# **CONSTRUCTION MANAGEMENT PLAN**

**FOR** 

**BLOTTS BARN, RAUNDS** 

Version 1: 9 May 2023



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#### 1 INTRODUCTION

#### **1.1** Pre-Construction Information

- **1.1.1** Pre-construction information provides the health and safety information needed by:
  - Designers and contractors who are bidding for work on the project, or who have already been appointed to enable them to carry out their duties;
  - Principal designers and CDM Principal Contractors in planning, managing, monitoring and co-ordinating the work of the project.

It provides a basis for the preparation of the construction phase plan (If appliable) and also has material relevant to the preparation of the health and safety file. It covers those issues relevant to construction management plan approval under a planning condition.

- 1.1.2 Pre-construction information is defined as information about the project that is already in the client's possession or which is reasonably obtainable by or on behalf of the client. The information must:
  - be relevant to the project;
  - have an appropriate level of detail; and
  - be proportionate given the health or safety risks involved.
- 1.1.3 Construction information is gathered and added to as the design process progresses and reflects new information about the risks to health or safety and how they should be managed.

#### **1.2** Status of this Document

1.2.1 This document is the pre-construction and construction Information as it stands at time of issue. Additional information will be distributed to relevant parties as the project progresses. Contractors and designers are advised to check with the Principal Designer to ensure that they are working to the latest Information.

#### 2 DESCRIPTION OF PROJECT

#### 2.1 Project Description

**2.1.1** The works are to be carried out at:

#### BLOTTS BARN, RAUNDS.

The land is currently utilised as surplus land to the existing office development on site.

The development is for the build out of new office units extending to associated services and infrastructure on a semi brownfield site, located just outside the settlement of Raunds.

#### Cut and Fill

The site is relatively flat in nature and no significant cut and fill is anticipated. Zero quantity of material is proposed to go off site. This initial element of the works (and the road base and sewer construction) is proposed to be completed by a suitable contractor designated as the initial CDM Principal Contractor on the site. A further contractor will then complete the above ground build, again as CDM Principal Contractor.

#### Drainage

Storm drainage is designed to outfall to 2no open swales located to the southern and northern boundaries before out falling to existing drainage ditches to the north-eastern and south-eastern boundaries, before discharging into the existing highway ditch adjacent to Brooks Lane. A surface water flow control device will limit flows. Foul drainage will comprise a series of sewage pipes to collect waste and direct it to a septic tank/sewage treatment plant in the south-eastern corner of the site.

# Highway

The bell mouth connecting the internal site roads to Brooks Lane will be constructed to adoptable highway standards with adoptable highway drainage beneath.

#### Landscaping

The surrounding site area will be landscaped.

#### Access junction works

Brooks Lane will be subject to 278 highway improvement works at the junction of the site access and to inclusion of passing bays.

# 2.2 Project Programme

Programme/key dates: Commencement: June 2023 Programme duration: approximately 48 weeks

**2.2.1** The contractor's working hours will be limited to the following times:

Monday-Saturday: 7.30 -19.30 Saturday: 7.30 - 12.30

#### 2.3 Project Personnel

**2.3.1** For details of the personnel appointed to this project, please refer to the Project Directory.

#### 3 PLANNING AND MANAGEMENT OF THE PROJECT

# 3.1 Arrangements for Co-operation and Co-ordination

- 3.1.1 Good communication is vital to ensure that the project will be well managed and minimise risks to health and safety. The CDM Principal Contractor will be required to communicate with Roger Denton (Client: Roger and Amanda Denton Ltd) on a regular basis and to keep the Client appraised of forthcoming works.
- 3.1.2 The CDM Principal Contractor will be expected to keep neighbours, including residents living near to the site, informed of forthcoming works. This may require the use of letter drops, visits, newsletters, or meetings, as appropriate.
- 3.1.3 Principal Contractors will be required to provide their own Health and Safety Procedures document and to follow it throughout.

