Construction Management Plan Turners Hill Road, East Grinstead





Construction Management Plan

- Site: Turners Hill Road, East Grinstead
- Client: Linden Homes South East
- Planning Authority: Mid Sussex District Council

Revision Status				
Rev	Date	Issue Description Prepared by		Ref
A3	Feb 2019	CMP: Outline Conditions 7 & 9 – Issued for Comment	Dominic Thomas	LH/EG/00/CMP-A3
B	May 2020	CMP: Outline Conditions 7 & 9 Revision following Consultee Comments	Dominic Thomas	LH/EG/00/CMP-B
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PREAMBLE

This Construction Management Plan has been developed to discharge Condition 7 & Condition 9 of outline Planning Permission specified by Mid Sussex District Council on application: APP/D3830/W/16/3142487.

This Construction Management Plan has been developed for the overall development. All works carried out in the development (by all appointed Principal Contractors including external PC appointments for initial work phases prior to Linden Homes taking over as PC) will be carried out in accordance with this document.

OUTLINE CONDITION 7 – ACCESS FOR CONSTRUCTION TRAFFIC	LOCATION IN DOCUMENT
No development shall take place until temporary arrangements for access for construction traffic have been provided in accordance with details which have been submitted to and approved in writing by the local planning authority.	Section 2.3
Development shall be carried out in accordance with the approved details.	

OUTLINE CONDITION 9 – CONSTRUCTION MANAGEMENT PLAN	LOCATION IN DOCUMENT
No development shall take place until a Construction Management Plan has been submitted to and approved in writing by the local planning authority. The plan shall provide for:	
a. Hours of working	Section <u>2.2.1</u>
b. Construction traffic routing and signage	Section <u>2.2.1</u> & <u>2.3</u>
c. Location of site offices	Section <u>2.2.3 &</u> Appendix One
d. Location of plant and materials storage	Section <u>2.2.3 &</u> Appendix One
e. The area within the site reserved for the loading, unloading and turning of vehicles delivering plant and materials	Section <u>2.2.1</u> & <u>2.3 &</u> <u>Appendix One</u>
f. the area reserved within the site for parking for site staff and operatives	Section <u>2.2.3 &</u> <u>Appendix One</u>
g. Wheel washing facilities	Section 2.2.4
h. Scheme to minimise impacts on air quality	Section <u>3.1</u> & <u>3.5</u>
i. Measures to ensure the safe operation of the Bluebell Railway	Section <u>2.4</u>





1.0 DESCRIPTION OF PROJECT

1.1 PROJECT TITLE + LOCATION

Turners Hill Road is a new development covering an area of approximately 9 hectares, located on the south-western outskirts of the town of East Grinstead, and is centred approximately on the National Grid Reference TQ 383376.

This Construction Management Plan covers all works associated with the overall development site.







1.2 SCOPE OF WORKS + CONSTRUCTION PROGRAMME

1.2.1 Scope of Works

The site will be developed by Linden Homes South East to construct 200 new residential properties.

The development will also involve the construction of attenuation basins, Play Areas, and two SANG areas (Suitable Alternative Natural Greenspace), creation of a footpath linking the overall development to the Public Right of Way to the south and clearance of vegetation / treatment works to the boundary of the Bluebell Railway Line / viaduct.

The overall development site will be split into various different phases of works, and separate areas will be under the control of different Principal Contractors. There are likely to be various external Principal Contractor appointments for initial groundworks/landscaping phases.

As such, there will be different sites in operation within the overall development at any one time. Each Principal Contractor will have their own distinct site, securely and clearly segregated from adjacent sites, with their own compounds / site offices / welfare / parking areas, and with their own HSE F10 Notification forms.

This Construction Management Plan has been developed for the overall development. All works carried out in the development (by all appointed Principal Contractors) will be carried out in accordance with this document.



LANDSCAPE LAYOUT PLAN (EXTRACT PROVIDED FOR REFERENCE ONLY)







SITE LAYOUT (EXTRACT PROVIDED FOR REFERENCE ONLY) (Showing housing development areas & smaller SANG area)





1.2.2 Site Description & History

The overall development site comprises former agricultural land covering an area of approximately 9 hectares and is bisected by the Bluebell Railway Line, and partially by the Imberhorne Viaduct.

