

Construction Environmental Management Plan

Document Reference: CEMP 16.01.24 Rev 02

Project Name: Unit 21 Mardon Park



VIEW 1 - UNIT 21 EXTENSION

Rev 02		
Approved by:	Date:	Signed:
Prepared by	Date:	Signed:
R P Bowen	23 Jan 2024	

Issue & Amendment Record.

Revision No.	Date	Description of Change	Produced/Amended by
00	2 nd June 2023	CEMP Created & Issued	R P Bowen
01	16 th Jan 2024	Phasing plan (Paragraph 3)	R P Bowen
02	23 rd Jan 2024	Delivery times (Paragraph 3) and traffic plan (Appendix F) updates	R P Bowen

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1. Introduction

GBV Properties Ltd has a sustainable vision for all its construction sites based on being both eco efficient and eco effective with its resources and labour. Fundamental to its vision are the continual improvements in environmental management it implements throughout its sites and an understanding of their social responsibility on the surrounding communities. The GBV Properties Ltd environmental management procedure sets out the objective to achieve environmental and social development simultaneously with a view to continuously improve the service, quality and commitment it provides.

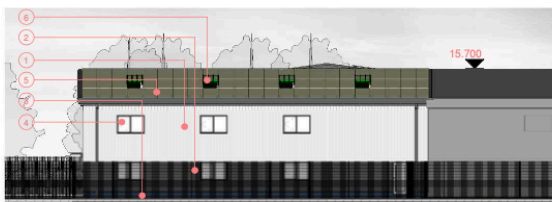
This Construction Environmental Management Plan (CEMP) document has been produced in outline format. As a live and dynamic document, additions may be made to the plan as the project evolves.

1.1 Scope of Works

The development comprises of new steel framed extension to an existing industrial unit (As per diagrams below) and is the next phase of a potential regeneration to the area creating further light industrial units for local business.

The sequence of the works is as follows

- Site Set up
- Site clearance inclusive of ecology watching brief
- Preparation for piling with precast concrete driven piles
- Pile cap & reinforced concrete beam and slab foundations
- Belowground foul & storm water drainage and service trenching and ducting
- Erection of steel portal frame
- Brickwork plinth to the low-level perimeter of the building
- Cold rolled steel and composite cladding to both the walls and roof including roof lights
- Construction of internal offices and toilets and other staff amenities
- Fit out including M&E.
- External works to included SUDS as per the agreed SAB approval
- External lighting works.
- External hard and soft landscaping including car charging points , bin stores and cycle enclosures.



SOUTH WEST ELEVATION - UNIT 21 EXTENSION
1 : 200



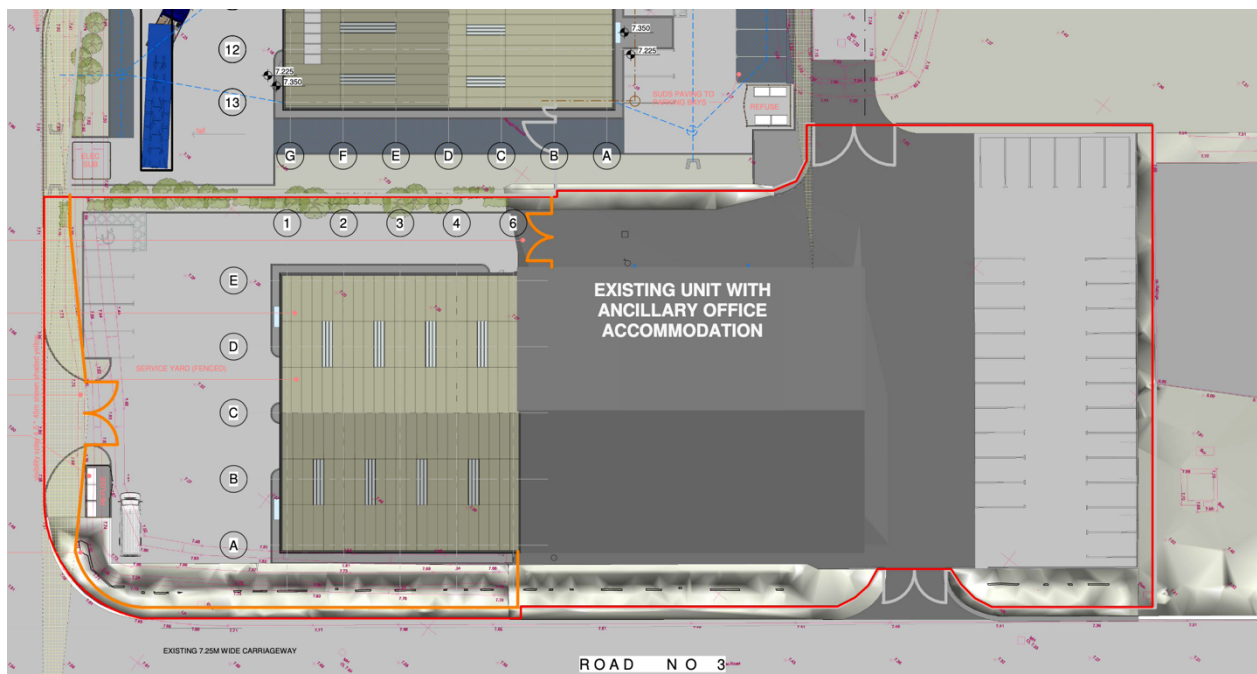
NORTH EAST ELEVATION - UNIT 21 EXTENSION
1 : 200

1.2 Location

The site is located on the Mardon Park Development.

