent and impact of the works to see if an informal agreement can be reached to minimise the duration of these works or carry them out at specific times.

2.6 Construction Traffic Routing

The supply chain will be advised to adhere to the following route when delivering goods to site: All vehicles would be expected to access from the A2 and will therefore follow the A226 and enter the site from Windmill Street. Once unloaded all vehicles will exit the site and follow the A227 onto Wrotham Road. The bankman's and traffic marshall will use stop and go boards throughout the delivery process and in the interest of safety and following recommendations from Kent County Council we are proposing to close all footpaths adjacent to the site.

All delivery drivers and construction workers will be advised of this essential route prior to making their delivery or commencing work.

Construction Environmental Management Plan

It is considered that the proposed routing avoids the use of minor roads and maximises the use of the major strategic roads where possible.

2.7 Construction Stages, Vehicle Movements & Vehicle Types

At present it is anticipated that the proposed redevelopment of the site will commence in February 2023 and complete in approximately 18 months. It should be noted that the construction programme and corresponding construction traffic strategies may be subject to change prior to work commencing on site. Any significant changes to the CEMP that may occur would need to be agreed with Gravesham Borough Council.

2.7.1 Phase 1 – Demolition of Existing Dwelling

For the first 10 weeks of the construction period the site will be prepared for the subsequent phases of development. This will involve the erection of hoardings, tree protection fencing, Ecology, Arboricultural, signage, site set up and the demolition of the existing dwelling.

A foundation stone which is currently contained within the existing boundary wall is to be retained for future installation within the proposed boundary wall.

During initial demolition works, all deliveries will be taken from Woodville Place and off loaded within the site boundaries, vehicle movements in and around the site will be controlled by one of the qualified Banksman. Once demolition works have been completed and the site cleared, contamination remediation works will commence. Temporary roads and hard standing will also be installed at this time.

We are aware of limited on road parking options within the local area and therefore, a parking area will be provided onsite during the demolition and remediation phase; this would avoid inconvenience to local residents and businesses.

A letter will be sent to all immediate neighbours and surrounding properties to advise of the intended demolition and construction start dates, it will also provide tower crane information.

Whilst the aim is to keep any disturbance, nuisance or inconvenience to an absolute minimum, inevitably there will be some nuisance and disruption due to the demolition and construction works.

Prior to any demolition works, solid hoarding will be erected along all boundaries. Access to the site will be via Woodville Place.

Vehicle movements to the site during this phase are not expected to be significant with occasional deliveries of hoarding and the removal of the existing structure. The Contractor anticipates that this is likely to result in the region of 1 or 2 lorry movements per day.

Construction Environmental Management Plan

The measures that will be employed to minimise the environmental impacts, including noise and air quality, throughout the demolition phase are set out within **Section 4** of this management plan.

2.7.2 Phase 2 – Groundwork's and Piling

It is expected that the groundwork's will take approximately 10 weeks with the key activities on site involving the site strip and muck away, foundations, and drainage.

Pile installation will be carried out using continuous flight auger which provides for little noise and disruption to the local neighbourhood.

It is envisaged that during this phase there will be between 1 and 3 deliveries per day with the majority of these movements made up of concrete, muck away trucks and rigid vehicles delivering materials. Some of these deliveries will be larger plant movements.

Prior to the commencement of any site clearance works a temporary access road will be formed. Clearance vehicles will be loaded whilst parked on site to prevent debris from entering the road.

Temporary access road construction will be followed by installation of the tower crane base. Concrete foundations will commence from the East end of the development site following through the building, completing at the West (from back to front). This sequence will be followed throughout the construction process, once 50% of the foundations are complete; substructure block work will commence, followed by internal drainage and back fill to levels. During this time the tower crane will be erected, provided the relevant curing times have elapsed for the concrete base.

Once substructures are complete the external drainage will be completed, along with the formation of the drive and parking areas to base course. The formation of the driveway is subject to utility company installations. Should utilities not be available at this time, a temporary access road will be maintained. A running site order will be in place for road sweepers. This will allow the Site Manager to call in a road sweeper as and when necessary. It is not possible to stipulate a specific road cleaning regime as this would depend on various aspects such as whether conditions. Nonetheless, the adjacent highway will be kept clean at all times.