The site is undulating in topography with some steep gradients.

The land north-west of the railway line will form the large SANG area, while the land south-east of the railway line will comprise the developable area of the site along with the smaller SANG area in the north.

The large SANG area is accessible via a 'crossing' underneath the viaduct, the creation of the SANG area will involve vehicles travelling underneath the viaduct. Due to constrained space vehicle movements will need to be carefully considered to ensure the viaduct is not struck or damaged by a vehicle/plant item.

There is a spring in the wooded area directly adjacent to the south of Garden Wood Road (south-east of the viaduct), as well as a well which was covered with a metal covering at the time of visiting the site in September/November 2019. There are also drainage ditches within and around the site boundaries.

Further wooded areas are located north of the SANG and there are also numerous mature trees around the remainder of the site boundaries, as well as within the site dividing the fields which make up the overall development.

The south-eastern boundary of the overall development site (bordering Turners Hill Road) comprises a steep embankment which is effectively a leading edge dropping down to the carriageway below.

Site History

In brief, the site does not appear to have been subject to significant change since the earliest available historic maps. The site formed part of an area of open fields, with a woodland to the north and Hill Place Farm off site to the south-west. The town of East Grinstead has developed to the east.

Sometime between 1873 and 1897 map editions the railway including a viaduct was constructed along the northern-western site boundary. The railway runs from a cutting, near to the south-west corner of the site, to a viaduct across the valley.

This line was originally dismantled in the 1960s, with the part of the cutting beyond the site to the west backfilled with landfill waste. In 2013 this part of the line was reopened as part of the Bluebell heritage railway following the removal of part of the landfill.



VIEW FACING NORTH ACROSS DEVELOPMENT



VIEW FACING SOUTH ACROSS DEVELOPMENT







EXISTING WELL IN WOODED AREA – NORTHERN AREA OF DEVELOPMENT SITE



IMBERHORNE VIADUCT



STREAM IN NORTHERN AREA OF DEVELOPMENT SITE (SOURCE: NATURAL SPRING)



PEDESTRIAN CROSSING UNDERNEATH VIADUCT



VIEW ACROSS SANG – NOTE: STEEP GRADIENTS



FOOTPATH ALONG SOUTHERN BOUNDARY





1.3 PROJECT DIRECTORY

Duty-holders will carry out their duties as defined by the CDM Regulations 2015 to ensure that all requirements of the CDM Regulations 2015 are met.

The Client will ensure that a suitably competent Principal Designer, Principal Contractor and Design Team are appointed to oversee the project and afford all project members sufficient time to plan and mobilise their activities.

1.3.1 Key CDM Duty Holders Currently Appointed

Client & Principal	Company	Linden Homes South East	
Designer	Address	Linden House, Guards Avenue, Caterham, Surrey, CR3 5XL	
(PD for housing)	Tel	01883 334 445	
Principal Designer &	Company	GHPC Group Ltd	
CDM Advisor:	Address	11 Milbanke Court, Milbanke Way, Bracknell, Berkshire, RG12 1RP	
Infrastructure Works	Tel	01344 304 800	
	Company	ECE Planning	
Designer – Planning Architect	Address	Brooklyn Chambers, 11 Goring Road, Worthing, West Sussex, BN12 4AP	
U	Tel	01903 248 777	
Designer –	Company	RSK	
Civil & Structural	Address	Spring Lodge, 172 Chester Road, Helsby, WA6 0AR	
Engineer	Tel	01928 726 006	
Designer –	Company	Hankinson Duckett Associates	
Landscape Architect	Address	The Stables, Howbery Park, Wallingford, OX10 8BA	
Eco/Arb Consultant)	Tel	01491 838 175	

1.3.2 Other Currently Appointed Project Team Members

	Company	Southern Testing Ltd
Geotechnical Consultant	Address	Keeble House/Stuart Way, East Grinstead, RH19 4QA
	Tel	01342 333 100





2.0 DETAILED CONSTRUCTION PROVISIONS

2.1 SITE SECURITY + PROTECTION OF THE GENERAL PUBLIC

2.1.1 Security + Segregation

Each Principal Contractor will ensure the boundaries of their sites and off-site works areas are fully secure from trespassers / members of the public / children and other site personnel as well as being completely separate from surrounding areas and operations.