Unit 21
Mardon Park
Central Avenue
Baglan
Port Talbot
SA127AX.

The extent of the site is shown in the diagram below.



1.3 Project Directory

Project Contacts: -		
Role	Name	Contact
Client	GBV Properties Ltd, Unit 19, Mardon Park, Central Avenue, Baglan, Port Talbot, SA12 7AX	Jonathan Ridd 07787 538300 projects@gbvproperties.co.uk
Architect	I.M Design Studio 27 Park Avenue Skewen SA10 6RU	Jonathan Morris 07917 860127 imdswales@gmail.com
Planning Consultant	Robert Bowen Planning Development Ltd Llangyfelach Swansea	Robert Bowen 07855 776129 info@rbplanning.co.uk
Principal Contractor	TBC	TBC
Health & Safety Advisor to The Principal Designer	GreenBuild Management Services, Unit 19, Mardon Park, Central Avenue, Baglan, Port Talbot, SA12 7AX.	Rob Williams 07469 235178 rob.williams@greenbuildconsult.co.uk
Structural Engineer & Principal Designer	Vale Consultancy, Consulting Civil & Structural Engineers, 29 Bocam Park, Old Field Lane, Pencoed, Bridgend, CF35 5LJ.	Matt Jones Tel: 01656 863794 Mob: 07967 221842 matt.jones@vale-consultancy.co.uk
M & E Designer	Securus Property Compliance Ltd, 9 Chestnut Road, Neath, West Glamorgan, SA11 3PA.	Rory Chapman & Richard Lloyd Tel: 07917692536 Rory.chapman@securus-compliance.uk

2. Environmental Management

The EMS will be regularly monitored and audited by appropriate personnel, throughout the duration of the works. It is the responsibility of the Project Manager to ensure development, approval and effective implementation of the environmental management system. This should be undertaken with the support of environment manager, specialists and other suitably qualified personnel. It must also be made clear to all site personnel that everyone has a responsibility to ensure no environmental incidents occur.

The following outlines the processes and plans to be implemented on site to ensure all environmental aspects and impacts are identified and sufficient measures are put in place to reduce risks associated with the works.

2.1 Impacts and Aspects Matrix

In line with procedures, an Impacts and Aspects Matrix has been completed which clearly identifies all applicable legislation in relation to the identified environmental aspects for this project. This document can be found in **Appendix B**.

2.2 Environmental Risk Assessment

Using the information obtained through the Impacts and Aspects Matrix, an environmental risk assessment has been undertaken. This assessment has been used to determine the mitigation methodology to be utilised on the project. This draft document can be found in **Appendix C**. Where significant risks are identified, specific management plans are to be put into place and details of these will in due course be found within this CEMP. Each management plan will be thoroughly assessed by all project management and method statements will incorporate the mitigation for the assumed risk. Any changes to works packages must be reassessed prior to any commencement of work.

2.3 Nuisance

Nuisance for the purposes of this document is broken into four sections, namely Dust, Noise, Vibration and Lighting. The following sections detail activities and control methods to be implemented on the project.

Sensitive receptors likely to be affected by construction nuisance include:

- Neighbouring Offices.
- Light Industrial Buildings.

2.4 Dust

Mechanical disturbance of granular material exposed to air creates atmospheric dust, the potential sources of these fugitive dust emissions are outlined below:

- Site clearance
- On site earth moving operations, site levelling, cut and fill etc.
- Vehicle movements over haul roads
- Vehicle movements on site during dry periods
- Wind blowing across the site during dry periods
- Stockpiling of excavated materials
- Cutting and grinding
- Accidental spillage and loss of load from vehicles carrying loose material

Appropriate preventative measures to control dust emissions can significantly reduce the potential for dust generation. Implementation of the following methods will help to minimise risk.

Risk	Mitigation
Construction Traffic	• All construction traffic will follow specifically designated routes • Speed limits will be put into place on site for all vehicular movements • All vehicles carrying loose material will be covered • If deemed necessary Wheel wash facility to be used for vehicles leaving site
Highways	• Where appropriate, use of road sweepers will be incorporated to ensure highways remain clear of dust and mud • Road edges and pathways will be swept by hand and damped down as necessary
Stockpiles	• To be sealed or sprayed as required • Location of stockpiles will be positioned away from any sensitive receptors
Dust Suppression	• Mobile bowsers to be deployed on site at regular intervals when necessary • Activity to be increased during significantly dry and windy periods • Where necessary, use of hoardings to be considered to ensure reduction in dust migration • Deliveries of significantly dusty materials to be sprayed to reduce dust potential • All cutting and grinding operations to be conducted in ways to reduce risk of dust migration (wet cutting techniques/dust suppression methodologies etc)
Monitoring	• Ongoing monitoring to be undertaken by site personnel on regular basis, both on and off site to ensure no migration of dust • Regular liaison with Client to be undertaken • Regular reviews of mitigation methodology to be undertaken by Environmental Manager and Project Manager.