#### 3.2 Design Development Procedures

- 3.2.1 It is proposed to hold design reviews at key stages of the project. At these reviews, health and safety issues will be addressed alongside practicality, aesthetics, cost, etc. in a review of the design's buildability, maintainability and usability. Where possible, relevant persons such as contractors, end users and maintenance workers will be involved in these reviews. The design reviews will be recorded by the Principal Designer in the form of a project Health and Safety Risk Register and/or a Maintenance Access Statement as appropriate.
- 3.2.2 The Principal Designer will update the Health and Safety Risk Register and the Maintenance Access Statement as the project progresses, to reflect the design development. Final versions of these documents will be included in the Health and Safety File issued to the Client on completion of the works.
- **3.2.3** Designers are encouraged to record design health and safety matters in the following formats:
  - Notes on relevant drawings
  - Design statements indicating the factors influencing key design choices
  - Maintenance access strategy statements indicating how key items could be safely cleaned/maintained
  - Drawings showing proposed risk control measures, e.g. drawings showing sequence of erection, or drawings showing features incorporated to enable safe maintenance

#### 3.3 Health and Safety Goals

3.3.1 The following health and safety goals have been set for this project. Achievement in relation to these goals will be measured as indicated and reported to the client at progress meetings.

Target	Measurement procedure
Competent personnel	Number of personnel on site with CSCS or equivalent cards / other evidence of suitable training & experience.
	Supervisors to have CITB Site Safety Supervisors Training Scheme (SSSTS) qualification or equivalent.
All personnel to receive site induction prior to commencement of work	CDM Principal Contractor to keep induction records available for inspection
Regular formal site health and safety inspections	CDM Principal Contractor to keep records of inspections available on site and include copies with his progress reports.
Appropriate PPE to be worn at all times.	CDM Principal Contractor's regular site safety inspections. Observation by consultants visiting site.

Target		Measurement procedure					
Positive neighbours	feedback	Neighbour feedback to be on agenda for progress and project review meetings					
No lost-time	accidents	Accidents/near misses to be recorded as described below.					

# **3.4** Management of the Construction Work

- 3.4.1 Where relevant the CDM Principal Contractor must ensure compliance with any Client Health and Safety rules for contractors (see 3.1.3). If relevant a copy of this is included in the appendix to this document.
- 3.4.2 The CDM Principal Contractor is expected to allocate sufficient competent staff to manage the project. As a minimum, it is expected that the CDM Principal Contractor's management structure will include a competent full time site supervisor whose duties include implementing the construction health and safety plan.
- 3.4.3 The following works are to be carried out by others under direct appointment with the client during the project construction phase:
  - Initial groundworks.

If applicable, the Client will make these contractors aware of the need to abide by the CDM Principal Contractor's site rules whilst working within the designated site area.

- **3.4.4** Health and safety will be on the agenda for all progress meetings. This should include a review of the following matters:
  - Any accidents/incidents (including minor accidents and near misses) and actions taken to prevent recurrence.
  - Results of site safety inspections and corrective actions taken.
  - Any significant high-risk activities due to take place over the next period and how these risks will be managed.
  - Feedback on any significant high-risk activities that took place during the last period and how the risks were controlled.
  - Report on any amendments made to the Construction Phase Plan during the period.
  - Training undertaken during the period, including inductions, toolbox talks and other on-site training
  - On-going welfare arrangements.
  - Any health and safety/co-ordination meetings, e.g. meetings with the client's site representative, contractors' co-ordination meetings, activity planning meetings, etc.
  - On-going site security arrangements and details of any breaches of site security during the period.

# 3.5 Permits to Work / Authorisation Requirements

- 3.5.1 Permit to work procedures will generally apply to the following types of work on this project:
- Excavation/earthworks generally
- Excavation for drainage
- Work adjacent to the overhead electric services
- Work adjacent to the highway (Lane)
- Working at height
- 3.5.2 The Client will not impose any Permit to Work systems upon the CDM Principal Contractor for this project. It is the CDM Principal Contractor's responsibility to ensure that any required permits to work are raised within their own approved system, with the conditions of the permit having been properly communicated to the supervisors and operatives undertaking the tasks. The contractor's nominated permit to work co- ordinator shall ensure that all relevant information, such as plans of existing buried services, existing as-built structural drawings and engineering drawings, etc. are available for attachment to individual permits to work.