Visitors will be directed (by signage at the entrance gate and by any personnel present on a locked gate) to the site office accessed via clearly defined pedestrian routes. Visitors will sign in and be inducted (as appropriate for the nature of their visit) by the Site Manager, prior to being permitted on-site.

Each Principal Contractor will ensure their site is fully enclosed with appropriate fencing (Heras / hoarding) and controlled access gates, so the site is completely autonomous from surrounding areas, clearly defined and separated before any works commence.

All site boundaries will be monitored daily by the Site Manager to ensure any deficiencies / breaches are dealt with quickly and to ensure when the site is left at the end of each working day, security of the site boundary is robust. Any site fencing/hoarding will be thoroughly inspected on a weekly basis by the Site Manager. Each inspection will be recorded with details kept in the site office.

2.1.2 Protection of the Public

Linden Homes are fully committed to protecting members of the public from the construction risks associated with this project. As part of the Construction Phase Plans developed for the project, the Principal Contractor(s) will be vigilant to the possibility of works areas being accessed by unauthorised persons (particularly children and teenagers who may see it as an exciting place to play). The Principal Contractor will ensure a high standard of housekeeping practices are implemented across their sites with particular emphasis on any off-site work areas to ensure they reduce the risk of potential injury to trespassers, if they manage to gain access to the site.

All materials, plant and tools will be fully secured/supervised when not in use and particularly at the end of the working day. Material storage/compound areas will be fully secured.

2.1.3 Liaison with Public

In accordance with *Mid Sussex District Council's <u>Construction Charter for Developers</u>, the Principal Contractor will display a notice board outside of the site entrance with names and telephone numbers of staff who can easily be contacted to respond to the concerns of residents, businesses and others.*

Where possible, adjacent residents, the operators of the Bluebell Railway, and surrounding businesses will be informed in advance of any known works likely to cause a disturbance such significant noise, dust, extended working hours and disruption of traffic.

2.1.4 Signage

Appropriate health and safety signage will be placed around the construction site guiding traffic and pedestrian routes, giving warnings of hazards and potential dangers (such as "Danger: Keep Out" etc.) and instructing conduct within the site boundaries (such as "Do not remove security fencing" / "Appropriate PPE must be worn..." etc.). Public routes and crossings will be fully signed.

2.1.5 Inductions

Each Site Manager is responsible for induction training and will ensure each operative receives induction training specific to the site and to the type and place of work. This will take place before the site operative commences work for the first time on site.

The induction will concentrate on the Principal Contractor's management provisions, site rules, safety provisions as well as the particular site risks involved with the project and the environmental & ecological considerations of the project. Evidence of all induction training carried out and names of personnel, who have undertaken formal induction training together with when they were inducted, will be recorded and filed on-site.

During the induction process, operatives will be informed of housekeeping matters, particularly the need to respect surrounding neighbours to the site and the need to keep noise to a minimum; particularly when entering and leaving the site. Working hours and restrictions on timing/method of deliveries will be clearly explained. They will also be informed of the necessity to ensure all parking is within the site boundary, and will be given clear instructions on how to deal with deliveries of materials etc., to prevent any congestion on the public highway.

Tool Box Talks will be held by contractors and the Principal Contractor regularly (as appropriate), and these will be recorded by the Principal Contractor.





2.2 CONTROL OF ON-SITE WORKING CONDITIONS

2.2.1 Site Working Hours & Deliveries

Construction working hours will be restricted to:

- 08:00 18:00 Mondays to Fridays
- 09:00 13:00 Saturdays
- No works permitted on Sundays or Bank Holidays.

Operatives will be permitted access to the site from 07:00 to prepare for works, however no plant or construction vehicles will be operated, and no noise-producing work, will start before 08:00. No work will be undertaken outside the hours agreed.

The Principal Contractor(s) will ensure these working hours are communicated to all contractors & site operatives during the Site Induction and are strictly enforced throughout the works.

No deliveries will be permitted to wait outside the site; drivers will make alternative arrangements when waiting for access to site and all suppliers will be informed of these restrictions at the point of placing the order.