2.5 Noise & Vibration

Noise has the potential to cause disturbance, given the location of the adjacent office and commercial buildings and it is essential that the works comply with the conditions which have been laid out by the NPTCBC construction noise code of practice. The latter, specifies that the Council's policy on hours of work is as follows:

- Monday to Friday 8am - 6pm
- Saturday 8.00am – 1.00pm
- No Sunday, Bank holiday or Public holiday working unless agreed in advance

Noise limitations to be set on site, drawing on BS 5228: Part 1 Noise Control on Construction) and any best practice on "Construction & Demolition work".

It is anticipated that the works should not pose any significant risks in relation to vibration other than when the piling is carried out but until such time as the contractor and method is chosen this can be updated further and the extent of the potential noise and vibration quantified.

2.5.1 Best Available Techniques BAT

In addition, our team will embrace best practices with regards noise minimisation, this will include but not limited to;

- Where possible, 'silenced' plant and equipment would be used at all times;
- Acoustic enclosures would be fitted to suppress noisy equipment;
- Temporary screening or enclosures for static noisy plant to reduce noise emissions and plant should be certified to meet any relevant EC Directives/UK/BS5228 standards.
- All plant would be properly maintained (greased, blown silencers replaced etc);
- Where practicable, all plant should conform to the noise limits presented in the EC Noise Emission in the Environment by Equipment for use Outdoors Directive 2000/14/EC; and
- Vehicles and equipment should be fitted with effective exhaust silencers, maintained in good working order and operated to minimise noise emissions in accordance with BS 5228, and should vehicles be left standing for a significant period, engines would be switched off.

2.6 Light Disturbance

The surrounding vicinity to the site currently creates a significant amount of light pollution to serve the security of the existing commercial buildings. Any further task lighting required on the project is not expected to cause a nuisance. All task lighting, however, will aim to minimise the impacts of light spillage on adjacent retained habitats as far as reasonably practicable.

2.7 Waste Management System

A Site Waste Management Plan will be created for the project. Reviews of Site Waste Procedures and the Site Waste Management Plan will be undertaken at 6 monthly intervals, or less if required.

2.8 Segregation of Waste

To ensure maximum potential for reducing waste to landfill, and encouraging reuse and recycling, waste will be segregated. Separate skips will be made available, when space is available, for all types of waste. Each skip will be clearly labelled, and site personnel will be informed of procedures within the induction. Regular monitoring will be undertaken to ensure correct procedures are followed at all times. The skips will be emptied at regular intervals to prevent overfilling. Toolbox Talks will be undertaken with all site personnel to ensure full understanding of waste procedures.

2.9 Disposal of Non-Hazardous Waste

All non-hazardous waste will be removed from site within strict adherence to all waste legislation requirements, including Duty of Care Regulations. Prior to any agreed use of hauliers or waste disposal sites, the appropriate licences will be thoroughly checked to ensure that particular waste streams can be accepted, and carrier licences are valid. This can only be undertaken by authorised personnel and copies of all necessary licences must be retained on site at all time and reviewed for expiry. No waste will leave site without appropriate waste transfer notes. It is essential that all waste transfer notes are inspected for detail and must contain the correct description of waste as well as the correct waste code, in line with the List of Waste Codes Regulations.

2.10 Disposal of Hazardous Waste

Hazardous waste is not anticipated given the site investigations and subsequent reports and it will therefore be under the threshold of 500kg a year set by the EA and hence the site will not have to be registered as a producer of Hazardous Waste. No hazardous waste must leave site without the correctly completed Consignment Note. The consignment notes must contain all necessary information including waste description and hazardous waste registration number. Any carriers removing hazardous waste must have appropriate licences and disposal sites must be verified to be able to accept waste being sent. These checks and signing of consignment notes can only be undertaken by authorised personnel. All hazardous waste must be stored on site in appropriate, covered or locked skips. No mixing of hazardous and non-hazardous waste is authorised.

In both instances above waste disposal options will look to ensure minimal transportation requirements where financially viable. If there is any suspected hazardous waste work will cease until it is tested and proved or we will

otherwise determine how we need to mitigate this risk as a result of the testing outcome. This will be done in accordance with our strict waste management procedures.

2.11 Waste Reporting and Records

All waste transfer / consignment notes will be held on site or at GBV Properties Ltd site office throughout the duration of the project. Each waste transfer will be fully documented, and the Site Waste Management Plan updated accordingly with waste carriers and disposal details.

2.12 Water

There works proposed for the site will include excavations to be carried out, therefore, ground water is likely to be encountered.

NB there are no watercourses around or in the site but there are existing swales to manage.

However, all site activities will be monitored, and the following measures put in place to ensure site contamination does not reach any nearby watercourses.

Visual surveillance monitoring will then be undertaken during construction. All records of water monitoring inspections will be kept on site throughout the duration of the project and be readily available for inspection by the Client or any regulatory body. In periods of heavy rainfall or excessive vehicle movements within the vicinity, monitoring should be increased to reduce risks of pollution incidents.

Construction of concrete structures during the construction phase would be monitored to prevent associated contaminated material entering any watercourses. Pre-cast work or permanent formwork could reduce the amount of in-situ concreting required. Washing out of concrete wagons or other equipment used in concreting operations will be undertaken in designated contained washout areas. These will be located away from all watercourses and drains and will be impermeable to prevent infiltration to ground.

The positioning of fuel storage tanks and other potentially polluting materials and maintenance/refuelling facilities will be on bunded areas of hard standing with dedicated drainage systems. Stored materials on site will be checked regularly for containment integrity (both primary and secondary), quantity stored and security of storage.