The Company will employ qualified Banksman whose duties will include the management of delivery vehicles. The Banksman will wear high visibility clothing at all times and will direct vehicles and pedestrians when delivery vehicles require access and egress to and from the site. A tower crane is to be deployed to assist with the construction process.

Construction Environmental Management Plan

The vast majority of material deliveries will be off-loaded by the crane and distributed directly to its designated area of installation, however, a dedicated storage area will be provided for when this is not possible.

Again, the measures that will be employed to minimise the environmental impacts, including in relation to noise and air quality, throughout all aspects of the construction process are set out within **Section 4** of this report.

2.7.3 Phase 3 – Superstructure & Roof

The third phase of the construction period is likely to last for an 8-month period and will involve the construction of the development including floors, masonry work, roof structures, gutters and drainpipes.

The Company will employ qualified Banksmen whose duties will include the management of delivery vehicles. The Banksmen will wear high visibility clothing at all times and will direct vehicles and pedestrians when delivery vehicles require access and egress to the site. A tower crane will assist with the construction process. The vast majority of material deliveries will be off-loaded by the crane and distributed directly to its designated area of installation, however, a dedicated storage area will be provided for when this is not possible.

Macadam temporary roads and hard standings will be provided for storage areas, traffic, parking and pedestrian routes. This will provide a clean surface for manoeuvre and prevent vehicles from carrying mud and debris onto the public highway.

Vehicle movements to the site during this phase are not expected to be significant with articulated vehicles for masonry deliveries and roof construction and heavy vehicles for bulk materials such as sand and cement. We estimate that this phase is likely to result in a maximum 6 deliveries per day. Articulated vehicles are likely to account for 30% of all deliveries.

2.7.4 Phase 4 – Internal Works

The fourth phase of the construction period is likely to last for 6 months and will involve the internal works such as the fitting of plasterboards, windows, carpentry, tiling, electric, plumbing, floor coverings and painting.

Vehicle movements to the site during this phase will primarily be smaller vehicles such as vans delivering internal fittings such as bathrooms and kitchens. However, there will be some articulated vehicle deliveries associated with the delivery of plasterboard, doors and windows. It is anticipated that this phase is likely to generate a maximum of 4 deliveries per day, 30% of these are likely to be articulated vehicles.

Construction Environmental Management Plan

2.7.5 Phase 5 – Landscaping & Utilities

The fifth and final phase of the development will be the least intensive with respect to vehicle movements to the site. It includes landscaping and installation of utilities and is anticipated to last for 2 months. Vehicular activity is likely to involve circa 1 van movement per day although turf deliveries may involve larger vehicles.

2.8 Dwell Times

The following dwell times are expected for the vehicles accessing the site during the construction phases.

- Skip Delivery / Spoil Collection – between 5 to 15 minutes
- Plant Delivery / Collection – between 5 to 15 minutes
- Materials delivery – between 15 and 30 minutes
- Concrete delivery – up to 30 minutes

Further measures that will be employed to control the number and frequency of vehicles arriving at the site are detailed within **Section 3** of this report.

2.9 Construction Worker Trips

CRL estimate that the site will require 2-3 direct employees supported by 15 sub-contractors at different phases of the construction. As such, it is estimated that there will be between 5 and 30 construction workers on site at any one time. With construction works taking place Monday to Friday 08:00 until 18:00 it is likely the majority of workers would arrive between 07:30 and 08:00 with a peak between 07:45 and 08:15. With regards to departures it is likely that the majority of workers would depart between 16:30 and 17:00 with only some workers staying until 18:00.

Due to the restrictive nature of the site, onsite parking will not be permissible. Information in **Section 5** outlines in more detail on construction worker trips and the measures within the Construction Worker Travel Plan that will seek to reduce the impact of construction workers travel.

2.9 Protection of drainage during construction

Any newly constructed Surface water or Foul drain or should be protected from damage by construction traffic and heavy machinery. Where piling works are being carried out care should be taken to avoid damage to any drain or sewer.

Drainage to be surrounded with bedding & the trench back filled as soon as possible after construction.

Drainage routes should be marked out on site & heavy construction traffic routed to avoid drainage runs.