The construction traffic route will involve travelling through the centre of East Grinstead past East Grinstead train station, businesses and residential areas. The construction traffic route will also involve travelling on roads used to access surrounding local schools.

Where possible, deliveries will be coordinated to avoid school opening and closing times and will avoid where practicable, accessing or egressing the site between the hours of 08:15 - 09:00 and 15:00 - 16:00.

No construction traffic or delivery vehicles will be permitted to park on any of the public roads surrounding the development – all parking will be accommodated on site.

2.2.2 Control of Noise & Vibration

Construction works, by their very nature, can generate significant noise levels which can present a nuisance to the surrounding areas when works are being carried out. In recognising this, the Client expects all contractors to adhere to Environmental Health Requirements, current regulations and *Mid Sussex District Council's Construction Charter for Developers*.

No works will be carried out on the site outside of the allowed working hours – specified in <u>Section 2.2.1</u>. All activities will be assessed for anticipated noise levels prior to works commencing, taking into account the potential for amplification of noise due to the layout of the site. Further, all plant and equipment brought to site will be well maintained and operated in accordance with the manufacturer's instructions and will comply with the <u>Control of Noise at Work Regulations 2005</u>.

Linden Homes recognise that maintaining good relationships with those living and working in the vicinity of the site is important. Identifying noise levels as a risk to the surrounding area (whether nuisance or safety) as early as possible in the process is a priority for Linden Homes, in order to ensure that any issues can be dealt with fairly and expeditiously. Local residents and businesses will be kept regularly informed of progress of works. The Site Manager will be available for contact for any interaction with the public during the works

Methods for reducing noise levels as far as practicable by the use of attenuation materials or such like, will be specified, and remain in place for the duration of the works. Specifically, the following areas will be required of all work activities;

- Comply generally with the recommendations of BS 5228: Part 1, clause 9.3 for minimising noise levels during the execution of the works.
- Noise levels from the works will be kept to a minimum.
- Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- Do not use or permit employees to use radios or other audio equipment in ways or at times which may cause nuisance. Any radios/entertainment devices will only be used at a level which will not cause undue disturbance to the neighbouring areas
- Every care will be taken to avoid unnecessary noise when carrying out manual operations and when operating plant and equipment.
- All plant will be switched off or reduced to idle when not in use.
- Noise producing plant will be sited as far as possible from dwellings, offices and other noise sensitive premises. Where the latter are particularly noise sensitive e.g. hospitals, schools, etc. then a further reduction in sound emission may be required and will be achieved by the use of barriers or acoustic housings.





2.2.3 Compound Position, Site Car Parking, Visitor Provisions, Plant and Equipment

Detailed site set up plans showing the location of Site Compounds, Welfare, Parking & Materials Storage will be provided by each appointed Principal Contractor prior to their appointment commencing on a phase-by-phase basis. The Principal Contractor(s) will provide these to Linden Homes for vetting as part of their respective Health & Safety System. An initial plan showing the location of the proposed site access, compound (where all deliveries and materials will load and unload), offices and contractor parking areas is included in <u>Appendix One</u>.

Please refer to <u>Section 2.3</u> for further information regarding arrangements for safe access & egress to the site.

All visitors to each site will report the Site Offices for an appropriate induction by the Site Manager. Parking facilities will be made available for visitors in each Principal Contractor's site, and clearly signposted.

All large building materials will be stored within the site area, within the vicinity of housing plots as they are being constructed, smaller materials and particularly any which represent a hazard to health, will be stored in the locked compound area. Waste segregation and storage areas will be provided within the compound area, to be arranged in line with the provisions set-out in <u>Section 3.5.</u>

In order to review all plant and equipment brought onto site, any machinery brought on-site by subcontractors will be notified and authorised by the Site Manager(s) or Assistant Site Manager and recorded on the Mobile Plant Register.

2.2.4 Road Cleaning Regime

Linden Homes will ensure that pro-active measures are taken to prevent slurry/spoil from vehicles leaving site during the works being deposited on the public highway.

The site roads near the development entrance will be constructed and tarmacked to base course at the earliest opportunity to provide a suitable hardstanding area for delivery vehicles. This will reduce the likelihood of HGV wheels becoming covered in mud, as no delivery vehicles will drive over unmade ground, and will limit the need for wheelwashing. A wet Wheelwash facility in the formed of a manned jetwasher will be positioned near the site egress point, so that any muddy vehicles can be washed down prior to leaving the site.