Spill kits will be made available, and site operatives trained in their use, to deal with any spillages. All spill kits will be fully stocked and kept dry at all times.

3 Transportation and Traffic Management

A traffic management / construction logistics plan can be found in the Construction Phase Health and Safety Plan. The plan outlines timings of deliveries; all required signage as well as designated routes to be taken by hauliers and workers ensuring minimal disruption to local residents and businesses. Further to this, GBV Properties adhere to a strict code of practice regarding plant and vehicle emissions, therefore, all mobile vehicles associated with the demolition / construction will comply with the standards for Low Emission. For HGVs, the standard is Euro IV for PM and for heavier vans and mini buses it is Euro 3. The site will be managed so

- The right machine will be used for the task – avoid inefficiently oversized machines
- That any vehicles do not have to wait to park safely, where this is not practical no vehicles shall be left idling.
- Plant is serviced correctly and regularly
- Low carbon fuels are used where possible
- Plant is operated efficiently (e.g. minimising idling time and using appropriate power)

Deliveries, Development Phasing/Size and number of vehicles

Deliveries to site will be undertaken between 08:00 -18:00 outside term times Monday- Friday.

During term times deliveries will be prohibited between 08:00-09:00 and 15:00-16:00.

Week	Works	Vehicles	Numbers per week (in and out)
1-2	Site Set up and clearance	Workers- Car/Vans 20t Excavator 10t Lorry (Excavations)	30 1(in) 20
3-11	Belowground foul & storm water drainage and service trenching and ducting. Highways	Workers- Car/Vans 10t Lorry (Delivery) Cement Lorry	30 10 4
12-16	Foundations and slab	Workers- Car/Vans 10t Lorry (Delivery) Cement Lorry 10t Cement Pump 20t Excavator	30 8 8 2 1(out)
17-29	External walls, roof, windows and doors.	Workers- Car/Vans 10t Lorry (Delivery)	30 10
30-34	Internal fit out including M&E.	Workers- Car/Vans 10t Lorry (Delivery)	30 10
35-38	External works to included SUDS	Workers- Car/Vans 10t Lorry (Delivery) 10t Excavator	30 10 1(in)
39-40	External hard and soft	Workers- Car/Vans	30

	landscaping	10t Lorry (Delivery)	5
		10t Excavator	1(out)

4 Land contamination

An Envirocheck desk top study of the Ground Conditions and Contamination assessment which indicated no contaminants within the footprint of the site and this has been confirmed by further site trial holes and chemical testing. However, previous land use would need for all operatives to be vigilant for any unusual form of contamination that may have been disposed of over the site. Therefore, during demolition and construction the following precautions would be taken to minimise the exposure of Site workers and the general public to potentially harmful substances:

- Adherence to the COSHH Regulations 2002 and the CDM Regulations 2015
- The requirement for all Site workers to wear and utilise appropriate and well-maintained PPE and, where necessary Respiratory Protective Equipment (RPE);
- The provision of adequate facilities and procedures to enable Site workers to wash and change;
- The use of dust suppression techniques;
- The regular cleaning of Site access roads; and
- The sealing of stockpiled material on the Site and covering of materials being transported to and from the Site.

If hazardous waste is discovered and is required to be removed from site, stockpiling of such material will be kept to a minimum and the storage area must be secure to ensure the risk of leaching into any water courses is negated. When disposing of any contaminated wastes, carriers and disposal sites must be verified for the type of waste stream prior to any waste removal. Prior to any soils being removed from site, a comprehensive test will be carried out to determine whether the soils are inert/hazardous or non-hazardous. The results of this testing will determine which disposal route is most appropriate. No WAC testing will occur until the first stage Full Characterisation Testing has been completed.

5 Trees

A full site Arboricultural Survey has been carried out indicated that no trees are under a tree protection order nor do they lie within a conservation area. Therefore, any tree within the site footprint will be removed by a trained operatives and mechanical means and others that lay outside will be pollarded to mitigate any further damage from the nearby construction work.

6 Resource use

GBV Properties Ltd will ensure, where practicable, the use of recycled or sustainable materials sourced from a responsible source, where possible BES 6001 certified. Furthermore, In line with company protocol, all Concrete should be obtained from a certified sustainable source, wood must have chain of custody documentation and be FSC/PEFC certified and. Steel should have Cares or similar certification.

A dedicated area will be maintained for storage of all materials and due care and appropriate handling will be undertaken at all times to reduce any risk of damages and wastage. Packaging of items should not be removed until required, to ensure maximum potential for returning of unused goods.

7 Energy consumption/Monitoring

“Switch it Off” schemes and other energy saving campaigns shall be implemented on site to encourage all personnel to consider their carbon footprint. Use of car sharing and buses shall be encouraged. This shall also be covered within the site induction and regular toolbox talks held relating to the subject.

8 Community liaisons

The Site manager or their agents will take charge of all day to day liaisons, with further support from the Environment manager who will be on site on a regular basis. Contact details and comments box will be displayed on the hoarding with a regular newsletter distributed to the local community informing them of the progression, forthcoming traffic movements and any potential disruption. GBV Properties Ltd and the contractor will convene regular open meetings with the residents for feedback and updates.