#### 3.6 Welfare Provision

- 3.6.1 Suitable welfare provision must be made from the start of the construction phase through to handover and completion. The CDM Principal Contractor will be responsible for providing all necessary temporary welfare facilities.
- 3.6.2 It is noted that fatalities have occurred to site workers due to Carbon Monoxide (CO) poisoning on construction projects where such gas-fired appliances have been used in site welfare facilities. Inadequately ventilated LPG cookers and heaters can produce CO gas. Flammable gas may also escape from leaking cylinders. This risk can be eliminated by using properly maintained electrical equipment instead of LPG. If LPG is used, suitable steps should be taken to reduce the risks, including:
- using and storing the cylinders in safe, well-ventilated places outside the accommodation (including overnight) or in purpose-built ventilated storage areas;
- ensuring that appliances have been properly installed, checked and maintained by a competent person;
- providing adequate combustion ventilation with fixed grilles at high and low level;
- checking that the ventilation provided is not blocked, e.g. by newspaper or rags in cold weather to "stop draughts";
- checking that cylinders are properly turned off when not in use; and
- using wall or ceiling mounted carbon monoxide detectors.
- **3.6.3** Electric supply (not generator) for the welfare will be enabled once the existing overhead electric services are diverted.

#### **3.7** The Construction Phase Plan

- 3.7.1 Prior to commencement, the CDM Principal Contractor must develop his Construction Phase Plan for the site, which describes how health and safety will be managed during the construction phase. The construction phase plan should reflect the information provided in this Pre-Construction Information. In accordance with the guidance given in Appendix 3 to the HSE legal guidance on the regulations (guidance ref. L153), the plan should be:
- relevant to the project;
- proportionate to the size and nature of the work, and the risks involved;
- workable and realistic;
- sufficiently detailed to clearly set out the arrangements, site rules and special measures needed to manage the construction phase;
- regularly reviewed and added to as new trades start.

The plan should **not** include documents that get in the way of a clear understanding of what is needed to manage the construction phase, such as generic risk assessments, records of how decisions were reached or detailed safety method statements.

- 3.7.2 The CDM Principal Contractor shall submit the Construction Phase Plan to the Client, copied to the client's CDM consultant and/or CDM Principal Designer, for review at least one week before the intended commencement date. A copy of the vetting sheet to be used to review the Plan is included in the appendix to this document for information. The CDM Principal Contractor shall not commence any work on site (including site set up) until he has received written confirmation from the Client that his Construction Phase Plan is satisfactory.
- 3.7.3 The Plan as submitted shall address early issues such as mobilisation, welfare, demolition, groundworks, existing site services, and other high-risk activities. The CDM Principal Contractor is required to review and revise the Construction Phase Plan as necessary during the works and should bring all such revisions to the attention of the Client and the Client's CDM consultant.
- 3.7.4 It will be ensured that a suitable Construction Phase Plan is prepared for the initial groundworks and is then updated for the remainder of the build out. The CDM principal Contractor is proposed to change as the works progress.

# 3.8 The Health and Safety File

3.8.1 The Health and Safety File provides information likely to be needed to ensure health and safety during any subsequent work such as maintenance, cleaning, refurbishment or demolition. The information in the File should alert those doing the work to the risks involved and help them to decide how to work safely. The File is a separate document to any other documents required under the contract, such as the building manual and/or operating and maintenance manuals.

- 3.8.2 The Principal Designer is responsible for preparing the Health and Safety File and issuing it to the client at the end of the project. The CDM Principal Contractor and all designers (including contractors who have any design aspect to their work) have duties under the CDM Regulations to promptly provide information for the File.
- 3.8.3 An outline list of information required to be included in the File is included in the appendix to this document. A detailed schedule and programme of information to be provided by individual members of the project team shall be drawn up by the Principal Designer in consultation with those organisations/persons. This schedule will be reviewed at regular intervals during the construction period to ensure that all necessary information will be compiled into the File prior to completion.