Linden Homes, and their appointed Groundworkers, will ensure a roadsweeper is available when required to ensure the site roads are kept free of mud throughout the development.

The Site Manager will regularly monitor the site roads, and the area of Turners Hill Road near the entrance, for dirt and debris and will arrange for road sweeps when necessary – this is likely to be more frequent during Groundworks (when there are more earthworks being carried out) and during periods of inclement weather. The roadsweeper will sweep the site roads and the area of Turners Hill Road near the entrance in the event any mud is tracked out of the site.

Road sweepings will be disposed of through the Principal Contractor's own waste management arrangements. Road sweepers will either be discharged off-site, or if on-site will be discharged using appropriate methods in compliance with the <u>Environmental Protection Act 1990</u>.

2.2.5 Welfare Provision

The Principal Contractor(s) will provide full welfare facilities in accordance with Schedule 2 of the CDM Regulations 2015 – these facilities will be in place prior to construction works commencing on-site and this will be confirmed by the Principal Designer to the Client, following review of the Construction Phase Plan.

All welfare provision will be provided in accordance with Linden Homes' Minimum Requirements for Site Accommodation and Welfare which sets out the minimum requirements for:

- Toilet Facilities
- Temporary Portable WC / Wash-stations
- Facilities for Rest
- Electrical Supplies

- Drinking WaterCleaning of Facilities
- General Site Accommodation
 Facilities for Changing Clothes





2.3 CONSTRUCTION TRAFFIC MANAGEMENT PLAN

The site will be accessed via a temporary entrance directly off Turners Hill Road, where there is currently an existing gated access point. The new permanent development entrance will be formed around this area, please refer to site layout plan in approved application DM/19/1067 for access details.

Construction traffic will access Turners Hill Road (B2110) from the north, via Brooklands Way (B2110) and the A22 / London Road, which accesses the A264 and M23 Motorway. Construction traffic will also be able to access the site from the south travelling northwards along Turners Hill Road (B2110).

Vehicular access to the SANG area to the west of the main development site will be achieved via the existing underpass – please refer to Section 2.4 for further details and considerations.

Any construction access gates will be positioned a suitable distance from Turners Hill Road to avoid delivery vehicles / construction traffic causing an obstruction.

The construction traffic route will involve travelling through the centre of East Grinstead past East Grinstead train station, businesses and residential areas. The construction traffic route will also involve travelling on roads used to access surrounding local schools. Therefore, there will be increased levels traffic on the roads during peak hours and school opening/closing hours.

An initial plan showing the location of the proposed site access, compound (where all deliveries and materials will load and unload), offices and contractor parking areas is included in <u>Appendix One</u>.

The Principal Contractor(s) will give particular consideration for moving vehicles/plant around areas with steep slopes, and carry out plant assessments before bringing commencing any works on-site to ensure all plant used during the works is suitable for the terrain it is to be used on.

To protect pedestrian operatives from possible contact with vehicles, there will be designated pedestrian walkways which will be physically segregated from the road using traffic barriers. The pedestrian walkways will be clearly signposted, well-lit, and will be free from any debris/materials storage to allow their continued, unobstructed, safe use. Pedestrians will cross the roads at designated pedestrian crossing points only, where pedestrians will have right of way over construction vehicles. The walkways will be regularly checked and maintained as necessary, to ensure they provide safe access and egress at all times.

Vehicle Movements and Deliveries/HGVs will be coordinated to avoid peak traffic times and school opening/closing times to minimise disruption to the local area. No delivery vehicles will be permitted to wait outside the site; drivers will make alternative arrangements when waiting for access, and suppliers will be informed of these restrictions at point of ordering.

The Traffic Management Plan will demonstrate the principles of the traffic flows, pedestrian segregation, traffic control measures, speed limits, signage, car parking. Vehicular traffic and pedestrian traffic will be segregated at the site entrance, with clearly signed routes being maintained.