Construction Environmental Management Plan

Personnel operating plant & machinery should be given instruction & guidance on the location & routes of the onsite drainage & routes to be taken to avoid the drainage runs.

Where heavy construction vehicles routes cross over drainage, construction mats are to be provided as necessary to avoid damage to the drainage.

Shallow drainage can be provided with a concrete slab over, as necessary where heavy construction traffic cannot be rerouted.

At the end of the construction process, drains are to be tested and any damaged drainage is to be relaid.

2.9.1 Surface water Management during construction.

Any inlet / outlet drainage points connecting into attenuation tanks or soakaways to be capped off during the construction process & until connection into the completed SW drainage system.

If any temporary surface water drainage is connected to the attenuation tanks or soakaways are to be fitted with silt traps & mud buckets. These are to be inspected regularly & cleaned out as necessary.

Any permanent new drainage used for temporary surface water drainage from site to be fitted with silt traps , filters & mud buckets as necessary.

Installed Gulleys & linear drainage should be sealed off until the completion of the hard surfacing carpark & access road surfacing.

On sloping sites measures are to be undertaken to avoid surface water run off leaving the site & also discharging onto the public highway.

No discharge or water contaminated with silt is to be allowed to enter a watercourse or drain as it can cause pollution. Channel run-off away from watercourses and surface water drains when dewatering a site. Protect all surface water drains and watercourses with cut-off ditches or earth bunds. NOT APPLICABLE – No watercourses are on site.

Drainage & its construction is to be undertaken in accordance with the The guidance of BS 8582:2013 Code of practice for surface water management for development sites

2.10 Existing Parking Restrictions

Parking in the local area is very limited. Contractors and visitors will be encouraged to use one of a number of dedicated public car parks within the area. Contractors and site visitors will be encouraged to use The Parrock Street car park which is only a short walk to the site. There is also opportunity for permit only parking at Lord Street Temporary car park, which is also only a short distance from the site. Churchill Retirement Living is also to approach the local businesses and land owners with a view of renting space for car parking for the site management and workforce.

Construction Environmental Management Plan

Where possible the Site Manager will try and minimise any deliveries on waste collection days in order to reduce the conflict with refuse trucks operating.

3 MEASURES, MANAGEMENT & CONTROL PROCESSES

3.1 Introduction

This section sets out the measures, management structure and control processes that will be put in place to implement, monitor and manage the CEMP. The Site Manager will be responsible for the site works which will ensure that the control processes are efficiently communicated and implemented.

3.2 Transportation Co-ordination

The Site Manager for the project will undertake the transport co-ordination role for the site. In this respect, their main responsibilities will include:

- Managing the implementation of the CEMP
- Vehicle scheduling
- Informing local residents of any low loader deliveries associated with construction of the site to avoid / minimise disruption
- Checking for scheduled road works on <http://roadworks.org>
- Checking for scheduled refuse collections with the Local Authority
- Handling any complaints
- Acting as a point of contact for employees, contractors and the general public.

The Site Manager will also be responsible for keeping neighbours adjacent to the development informed of the construction progress, particularly with regards to when high frequencies of deliveries are expected. In this respect, the Site Manager will ensure that there is adequate liaison between the key stakeholders throughout the construction period:

3.3 Booking System

On a weekly basis the Site Manager will evaluate details of the daily profile of deliveries proposed for the upcoming week.

Hauliers will be required to contact the site on a daily basis and indicate their delivery schedule for the following day. The proposed deliveries will be checked against the weekly delivery schedule. This will be overseen by the Site Manager to ensure that no two construction deliveries occur simultaneously at the site, thereby ensuring that there is always space at the site to accommodate the necessary plant and deliveries.

Construction Environmental Management Plan

It is not considered necessary to implement a holding area for delivery vehicles. However, to avoid stacking on the local highway, hauliers will be required to notify the Site Manager before the expected delivery time to ensure that the delivery space and the banksmen are ready for their arrival onsite.

Sufficient time will be given between deliveries to allow for any delays as a result of the delivery vehicle getting held-up in traffic or the loading/unloading taking longer than expected and to avoid any vehicles waiting on the surrounding highway network. The traffic marshall will be responsible for carrying out spot checks to surrounding roads to ensure delivery vehicles are not parked or causing an obstruction.