#### 4 EXISTING / ONGOING USE OF THE SITE

# 4.1 Client's Ongoing Operations

**4.1.1** The Client has no existing activities on site. The site is a semi-brownfield site adjoining an existing office development. The Construction site will be securely fenced as outline below to ensure its separation from the existing occupied offices.

#### **4.2** Site Security

- **4.2.1** All contractors must give prior notice of intended arrival on site and must sign in and out at the site office.
- 4.2.2 The CDM Principal Contractor shall erect timber hoarding and/or a solid metal panel temporary hoarding system and/or heras-type fencing to the full perimeter of the site where secure boundaries do not exist. Suitable vehicle and pedestrian access gates shall be provided, together with all necessary safety signage. The CDM Principal Contractor shall ensure that the hoarding/fencing is maintained in good condition for the full duration of the project.
- 4.2.3 At the end of each day, the CDM Principal Contractor shall ensure that the site is secured and left in a safe condition. This shall include removing access ladders; covering or fencing-off pits and excavations; isolating and immobilising plant; storing materials safely; and locking away hazardous materials; etc.

#### **4.3** Fire Precautions

- **4.3.1** Emergency escape routes are to be provided throughout the site, with an assembly point provided for the site.
- **4.3.2** The CDM Principal Contractor shall take all necessary precautions to prevent fires from occurring and to minimise the effects should there be a fire. Advice on fire safety is available from the HSE website at www.hse.gov.uk/construction/safetytopics/fire.htm.

**4.3.3** Smoking will only be permitted in the designated area(s) provided by the client. All matches, cigarette butts, etc. must be disposed of in the dedicated bins provided.

## **4.4** Fire and Emergency Procedures

- **4.4.1** The CDM Principal Contractor shall draw up emergency procedures for the site, which should be explained to everyone during induction and posted on the site notice board.
- **4.4.2** The nearest hospital with urgent care services / full accident and emergency facilities is:

Kettering General Hospital Rothwell Road Kettering NN16 8UZ

Telephone: 01536 492000

(Approximately 17 miles / 24 minutes by car).

4.4.3 The CDM Principal Contractor shall keep a record of all accidents and near misses that occur on site, including copies of any forms sent by contractors to the HSE under RIDDOR. All major occurrences shall be notified to the principal designer as soon as possible, and a copy of all accident/near miss records shall be included in the CDM Principal Contractor's regular progress reports.

#### **4.5** Access to Site

**4.5.1** The site is accessed from Brooks Lane to the south of the site. An existing access exists, which serves the existing offices. See illustrative site plan within the appendices to this document.

- **4.5.2** Section 278 highway improvement works are proposed in order to form the construction site access/permanent vehicle off Brooks Road. Brooks Road links, via Raunds, to the A45.
- **4.5.3** The CDM Principal Contractor should prepare a written route / map for notifying all delivery firms and drivers.
- **4.5.4** This project will involve transport of the following large components/bulk materials to/from site:
  - Roof trusses
  - Pre-cast concrete floor beams and stairs
  - Bricks and blocks
  - Road construction materials
  - Landscaping materials
  - General building materials
  - etc
- 4.5.5 The suggested route(s) for construction traffic is from the A45, turning towards Raunds at the roundabout with the A45/B663, via Brick Kiln Road to Brooks Road and right into the site.

#### **4.6** On-site Traffic Management Arrangements

4.6.1 Traffic routes across the construction site will be planned to segregate pedestrian and vehicle movements so far as reasonably practicable and to minimise reversing and other dangerous vehicle manoeuvres. Construction traffic will be separated from the existing office occupier traffic at the earliest opportunity into the site, with construction traffic routing to the north and existing occupiers (and pedestrians) routing to the south of the existing buildings.

# **4.7** Site Compound and Parking Restrictions

- **4.7.1** A site plan is included in the appendices to this document (Traffic Management Plan). It shows the proposed location of site car parking, materials storage, silos, and compound (office, welfare, mess room).
- **4.7.2** Due to the isolation of the site, contractors' vehicles must be parked within the allocated site compound.
- **4.7.3** The area adjacent to the proposed storage building is proposed to be utilised for material storage / welfare.