To minimise vehicular movements through the residential area, and to minimise any disruption to local residents, the Principal Contractor will encourage all site operatives to share cars and utilise public transport where possible to keep site traffic volumes to a minimum – it is expected that the majority of Construction Workers will access the site via car, using the same route as all construction traffic (detailed above).

There will be an estimated maximum of around 80 workers / visitors on-site at peak construction time, and an estimated maximum number of 40 cars and vans accessing the site each day (at peak construction time), there will be an estimated maximum of 30 HGVs accessing the site per day at peak construction time. The site car park will be provided within the site boundary and will accommodate the anticipated number of cars and vans.

All loading and unloading from delivery vehicles and construction traffic (including building materials, finished or unfinished products, parts, crates, packing materials and waste) will take place inside the site compounds only.

The roads outside the site will be kept clear at all times with clear access for fire appliances and emergency services.





2.4 PROTECTION OF BLUEBELL RAILWAY LINE AND IMBERHORNE VIADUCT

The Bluebell Railway Line and Imberhorne Viaduct essentially bisect the overall development, dividing the developable areas on the south-eastern side of the railway line from the SANG area to the north-west.

The works associated with the housing development works will involve working in close proximity to the railway line/viaduct, while the works to create the SANG will involve manoeuvring vehicles through the existing underpass.

As part of the development, Linden Homes will carry out improvement works to the railway and viaduct boundary, involving removal of dense vegetation and instatement of a new permanent boundary fence.

In order to prevent damage to the viaduct / railway line, and to maintain its stability the Principal Contractor(s) will ensure the following measures are put in place prior to commencing any works on-site and ensure they are maintained for the duration of the development:

- Erection of fencing along the length of, and either side of the viaduct and railway line to create a physical exclusion zone
- Any works which will involve working within the Exclusion Zone (e.g. during vegetation clearance, and when manoeuvring vehicles through the underpass for the SANG works,) will be done strictly under a Permit to Work
- The underpass will be sufficiently protected to ensure that vehicles/plant can safely pass through it (i.e. by erecting vehicle collision barriers and goalposts as necessary)
- The types of plant/vehicles to be used for the SANG works, vegetation clearance, or any other works within the Exclusion Zone will be subject to Plant Assessments to ensure they are of a suitable type and size, and capable of moving freely around/underneath the underpass without unintentionally damaging it
- Excavations close to the railway line/viaduct will be carefully considered and controlled to ensure that the integrity of the railway line/viaduct is not undermined
- Carefully considered emergency procedures (to be agreed with Linden Homes and Bluebell Railway Line Representatives) ensuring every site operative is aware of how to raise the alarm and minimise further damage / danger
- All Lifting / Piling Operations near the railway will be controlled with a lifting plan/method statement developed. CFA piles will be used over driven piles to minimise vibration which may undermine the stability of the viaduct







3.0 DETAILED ENVIRONMENTAL PROVISIONS

3.1 GOOD WORKING PRACTICES TO CONTROL NOISE, DUST AND RUN-OFF

Throughout the construction phase of the development, good working practices will be adopted to manage and reduce and associated impacts upon the local community. The following will therefore be undertaken:

<u>Control of Noise</u> (in addition to the provisions set out in <u>Section 2.2.2</u>)

- Designated and supervised areas for the storage of materials, storage of plant and equipment, site accommodation, parking and loading and unloading of vehicles.
- Agreed construction methodology to minimise generation of noise, vibration and dust.
- All plant shall be switched off when not in use, or where this is not practicable, throttled down to a minimum.
- Wherever practicable, all plant and equipment shall be powered by main electricity in preference to locally powered sources such as diesel generators.
- All compressors and generators shall be 'sound reduced' models fitted with properly lined and sealed acoustic covers or enclosures, which shall remain closed whenever the machines are in use.
- All vehicles, plant and machinery used during the operations shall be fitted with effective exhaust silencers and all parts of such vehicles, plant or machinery shall be maintained in good order and repair and shall be in accordance with manufacturer's recommendations.
- Wherever practicable, rotary drills and 'busters' activated by hydraulic or electric power shall be fitted with effective mufflers or silencers of the type recommended by the manufacturers.
- Noisy plant or equipment shall be sited as far away as possible from noise sensitive receptors. It should be noted that the entirety of the site has been bordered by 2.4m high hoardings in any case, and that the hoarding will act as a buffer to reduce the impact of any escaping noise throughout the construction process.
- All site personnel will be inducted before commencement on site ensuring that they are briefed of all site rules and restrictions.
- Linden Homes will ensure that neighbouring residents likely to be affected by the works are notified about the proposed works prior to commencement.