9 Pollution prevention & Emergency response plan

THE UK Governments Pollution Prevention Guidance PPG1 will be used to guide all prevention measures. A full Pollution prevention plan can be found in Appendix E.

10 Site Environmental Documentation

All environmental documentation must be kept on site at all times and be available for inspection by internal and external auditors, as well as the client and management. Where any document is amended, previous versions will be superseded, and the environment Manager notified. Site personnel will be made aware immediately, if any significant changes in works procedures are implemented.

Initial start-up documentation will include the following:

- Site Set Up checklist
- Impacts and Aspects Matrix (Appendix B)
- Environmental Risk Assessment (Appendix C)
- Construction Environmental Management Plan
- Site Waste Management Plan (In Construction Phase Plan)

11 Auditing and Monitoring

A regular audit schedule will be set up at project start. This audit schedule will include both internal and external audits for the project. It is the responsibility of the site management to ensure all documentation and evidence required for audit purposes is kept up to date and freely available for inspection at all times. A weekly site inspection using the checklist found in appendix E will be carried out by a manager. The site environmental management system will be audited to the standards set out by ISO14001. Additional legal compliance audits will also be undertaken. Any system failures will be documented and appropriate corrective actions issued and implemented.

Weekly site inspections will be carried out to ensure environmental risks are being managed appropriately. SHE Inspection forms will be completed and signed off by site management. All documents will be filed and retained on site for auditing purposes. Any failure to undertake such monitoring will be deemed as a non-conformance with procedure and appropriate corrective action will be implemented.

12 Site Security

The site will be secured by a high heras type to form a physical barrier.

The vehicle entry point will be secured with a gate that will be kept shut and opened for vehicles by a vehicles banksman.

The site will have local camera and internet based site security. The perimeter of the fence will be well lit. CCTV will be deployed in a risk based manner to provide visual surveillance and recording of any incidents as required.

The local Police safer neighbourhood team will be consulted to ascertain if there are any specific risks relating to the site.

13 Considerate Constructors

The site if necessary(TBC)will be registered with the Considerate Constructors scheme. The requirements of this will require us to sign up to the Considerate Code of Practice which will dictate how we manage many aspects of our site and detail how we should value our workforce, how we must consider everyone's safety, protect the environment, respect the community and care about the appearance of our site.

14 Neighbouring Developments

At present there are no neighbouring developments with planning consent that will have an impact on these works. Should this change in the future this section of the report will be updated.

Appendix A: Location of Works.

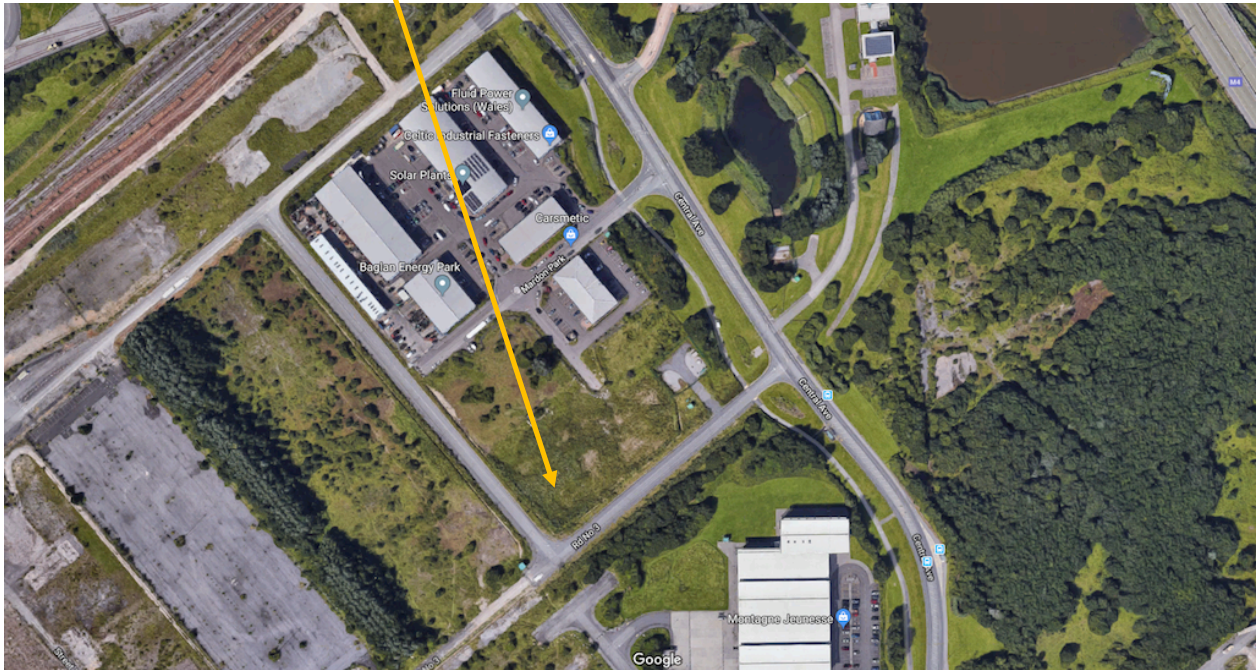
Appendix B: Aspects & Impacts.

Appendix C: Preliminary Risk Assessment.

Appendix D: Weekly Environmental Checks.

Appendix E: Pollution Prevention Plan.

Appendix A: Location of Works.