#### 4.8 Adjacent Land Uses

**4.8.1** The surrounding land use comprises agricultural and grazing fields, with some isolated dwellings along Brooks Lane, to the north and south of the site. Raunds village lies to the north, but is some distance from the site. September Hall Farm, a residential property lies

immediately to the north of the site, but this is occupied by the Client. Existing office units, occupied under long Leaseholds, lie immediately to the south of the site. There are electric and telephone overhead services running adjacent to and across the site area. This service is to be suitably and safely negotiated by the site activities (via the use of 'goal posts' and barriers).

**4.8.2** The site will be fully completed before any of the units are occupied.

#### 5 EXISTING INFORMATION / SITE HAZARDS AND RESTRICTIONS

#### **5.1** Existing Records

**5.1.1** The following surveys, reports and drawings relating to the existing site are available:

Description	Dated	Available from
Off-site traffic management plan	-	See Appendices

#### 5.2 Asbestos

**5.2.1** No ACM presence has been identified.

#### **5.3** Ground Conditions

No significant concerns have been raised relative to ground conditions. Ground conditions will be assessed and monitored as construction progresses.

#### **5.4** Existing Services

- **5.4.1** There are electric overhead services running adjacent to and across the site. This service is to be suitably and safely negotiated by the site activities (via the use of 'goal posts' and barriers etc).
- **5.4.2** Copies of utility services drawings are being obtained.

# **5.5** Existing Plant and Equipment

**5.5.1** Electric services only as noted above.

# **5.6** Existing Structures

5.6.1 There are no known structures within the development site. Immediately to the south of the site are existing office buildings. These building will not influence the site except for access being provided to them from the proposed site access road.

5.6.2 Your attention is drawn to the following hazards associated

with these works: Health Hazards:

N/A

Safety Hazards:

- Construction/public traffic access off Brooks Road.
- Overhead WPD power cables existing.

### **5.7** Existing Storage of Hazardous Materials

- **5.7.1** The following materials, which present a hazard are currently stored on site:
  - N/A

#### **5.8** Confined Spaces

- **5.8.1** The following areas of the site have been defined by the client as confined spaces:
  - N/A

#### 6 DESIGN AND CONSTRUCTION

#### **6.1** Principles of Design

Various measures have been taken within the design of the project to minimise risks to construction workers, end users, maintenance workers and others.

# **6.2** Temporary works

- **6.2.1** Temporary works include, but are not limited to:
  - Hoarding
  - Scaffolding
  - Propping, needling and falsework

All temporary works (other than those assembled strictly in accordance with manufacturer's instructions or a recognised standard) must be designed by a competent person prior to construction. Copies of any designs are to be issued to the principal designer prior to works being undertaken. Additionally, the CDM Principal Contractor shall have an independent design check undertaken on all complex or high- risk temporary works and shall provide evidence of the same to the principal designer.

6.2.2 The CDM Principal Contractor's attention is drawn to the scaffolding technical guidance TG20:13 published in February 2014 by the NASC (National Access and Scaffolding Confederation). This

provides Compliance Sheets for most standard types of scaffold which demonstrate that a scaffold is TG20 compliant and therefore does not need a bespoke design. Tube and fitting scaffolds used on this project will be expected to have either a TG20 Compliance Sheet or a full design.

- 6.2.3 All temporary works are to be constructed/installed to the exact specification of the approved design or manufacturer's instructions/recognised standard. Installation is to be carried out by competent persons only, with suitable training and experience. The CDM Principal Contractor shall maintain copies of all handover certificates, approved designs, manufacturer's instructions, standards, etc. on site.
- **6.2.4** All temporary works must be inspected by a competent person at intervals not exceeding 7 days or following adjustment, damage or other incident which may affect the stability of the temporary works (including weather, subsidence, etc.).