<u>Air Quality Management Plan / Control of Dust</u> (in addition to the provisions set out in <u>Section 3.2</u>)

- The requirements of the Control of Substances Hazardous to Health Regulations 2002 will be met using the Hierarchy of Control.
- Local dust extraction equipment will be fitted to grinding machinery and masonry and silica-based materials will be cut using water suppression / wet cut methods.
- Concrete / mortar batching will be avoided where possible. During dry weather and in the absence of any local or national water restrictions in place, water suppression / spays will be used for the damping down of any process likely to generate airborne dust.
- When preparing the site areas for construction, the Principal Contractor will seek to strip the topsoil in phases, so that the ground is only disturbed when works are ready to commence in the area. This will proactively reduce large amounts of soil dust being created and will also reduce the amount of spoil heaps required during the initial work phases.
- Managing loose materials (damping down / covered in windy conditions)
- In areas of work close to sensitive properties, the Site Manager will undertake regular dust monitoring inspections of boundaries (as part of regular Site Inspections) to ensure that dust levels are monitored and controlled and where necessary will ensure that suitable dust suppression methods are employed to deal with any residual issues in these areas.
- To control smoke and noxious fumes, there will be no burning permitted on-site and all plant will be maintained in good working order.





Control of Run-Off / Fuel Management (in addition to the provisions set out in Section 2.2.4 & Section 3.3)

- Road washing facilities, via a mechanical road brush will be used when any extensive mucking away takes place to avoid spreading mud and debris along the highway.
- All site traffic will exit the site via a wheel / jet washing facility installed at the site exit to help reduce any potential impact on the local highway network.
- All fuel for plant will be segregated and stored in double bunded fuel storage containers with the provision of a fuel spill kit. If there is any significant fuel spillage, then this will be managed by Linden Homes specialist 24-hour response cleaning contractor.

3.2 PROTECTION OF WATER, LAND ENVIRONMENT, AIR QUALITY & POLLUTION PREVENTION

The Client, Principal Contractor(s), and all Contractors on this project will ensure the protection and integrity of all watercourses, drainage systems and associated flora and fauna (with particular consideration given for the existing spring (near plot 7) and the drainage ditches on site) by preventing any surface water run-off or potential sources of contamination from reaching watercourses / drainage systems.

All surface water drainage from impermeable areas and roads will pass through trapped gullies prior to being discharged into any watercourse.

All road gullies will be fitted with gully bags gully bags or terram to prevent silt run off into existing drainage systems. All gullies will be visually checked on a regular basis by a member of the Site Management Team (minimum weekly, and more frequently as required during periods of wet weather and when significant earth movements are being carried out) and will also be checked during Health, Safety & Environmental Inspections. If the condition of any gully bag or terram has deteriorated by becoming worn, or if the gully bag has filled with mud/silt it will be replaced (or cleared) on the day of inspection.

If silt spillage is identified, it will be treated as a priority to stop the flow and contain the spillage before it enters surface water drains or watercourses/ground. Road sweepings will be discharged safely as outlined in <u>Section 2.2.4</u>.

To prevent polluting waters, there will be no discharge of foul or contaminated drainage or trade effluent from the site into either groundwater or any surface waters, whether direct or via soakaways. No pumped water will be discharged into the live drainage system without having been filtered through a silt interceptor.

These procedures will include managing loose materials (damping down / covered in windy conditions), and monitoring and recording dust levels during the site inspection process. All work areas will be well ventilated to prevent dust build up. Dust will be minimised during cutting operations of blocks etc. by ensuring use of equipment with on-tool water suppression.





3.3 FUEL STORAGE AND USE

Any facilities for the storage of oils, fuels or chemicals will be sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound will be at least equivalent to the capacity of the tank plus 10%.

If there is multiple tankage, the compound will be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%.

All filling points, vents, gauges and sight glasses will be located within the bund. The drainage system of the bund will be sealed with no discharge to any watercourse, land or underground strata. Any pipework will be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets will be detailed to discharge downwards into the bund.