Appendix B: Aspects & Impacts.

Aspect	Legislation *	Impact	Risk	Mitigation Measures
Nuisance – Dust	Environmental Protection Act 1990 Clean Air Act 1993	Deposition of dust Reduction in air quality Statutory nuisance	Complaints Legal action Local Authority Action Clean-up costs	Monitoring Construction Environmental Management Plan Damping down methods appropriate to site Covering all loose materials
Heritage/Archaeology	Ancient Monument & Archaeological Areas Act 1979 National Heritage Act 1983 Planning (Listed Buildings & Conservation Areas) Act 1990 Planning & Compensation Act 1991	Loss of heritage/artefacts	Complaints Legal action Delay and disruption	Awareness training Archaeological Assessments
Nuisance - Noise	Environmental Protection Act 1990 Clean Neighbourhoods & Environment Act 2005 Control of Pollution Act 1974	Disturbance to residents. Statutory Nuisance	Complaints Legal action. Delay to works. Risk to Reputation	Planning condition requiring adherence to Surrey Council's Code of Practice for Control of Pollution & Noise from Demolition & Construction Sites
Waste	Environmental Protection Act 1990 Control of Pollution Act 1974 Environment Act 1995 The Environmental Civil Sanctions Order 2010 Hazardous Waste Regulations Clean Neighbourhoods & Environment Act 2005 Duty of Care Regulations Environmental Permitting 2010	Disposal costs, Transportation, Resource use and landfill capacity	Breach in Duty of Care Prosecution Excess costs of disposal. Civil Sanction	Site Waste Management Plan – Use WRAP Net waste tool Plans Checks of Carrier licence and disposal facility consents / licences Minimise waste arising - Reuse and Recycle Segregation of wastes Training, Toolbox Talks
Water	Water Industry Act 1991 Water Resources Act 1991 Water Act 2003 Groundwater Regulations 1995 Environmental Permitting 2010	Water quality /groundwater quality reduction. Pollution Water Charges, Resource consumption. Groundwater drawdown	Legal Action Clean-up costs Failure to meet consent. Uneconomical use of water Need for Abstraction Licence Enforcement action	Surface water and trade effluent consents. Site operational control procedures Monitoring compliance Environmental Incident Procedure, Spill kits/training
Transportation	Road Traffic (Vehicle Emissions) Regulations	Traffic disruption Dust and emissions to air.	Complaints Damage Disruption	Considerate Constructors Scheme Traffic Management Plan
Contaminated Land	Contaminated Land Regulations 2006 Control of Pollution (Oil Storage) Regulations	Contamination of Land Pollution of Waters	Potential Spillage Prosecution Clean-up Costs	Construction Environmental Management Plan Compliance with Oil Storage Regulations Spill kits & Training
Ecology - Flora & Fauna (Disturbance & Harm)	Wildlife & Countryside Act 1981 Environment Act 1995 Conservation (Natural Habitats Etc.) Regulations Wild Mammals (Protection) Act 1996 Protection of Badgers Act 1992	Loss of habitat Loss of valuable species Spreading noxious/invasive species	Legal action Loss of Reputation Reinstatement costs Civil Sanction	Construction Environmental Management Plan Reptile translocation Japanese knotweed treatment / eradication Species identification training Protective fencing and signage of sensitive areas
Resources (ADS 09)	Environmental Protection (Controls on Substances that Deplete the Ozone Layer) Regulations 1996. Control of Substances Hazardous to Health 1999. Environmental Protection Act 1990 Chemicals (Hazardous Information and packaging for Supply)	Resource Use/Depletion Global Warming	Cost Un-sustainability Risk to Reputation	Supply chain management and material control Use of material from sustainable sources. Use of FSC Timber
Visual Amenity (Detriment to)	Town & Country Planning Act 1990 Planning (Listed Buildings & Conservation Areas) Act 1990	Loss of visual amenity	Complaints Legal action Delay and disruption	Planning process Public consultation Considerate Constructors Scheme

Appendix C: Preliminary Risk Assessment.
Mardon
Park
Preliminary Environmental Aspect & Impact Risk Assessment

Environmental Aspect	Potential Environmental Impact	Risk			Total	Control Measures	Residual Risk			Total	Guidance
		O	+D	x C			O	+D	x C		
DUST	Contamination of water courses Legal Action by Statutory Authorities	4	2	8	48	Pollution Prevention Plan Dust sheets/damping down via Bowser Environmental Monitoring	3	2	6	36	CEMP
NOISE	Complaints by residents Legal Action by Statutory Authorities Disruption to wildlife	3	2	6	30	Local council Code of Practice Monitoring Low noise plant /ensure no idling engines	2	2	6	24	Local council Code of Practice
WASTE	Pollution/contaminated land Legal Action by Statutory Authorities	4	3	6	42	Site Waste Management Plan Environmental Monitoring Duty of Care/Transfer Notes Training Segregation of waste	2	2	8	32	Site Waste Management Plan
WATER	Contamination of groundwater/surface waters/rivers Impacts on wildlife Potential harm to humans Failure to meet consents Legal Action by Statutory Authorities	4	4	10	80	Environmental Monitoring Obtain appropriate licences/consents Spill kits complete and readily available Consider flooding when positioning plant, fuel store etc	3	3	8	48	Monitoring will be undertaken on a weekly basis, procedures are set out in the Pollution Prevention Plan. An up to date log will be kept in the Environmental file and any findings will be communicated to the relevant persons.
TRAFFIC	Traffic congestion Complaints from public	4	3	6	48	Traffic Management Plan	3	2	4	20	Traffic Management Plan
ECOLOGY	Loss, destruction, harm or disturbance of wildlife or habitat Reduction in endangered species Spreading of invasive plants Legal Action by Statutory Authorities	4	3	10	70	Environmental Monitoring Training/Toolbox Talks/Species Identification Information Ecological Assessment Application for appropriate consents/licences Fencing off sensitive areas	2	2	10	40	Nature Conservation Plan