3.4 Route Compliance

Use of the agreed vehicle routes shall be included when communicating with the supply chain and individuals associated with the works. It is envisaged that this information will be communicated in the form of email and will include information with regard to times of operation, delivery routes, the call up procedure and delivery slot information.

3.5 Communication Strategy

As identified above, the Site Manager will be responsible for keeping neighbours informed of the construction progress and also to ensure that there is adequate liaison between all stakeholders throughout the construction period.

Prior to any works starting the contractor shall inform occupiers of all properties which may be affected by noise, dust or vibration arising from the construction works, the proposed hours of work and their expected duration.

A '**Contact Us**' poster will be displayed on the site hoarding next to the entrance gates with the name, email address and contact phone number of the site manager.

- Wherever possible an immediate response will be provided to issues raised.
- If an immediate response is not possible a response will be provided within 48hrs and where the matter is more complex this initial response will set out how we are going to deal with the issue raised.
- If required matters will be escalated to the senior management team within the construction department and we will aim to resolve all matters within a maximum period of 15 days.

3.6 Complaints Procedure

Construction Environmental Management Plan

Whilst the Site Manager will use reasonable endeavours to ensure that site neighbours are informed of the construction programme and associated impacts it is possible that complaints may be raised by local residents about the programme of works. The Site Manager will therefore be available to meet and explore issues with concerned residents directly, via appointment. As stated in 3.5 above Site managers contact details will be displayed on the site entrance.

Complaints shall be taken seriously and addressed immediately by the construction team. All complaints that are received will be reviewed in weekly site meetings to ensure that any required actions are communicated to all employees. See feedback process appendix 3.

4 ENVIRONMENTAL IMPACT MEASURES

4.1 Context

It is important that construction impacts in relation to issues that may arise along the local highway network, as well as increases in vehicle emissions and waste attributable to the proposed scheme, are addressed. Suitable mitigation measures aimed at reducing these impacts with specific regard to transport are identified below.

4.2 Noise Pollution, Dust & Dirt Control

Mud and debris on the road is regarded as one of the main environmental nuisances and safety problems arising from construction sites.

Control measures will be put in place to prevent any sediment run off from the site. After study of the proposed site set up, the most likely path for any sediment run off would be to the north. Sediment run off is not considered to of concern due to the site reduced level in relation to the surrounding highway. The site manager will however, monitor the site boundaries on a regular basis and will address any area for potential run off by means of bund walls and soakaway pits, if required.

During works the main air pollution emissions are the dust generated when building materials are broken up and the fumes from machinery. The contractors will suppress dust emissions with water whilst loading waste materials for disposal. Machinery exhaust emissions will be kept as low as is practicable by using well maintained vehicles and machinery at all times.

Dust pollution will be minimised during demolition work with water, specialised spray equipment may be deployed if required. The existing water service will be retained so as to ensure that adequate water is available for the duration of the demolition works.

Construction Environmental Management Plan

The main instances of noise pollution during construction works are the use of compressors, generators, reversing alarms and portable petrol cut off saws. The compressor and generator will be of the latest design available with the lowest emission ratings and will be sited as far from residential properties as is practicable. All machinery will be switched off when not in use to minimise emissions as well as noise. The portable petrol cut off saw will be operated with an automatic water applicator. The water application is designed to dampen any arising debris and dust as well as reduce wear to the blade. Use of cut off saws without water attachments will not be tolerated under any circumstances.

Hoarding will be erected at the front of the site. Along with reducing the visual impact and providing protection for the construction workers and public, this will also act as a barrier for dust and dirt originating from within the site.

All HGVs removing spoil from the site will be fully sheeted to minimise the risk of any mud over spilling onto the highway. A wheel washing facility will be provided for the duration of the construction works to ensure levels of soil on roadways near the site are minimised. The wheel washing facilities will be in the form of a hose down point located adjacent to the entrance and soakaway to drain away arising's. Vehicle wheels will be cleaned whenever a vehicle leaves the site, if required.

The site management team will ensure that the area around the site including the public highway is regularly and adequately swept to prevent any accumulation of dust and dirt.