Tanks will be sited in a safe area, away from manholes and surface water gullies. Tanks will be double-bunded, non-gravity diesel tanks. The Fuel tank and hose will be locked secure when not in use and the site will possess a spill control kit. A clearly defined drip control area will be introduced around the tank. Tanks and surrounds will be regularly inspected for damage, spills or leaks as part of weekly inspection.

All measures to control chemical storage, discharge and spillage will cover;

- Oil Storage tanks in excess of 200 litres
- Double Skinned (twin-walled) tanks
- Proprietary Tank Systems
- Mobile Bowsers
- Security
- Dealing with Spills
- Prevention of Contamination of Rivers & Streams
- Storage and use of other chemicals (quantities less than 200L)

3.4 WASTE MANAGEMENT

A Site Waste Management Plan, and a Materials Management Plan will be developed by Linden Homes. Each appointed Principal Contractor will be required to adhere to the SWMP throughout the development.

All inert material will be retained and re-used on site where possible, all plasterboard waste will be collected and returned and the majority of the remaining waste will be removed in compactable skips.

The management, handling and disposal of waste and classification of materials will be carried out in line with all current Environmental Legislation and requirements.

There will be no burning on-site (including waste, materials, undergrowth or other vegetation or refuse) throughout the course of the development (both during construction and site preparation works). This restriction is in place in order to protect the environment as well as to safeguard the amenities of occupiers of existing properties within the vicinity of the application site, and site staff.





3.5 ECOLOGICAL MITIGATION DURING CONSTRUCTION

The Ecological Management Plan prepared by HAD (Hankinson Duckett Associates) includes measures to be employed during construction to avoid adverse effects of dust on trees and other vegetation in the vicinity of retained woodland habitats. These measures will include:

- Use of hard surfaced haul routes
- Damping down and regular cleaning of haul routes during periods of dry weather
- Vehicle washing and wheel cleaning prior to leaving the site
- Locating storage and cement mixing areas away from the woodland edge
- Covering, seeding or damping of stock piles
- Monitoring of dust levels
- Further details on Dust Suppression & Monitoring are included in Section 3.2

Measures to avoid adverse effects on wildlife associated with retained woodland vegetation during construction will include:

- Fitting of silencers to vehicle exhausts
- Restrictions on working hours refer to <u>Section 2.2.1</u>
- Use of mufflers or silencers on pneumatic percussive tools
- Use of rotary drills and busters actuated by hydraulic or electrical power for excavating hard material where practicable
- Careful unloading/ loading of vehicles, movement of material or dismantling of scaffolding
- Shutting/throttling down of machinery not in use
- Use of quiet methods of piling where practicable

The following protection measures will be implemented to ensure that wetland habitats within and adjacent to the site (spring & ditches/streams) are protected during the course of the development:

- Avoidance of reduction in ground levels where this may adversely affect contribution of groundwater currently moving from south to north across the site
- Appropriate design and use of any land drains, filter drains and groundwater pumping required to maintain current water levels supporting the woodland, streams, springs and wet flushes within the site
- Design and implementation of a sensitively designed surface water drainage scheme to maintain the continuity of water entering the woodland from the development area
- During the construction phase, workers will be fully briefed on ecologically sensitive habitats and all construction activities will be conducted in accordance with the
- Where there is a risk of waterborne pollution entering existing watercourses during construction, a temporary drainage strategy will be implemented to capture waterborne pollution prior to entering the streams or other sensitive aquatic habitats, incorporating settlement tanks and/or interceptors where necessary
- All hazardous liquids and chemicals will be stored and utilised in accordance with the COSHH Regulations.





4.0 APPENDIX

The following surveys & reports have been provided by the Client and are available via Dropbox at the following link: www.dropbox.com/sh/u7aagmqh22t0qzo/AABA-7CqTZ7mUsP7sI0bymdha?dl=0

REPORT/SURVEY	DATE	COMPANY	REFERENCE
Site Compound Plan	Aug 2018	Linden Homes	N/A
Construction Charter for Developers	N/A	Mid Sussex District Council	N/A
Ecological Management Plan	Aug 2018	HDA	2136.13