# **6.3** Construction Sequencing

**6.3.1** The Principle Contractor will prepare a construction programme.

# **6.4** Significant Hazards and Risks

- 6.4.1 This section identifies significant hazards and risks identified by the design team, which cannot be avoided or designed out. Significant hazards are not necessarily those that result in the greatest risks, but those that are not likely to be obvious to a competent contractor or another designer; unusual; or likely to be difficult to manage effectively.
- 6.4.2 In appraising the matters detailed below, consideration should be given all parties who may be affected, including for example:
  - Construction/maintenance workers engaged directly in the hazardous activity
  - Other construction/maintenance workers who may be affected, e.g. those working below high level working.
  - Client's workforce occupying the buildings whilst construction works are carried out
  - General public, including children from any adjacent schools.
  - No construction traffic / pedestrians.
- 6.4.3 Significant Hazard: The proximity of the overhead electric services (see 5.4 above) is a significant hazard.
- **6.4.4** No other significant hazards have been identified to date in accordance with the criteria noted above. Contractors will, however, have to take all necessary precautions to deal with both health hazards and safety hazards normally associated with this type of work, such as:

#### Health Hazards:

- Manual handling/lifting
- Noise
- Vibration
- Dust, including silica dust, e.g. from drilling or cutting concrete
- Dermatitis, e.g. from exposure to wet mortar, solvents or diesel

# Safety Hazards:

- Working at height
- Sloping site
- Dealing with existing services
- Use of mobile plant and equipment
- Lifting operations (use of cranes, hoists, etc.)
- Slips and trips
- Phased handover of plots is proposed. Plots likely to be occupied while construction continues elsewhere on the site.

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# APPENDIX 1 - Project Directory

# Project Directory

CDM Principal Designer	TBC
CDM Client:	Roger Denton Roger & Amanda Denton Ltd September Hall Farm Brooks Road Raunds Northamptonshire NN9 6NS  Tel:07798 734900 Email: roger@sterlingsafetywear.co.uk
CDM Principal Contractor: (initial)	Duties to be undertaken by appointed groundworker. TBC
CDM Principal Contractor: (build-out)	TBC
Architect:	TBC
Engineer:	TBC
Builder:	TBC
Electrical Contractor:	TBC
Plumbing Contractor:	TBC
Roof Works:	TBC
Building Control:	TBC

 $\label{eq:APPENDIX 2 - Notification of Project to the HSE} \\$ 

To Follow.

APPENDIX 3 - Health and Safety Risk Register

APPENDIX 4 - Construction Phase Plan vetting sheet

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|--------------|----|------|------|------|------|------|------|------|------|------|-------|
| i iojectivo. | ٠. | <br> |       |

The list below is based on Appendix 3 of L153 Guidance on CDM 2015. Greyed out lines are headings and do not need to be marked. The plan must record the arrangements for managing the significant health and safety risks associated with the construction phase of the project. It is the basis for communicating these arrangements to all those involved in the construction phase so it should be easy to understand and be as simple as possible.

Description	<b>√</b> /□	Comments	Cleared
Description of project			
Project description and programme			
Details of client, principal designer, designers, principal contractor and other consultants			
PC's management structure and responsibilities, including names and contact details			
Management of the work			
Health and safety aims for the project and arrangements for monitoring and review of health & safety performance			
Site rules			
Arrangements for co-operation between project team members and co-ordination of their work, eg. regular site meetings  neighbouring occupants design development / changes			
construction team / subcontractors			
Arrangements for:			
involving workers, i.e. consultation			
site induction			
welfare facilities from day 1 to completion			
Fire and emergency procedures			
first aid			
the reporting and investigation of accidents and incidents including near misses			
the selection and control of contractors (including training)			
the production and approval of risk assessments and method statements			
<ul> <li>reviewing, revising and developing the construction phase plan as the project progresses</li> </ul>			
collection and issue of information for the health and safety file			

# Construction Phase Plan Review (cont.)

Description	√/□	Comments	d
General Site Arrangements			
• site security			
• site access			
traffic routes and segregation of vehicles and pedestrians			
<ul> <li>delivery and removal of materials, waste and work equipment</li> </ul>			
<ul> <li>site parking and storage of materials and work equipment</li> </ul>			
Arrangements for controlling specified risks (Schedule 3 particular risks):			
Burial under earthfalls			
Falls from height			
Chemical / biological substances			
Ionizing radiation			
Work near HV power lines			
Risk of drowning			
Wells, underground earthworks and tunnels			
Work by divers with air supply system			
Work is caissons with compressed air atmosphere			
Use of explosives			
Assembly or dismantling of heavy prefabricated components			
Other significant risks:			
• asbestos			
control of lifting operations			
dealing with services - water, electricity and gas, including temporary electrical installations			
the maintenance of plant and equipment			
dealing with contaminated land			
manual handling			
use of hazardous substances			
reducing noise and vibration			
other project specific risks			
Construction Phase Plan			