Burning of materials on site is strictly prohibited.

4.3 Noise Control

Noise generated by the demolition and construction process has been considered and its impact on neighbouring properties. Suitable mitigation measures to be used include:

Standard construction hours;

- The use of quieter alternative methods or mechanical plant, where reasonably practicable
- Locating plant, equipment, site offices, storage areas and worksites away from neighbouring properties, where reasonable practicable
- Machines and equipment in intermittent use will be shut down or throttled down to a minimum when not in use
- The use of site hoardings or portable acoustic enclosures/screens, where practicable
- Maintaining and operating all vehicles, plant and equipment in an appropriate manner, to ensure that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum

Construction Environmental Management Plan

4.4 Fuel Consumption/Emissions

CRL will strive to procure local contractors for the project, thereby minimising transport costs and impact on the local environment. The use of the booking system for deliveries will also help to ensure that the construction site is serviced in an efficient manner which will help to minimise the number of vehicle movements that would be generated.

A further measure that can be employed is encouraging all delivery vehicles to switch off engines as they are waiting at the site, thereby preventing unnecessarily idling vehicles.

Car sharing will be promoted with all employees and contractors.

4.5 Waste Management

In order to seek to reduce the number of HGVs that are generated, aggregates generated on site during the excavation phase of the development will be re-used wherever practical.

All waste materials will be collected and stored in suitable receptacles before they are taken off site. Waste materials will not be allowed to accumulate to reduce the risk of fire and vermin. The waste will be separated into recycling types and general waste.

Whenever deliveries are undertaken, banksmen will be deployed to ensure that materials are transferred into the site as soon as possible and ensure that no dirt or rubbish is left on the public highway.

Waste will be segregated at source and loaded into dedicated skips, it is envisaged that these will consist on General Waste, Masonry, Wood and Gypsum products.

4.6 Oil and Fuel Spillages

Leaks, spills or releases of chemicals or oils during delivery, storage and use of fuels and oils are the responsibility of the Site Manager, Site Foreman & Contracts Manager

Source

- Storage and movement of fuels and oils on site
- Accidental spills during refuelling of plant and equipment
- Leaking plant and equipment
- Infiltration of spilled oils and fuels into the ground and groundwater
- Discharge of effluent from cleaning procedures

Preventative Action

Construction Environmental Management Plan

- Refuelling and tank filling should only be carried out in designated areas suitably protected.
- When the designated refuelling area cannot be used due to the nature of the equipment, remote filling bowsers should be suitably protected
- There should be an emergency spill kit ready in case of spillage in the main fuel storage / refuelling area and one in every bower. The kit should be stored in a marked bag.
- If any component from the spill kit is used, it should be replaced immediately and the used materials should be disposed in accordance with waste regulations.
- Bowsers should be equipped with automatic cut-out mechanism. Trained personnel must supervise all refuelling operations.
- Valves and taps will not be left open unattended and will be locked when not in use.
- Funnels must be used when refuelling small plant and equipment.
- All minor spillages must be cleaned up immediately.
- All spare fuels and oils should be returned to designated storage areas immediately.
- Personnel carrying out refuelling will be made aware of this protocol and trained in the use of spill kits and emergency procedures.
- All drainage will be removed and capped during the demolition phase so there is no need for any pollution protection in this respect.
- As new drainage is installed, all receptors such as gullies, manhole covers and inspection chambers will be sealed until such time as the development becomes complete and is connected to the public sewers.
- In the event of heavy rainfall events we will incorporate mitigating measures to pond and infiltrate where best practicable on site, inclusive of ensuring that no suspended solids or silt goes off site. These measures will be monitored and managed during construction phases.

Monitoring and Observation

- Site personnel to monitor oil and fuel storage and movement to detect spillages and leaks
- Should a spill occur the project environment manager would prepare a report including the following information: Date, time and location of spillage, substance spilled, and action taken to contain it

Further action required

- In the event of a spill incident the following actions will be taken: Inform the site manager immediately
- Stop work where required to manage spill adequately and prevent further spilling.
- Eliminate sources of ignition (engines, tools etc.).
- Remove the cause of spillage.