Mardon
Park

RESOURCE USE	Generation of additional waste streams Reduction of fossil fuels Destruction of non- sustainable forests	4	2	6	36	Re-use of materials Prevention of over-ordering Appropriate storage of materials FSC Timber Usage Switch It Off Schemes	2	1	4	12	All waste streams have been identified, any additional waste streams will be added to the Site Waste Management Plan Further procedures can be found in the Pollution Prevention Plan
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Likelihood of Occurrence (O)		+ Likelihood of Detection (D)		X Severity of Consequence (C)	
Criteria	Rank	Criteria	Rank	Criteria	Rank
V High	5	V High	1	V High	10
High	4	High	2	High	8
Moderate	3	Moderate	3	Moderate	6
Low	2	Low	4	Low	4
V Low	1	V Low	5	V Low	2

Author:

Date:

Appendix D: Weekly Environmental Checks.

Reporting period:		Main Sub Contractors on site:								
Week beginning:		<table border="1"> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>								
Short description of work carried out within reporting period:										
Weather conditions										
Environmental incidents in the reporting period:										
Weekly Activities: (to be completed by Environmental Manager).										
	Name	Date	Note							
Watercourse/discharge monitoring										
Spill kits checked Completeness of inventory										
Reptile barrier										
Noise monitoring										
Tree protection										
Site boundary										
Fuel storage checked (containment integrity, storage)										
Dust situation										
Vehicles (Is everybody aware of vehicle coverage)										
Environmental toolbox talks										
Lighting										
Environmental training requirements										

Appendix E: Pollution Prevention Plan.**Mardon Park Development****Pollution Prevention Plan.**

Approved by:	Date:	Signed :
Prepared by	Date:	Signed :
R Bowen	02/06/2023	

Issue & Amendment Record.

Revision No.	Date	Description of Change	Produced/Amended by
00	2 nd June 2023	First Issue	R Bowen

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4 Dust Control Methods	4.1	Identification and suppression Methods	
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1. Introduction

1.1 Scope

This pollution control and incident response plan forms part of the environmental management plan for the contract. It describes the pollution control and reporting process to be followed by GBV Properties Ltd and their subcontractors.

1.2 Definition and Example

1.2.1 An environmental incident will typically be, but not be limited to, the examples listed below:

- Minor oil spills away from watercourses
- Not working in accordance with the environmental requirements of a Works Procedure
- An event or series of events causing environmental harm i.e. silting up of a river, an oil spill
- A breach of consent conditions i.e. generating noise in excess of the Local Authority Section 60/61 limits
- Issue of a statutory enforcement notice by the Local Authority or Environment Agency.

2. Pollution Control Measures

2.1 Sufficient numbers of spill kits will be strategically placed around the site, especially in areas identified as potential spillage locations. The locations of these spill kits should be checked periodically and especially if access to the area changes throughout the programme of the works. A map should be clearly displayed to identify the location of all spill kits, if positions change; the map must be updated to reflect the changes. The site Foreman and/or other nominated person [by PM] are responsible for checking and maintaining the spill kit materials. No litter is to be placed in the spill kits, and they must be clearly labelled, and materials enclosed listed and kept up to date. Also, a copy of the Spill Procedure Incident Response Plan must be included within the spill kit container. The SPIRP will be published at the beginning of the project. Used materials from the kits must be disposed of appropriately, and replaced as a matter of urgency. Appropriate waste facilities must be provided for contaminated materials. These waste facilities must be kept separated from any other non-contaminated wastes.

All sites should where possible use double bunded plant or equipment, where double bunded plant or equipment is not available, there must be an additional method of containment to ensure no pollution or spillages occur. This could be in the form of plant nappies and/or drip trays. Where drip trays are used, suitable methods for emptying must be employed, such as with hand held pump and the contaminated water disposed of correctly. The trays must be checked daily (more during wet weather) to ensure no build-up of contaminated water overspill from the tray.

All bulk fuel tanks will be adequately protected (including concrete bund) to prevent major spillage in the event of hose failure or other equipment malfunction. The protection must include use of sandbags and booms to create a protective barrier around the equipment.

Initial plant set-up is to be checked and signed-off. The amount of fuel in the tanks on arrival must be recorded, (99% of the time they are usually empty).

Wheel wash facility will be provided to prevent any spreading of contamination onto local roads. All vehicles carrying waste away from site must use covers to prevent any loss of load and additional dust.

Weekly combined Health, Safety and Environmental Inspection will be carried out to ensure procedures are followed.