Construction Environmental Management Plan

- Contain the spillage using the emergency spill kit.
- Block pathways to drains. Bund drains and manholes to stop migration of contaminants.
- Clear up the spillage.
- Request a specialist spill contractor if required.
- If the incident is a major spill and cannot be contained the Environment Agency will be notified.

Reference to further information;

- Control of Pollution (Oil Storage) (England) Regulations 2001
- Control of Substances Hazardous to Health
- Regulations 2002 (COSHH)
- Environment Agency

4.7 Water Pollution

Water pollution incidents are the responsibility of the Site Manager.

Source

- Oils and fuels

Preventative Action

- All foul water and surface water drains downstream of the site works as well as the relevant water authority will be identified.
- Underground services will be investigated and identified to avoid damage to them.
- All containers and tanks will have clear notices of their contents and how to handle them.
- Stockpiled material will be protected to reduce rainwater infiltration.
- In the event of a spillage causing pollution to water (i.e. discharged into drains) or land, the source will be contained and the Environment Agency will be notified.

Monitoring and observation

- Water consumption for site facilities, water used for damping down as well as other water supply sources will be monitored by the site manager.
- Unusually high consumption of water will be investigated to prevent undiscovered leaks.

Further action

- Prevention of spills during refuelling on site (see fuel and oils spills).

Reference to further information

- Water Act 2003
- Water Industry Act 1991

Construction Environmental Management Plan

- Environment Agency Pollution Prevention Guideline PPG6: Working at construction and demolition sites.
- Environment Agency Emergency Hotline: 0800 80 70 60

4.8 Pest control

We have appointed a pest control company who will carry out a survey before works start on site and will provide CRL with a method statement of how to control vermin throughout the period of demolition & the construction phase. Details of the company are as follows:

Jim Coull



Pest Control Surveyor

Jim.coull@agsone.co.uk

07771 375265

4.9 Lighting & Security

Lighting will be provided throughout the site compound, this will be kept to a minimum and lighting will only be directed within the site. All external lighting will work on a sensor basis and will only be activated by movement on site.

Throughout the construction phase site will be protected by a CCTV system. The battery-operated wireless solution will monitor 24/7 from a remote monitoring station. If an intrusion occurs, footage of the incident is viewed by the security team to verify it is a genuine breach. If so, then approved SIA responder will be dispatched to the site, along with the police if required, to deal with the trespassers.

Gravesham Borough Council

5 CONSTRUCTION WORKER TRAVEL PLAN

5.1 Introduction

A Travel Plan is a package of measures aimed at promoting greener, cleaner travel choices and reducing reliance on the private car. It enables employers to reduce the impact of travel on the environment, whilst also bringing a number of other benefits to the organisation as an employer and to staff.

This Travel Plan seeks to address activities related to the construction of works at the site which includes commuter journeys for construction workers, material supplies and deliveries. By successfully addressing these different types of travel, promoting travel via sustainable modes and sourcing labour and goods locally, the Travel Plan objectives can be achieved.

Development work is anticipated to begin in February 2023 and take approximately 18 months to complete.

5.2 Existing Conditions

The site is located within reasonable proximity of the strategic highway network. All vehicles would be expected to access and exit from the A2 and A227, and vice versa. As such, construction vehicle trips associated with the site will have a minimal impact on less substantial routes which are more influenced by changes in traffic volumes.

Contractors, where feasible, will seek to recruit construction workers from the local area. This will help maximise the potential for construction workers to walk and cycle to the site.

It is therefore deemed that there are opportunities for the construction worker trips to be undertaken by public transport.

There is great potential for construction workers to car share to work; especially given the fact that some sub-contractors will be travelling from the same origin to the same destination (the site).

Car sharing represents a relatively convenient form of travel offering a significant potential to reduce overall private mileage of construction workers and visitors. It is this mode of transport which often forms one of the most convenient methods of sustainable travel with construction workers.

The construction site will provide facilities in accordance with requirements set out in the HSE guidelines. As such the site will provide a drying room, storage facilities, toilets and offices. In addition to this a canteen area is provided. This will further encourage people to travel to the site by sustainable modes such as walking and cycling whilst having

Construction Environmental Management Plan

the added benefit of reducing the number of trips made off site during lunch breaks.

5.3 Measures

There is great potential for construction workers to travel to the site by sustainable modes such as walking, cycling, public transport and car sharing. It is therefore deemed appropriate to continue to promote the local services available as well as the following measures to promote sustainable travel by construction staff.

- Include local public transport timetables and route maps within the on-site compound for construction staff to review;
- Give construction staff the opportunity to change clothes within the site compound if walking to the site in inclement weather;
- Minimise where possible the number of contractors on site at any one time to reduce trips generated and promote car sharing.

Further to this, the following measures are to be promoted to minimise the environmental impacts of HGV trips generated by the development.

- Initiate a weekly booking system for the delivery of plant and materials to the site to ensure that there is never more than one HGV on site at any one time;
- The Developer will strive to procure local contractors for the project, thereby minimising transport costs and impact on the local environment;
- All delivery vehicles will be required to switch off their engines as they are waiting at the site, thereby preventing unnecessarily idling vehicles;
- Communicate vehicle routes to Contractors, suppliers and individuals associated with the works;
- All HGVs removing spoil from the site will be fully sheeted to minimise the risk of any mud over spilling onto the highway; and
- Provision of wheel washing facilities at the site entrance / egress.

5.4 Residual Impacts

It is not possible to provide site parking and therefore, alternative parking will be communicated to the supply chain and individuals associated with the work who will be encouraged to use the dedicated offsite parking.

A booking system will be initiated to ensure that there is only ever one delivery taking place at a time, minimising the impact upon neighbours. Local residents will be informed when any low loader deliveries are made in order to minimise any disruption.

6 SUMMARY & CONCLUSIONS

6.1 Summary

This Construction Environmental Management Plan (CEMP) has been prepared by CRL and relates to the proposed redevelopment works at the former Gravesend Police Station. The CEMP provides information to ensure that the development works are organised and delivered in a manner that mitigates and safeguards the highway impact, highway safety and amenity of the area surrounding the development site.

The construction period is anticipated to last for approximately 18 months, beginning in February 2023. It should however be noted that the construction programme and corresponding construction traffic strategy may be subject to change.

Access to the site will be taken from Woodville Place. This area will remain presentable and tidy at all times. The entire highway facing boundaries of the site will be hoarded; tree protection will be maintained throughout the development process. The hoarding will be erected prior to the existing boundary walls being removed.

CRL will be leading the build element of the project. CRL estimate that the site will require 2-3 direct employees supported by 15 sub-contractors at different phases of the construction. As such on average it is estimated that there will be between 5 and 30 construction workers on site each day.

All materials associated with the development process will be stored within the footprint of the site. Skips and other plant will also be stored within the curtilage of the site. A lay-by will be created for the loading and unloading of plant and material.

The site benefits from being within reasonable distance from the A2. All vehicles would be expected to access and exit using the A227, and vice versa.

Based on the analysis presented within this CEMP it is estimated that, during the busiest period, up to 3 HGVs each day are forecast to service the site. The largest vehicle is expected to be a low loader. The scale and volume of vehicle movements associated with the development construction period is not considered to have no significant impacts on the operation of Wrotham Road (A227), whilst larger vehicles access the site.

All deliveries to the site will have to book in advance with the Site Manager who will keep a record of the schedule and all deliveries. All deliveries will then be met by one of the Banksmen who will assist vehicles entering, exiting and manoeuvring around the site as well as low loader deliveries.

Construction Environmental Management Plan

The construction process will be managed by the appointed Site Manager employed by Churchill Retirement Living Ltd. The Site Manager's responsibilities will include acting as a point of contact for the local authority, KCC, stakeholders and members of the public. Further to this, the Site Manager will also be responsible for delivery scheduling, construction route compliance and managing other contractors employed on-site.

To further control the environmental impacts of the development, measures to be employed include covering skips and vehicles to prevent overspill, wheel washing facilities, mitigation measures for noise, employing local contractors and the implementation of a waste management strategy.

Whilst the principles of the construction strategy in relation to transport are established with this CEMP it should be noted that the construction programme and corresponding construction traffic strategy may be subject to change prior to work commencing on site.

Overall it is considered that the measures and control processes outlined in this CEMP are appropriate to overcome the identified constraints associated with the site