2.1.1. Risk assessments will be undertaken and the following processes to be put in place:-

Sensitive Receptors

- Any areas which pose risk of pollution to groundwater, surface water or drainage must be determined through risk assessment.
- Where groundwater has been identified, additional due care must be taken to ensure no contamination may occur. Maps should be marked up to clearly identify all groundwater aquifers known below a site.
- Bulk tanks will not be located within 10 meters of any watercourse or 50 meters of a borehole or well, any breach of this would be a breach in legislation.
- All Pumped water should be discharged via appropriately sized silt separation tanks to prevent any introduction of solids into the existing water courses.
- Discharge should be monitored, sampled and results recorded.
- Use of Materials Hazardous to aquatic environments should be chosen carefully and control measures enforced to prevent any leaching of substances into ground/surface water.
- Monitor water levels in and around areas of substantial dewatering processes. Areas to be recharged with extracted groundwater to same quality and temperature.

Working near Water

- Check that permissions have been obtained for any temporary works
- Ensure that surface run off from the site is contained and discharge controlled by appropriate methods (silt fences, settling tanks, and balancing ponds.)
- Floating booms should be used in the above to contain any chemical/petrol chemicals resulting from surface runoff – these are last resort measures to catch unexpected substances.
- Appropriate land drainage consents must be complied with

Site Transportation

- No out of working hours deliveries will be accepted.
- Site haul routes should be regularly inspected, and dust suppressed to ensure that air quality does not deteriorate in the immediate vicinity of the construction site.

Concrete Washout Area

- Is located sufficiently away from any water courses or drainage outlets.
- Will be regularly monitored to ensure no overflowing of unit
- Set concrete be disposed of appropriately.

2.2 Training will be given to ensure that all staff are aware of the necessary operating procedures.

2.3 Periodic exercises will take place to test the effectiveness of this procedure and records of these exercises held on site. It is recommended that these tests are undertaken on a basis of no less than 3 monthly intervals to ensure procedures are kept up to date.

3. Managing Firewater Spillages

3.1 Emergency containment systems appropriate to the site layout must be considered in the event of firewater having to be used. Firewater cannot be allowed to contaminate any watercourses. There are many ways in which pollutants can enter watercourses such as: - direct entry through site drainage system, run off into nearby watercourses or through the ground. Site drainage will be examined to ensure in event of emergency at the site, potential sensitive receptors will be safe from for and a suitable method of containment to be used. Suitable methods would include bunds, trenches, shut-off valves and lagoons. Emergency materials and equipment located will be in the sensitive areas.

4. Dust Control Methods

- 4.1 Dust suppression methods must be considered especially during dry periods. The methods must ensure dust cannot contaminate surrounding property, cause pollution of watercourses or damage to any wildlife and ecology. Risk assessment will define areas as at risk of dust contamination. Suitable methods available would include use of bowzers and/or micro spray systems. For control of dust on roads, all Lorries will be covered, and use of road sweepers will be implemented where appropriate. Where any lorries are noted to be leaving sites

5. Noise Pollution

- 5.1 Suitable methods should be undertaken to ensure reduction of disturbance potential. Noise monitoring will be undertaken at specific points around the site area. Where it is deemed the noise impact to pose significant risk, alternative methods should be incorporated to mitigate this risk. Use of low noise plant and good plant maintenance should be incorporated on site. A noise compliant protocol will be introduced with published contact numbers must be made available to all residents, EHO and other authorities in the event of emergency/nuisance during work periods and for periods outside of normal working hours.

6. Contaminated Land

- 6.1 Where there is potential for contaminated materials to be removed from site, stockpiling of such material is required, the storage area must be secure to ensure it does not pose risk of leaching into any water courses or groundwater. When disposing of any contaminated wastes, carriers and disposal sites must be verified for the type of waste stream prior to any removal being undertaken. Prior to any soils being removed from site, a comprehensive test will be carried out to determine whether the soils are inert/hazardous or non-hazardous. The results of this testing will determine which disposal route is most appropriate. No WAC testing will occur until the first stage Full Characterisation Testing has been completed.

7. Chemical and Product Inventory

- 7.1 A full inventory of all chemicals and COSHH sheets which have a potential to cause pollution will be populated at the start of the project and kept in on file. This list is to be completed and kept up to date as necessary. Any chemicals or products will be appropriately stored.

8. Incident Reporting

- 8.1 The Environmental Manager will investigate into the cause of any major incidents, which will be recorded and notified to the relevant Project Manager using the GBV Properties Ltd incident report form. Incidents will be escalated to both the environment manager and contracts via phone & email. Where any complaints are made against the site about noise and or vibration, this must be recorded and acted upon immediately.

9. Responsibilities

9. Responsibilities					
<i>Action</i>	Responsibility				
	SO	SM	EM	H&S	PM
Identify the pollution/potential pollution incident.	♦	♦	♦	♦	♦
Conduct regular exercises to test procedures.	♦	♦	♦	♦	♦
Implement immediate pollution control measures.		♦			
Notify emergency services.	♦	♦	♦	♦	
Notify _____ Project Manager.		♦			
Plan control/clean-up measures.		♦	♦	♦	
Carry out control/clean-up measures.	♦	♦		♦	
Investigate cause of incident and produce EIR			♦		
Recommend preventative action.			♦	♦	
Implement prevention action.				♦	♦
Notify EA in extreme emergency.					♦
SO – Site Operation; SM – Site Manager; EM Environment Manager; H & S – Health and Safety Advisor; PM – _____ Project Manager.					

Appendix F: Site Set Up & Traffic Management