electricity and gas, including temporary electrical installations	
<ul> <li>the maintenance of plant and equipment</li> </ul>	
dealing with contaminated land	
manual handling	
• use of hazardous substances	
reducing noise and vibration	
other project specific risks	
Construction Phase Plan	
Vetted By:	
Signature	 
Name	

APPENDIX 5 - Information Required for the Health and Safety File

#### INFORMATION REQUIRED FOR THE HEALTH AND SAFETY FILE

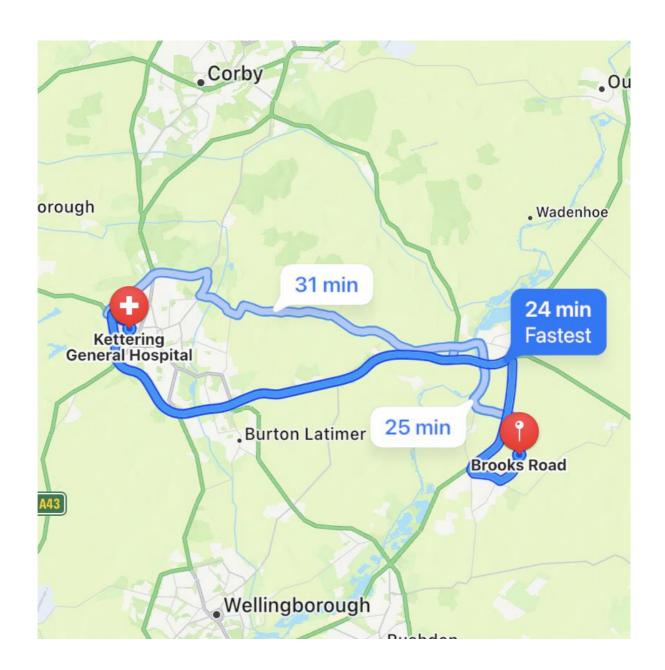
- List of asbestos-containing materials removed as part of the project works. (Copies of removal and reoccupation certificates should be included in the Building Manual rather than the H&S File)
- Site investigation report and contaminated land remedial works statement
- Structural design statement, design criteria & design loadings
- Details of significant structural risks and how to control these during future maintenance &/or demolition work (e.g. sources of substantial stored energy including pre- or posttensioned members)
- Details of any building materials used which may pose a significant hazard in future
- Maintenance access strategy statement (and accompanying drawings) for key items of plant and equipment in difficult-to-get-to locations
- Information regarding safe removal/dismantling of plant and equipment (e.g. lifting arrangements; special instructions for dismantling)
- Access strategy statement (design intent) for window cleaning and maintenance
  of the building fabric, including an outline of any equipment provided for use
  during cleaning/maintenance, eg. access equipment, ladder anchor points,
  mansafe systems.
- Drawing(s) showing maintenance access routes etc.
- As built drawing showing positions of incoming mains services
- As built drawing showing route of any major internal mains services, eg. gas mains, electrical submains.
- Fire strategy drawing (eg. as submitted for Building Regulations)
- Fire strategy statement (for projects where a fire engineering approach has been taken)
- List of all as built drawings provided for the project. (Copies of drawings to be included in Building Manual/O&Ms, not in the H&S File)
- List of other O&M manuals provided for future reference. (Title, date and author as they appear on the file cover)

# E DEVELOPMENT 'S BARN, RAUNDS R AND AMANDA DENTON LTD

APPENDIX 6 - Client's Health and Safety Rules for Contractors

See 3.1.3 above

APPENDIX 7 - Route to Nearest Hospital with emergency facilities



# Kettering General Hospital

Rothwell Road Kettering NN16 8UZ

Telephone: 01536 492000

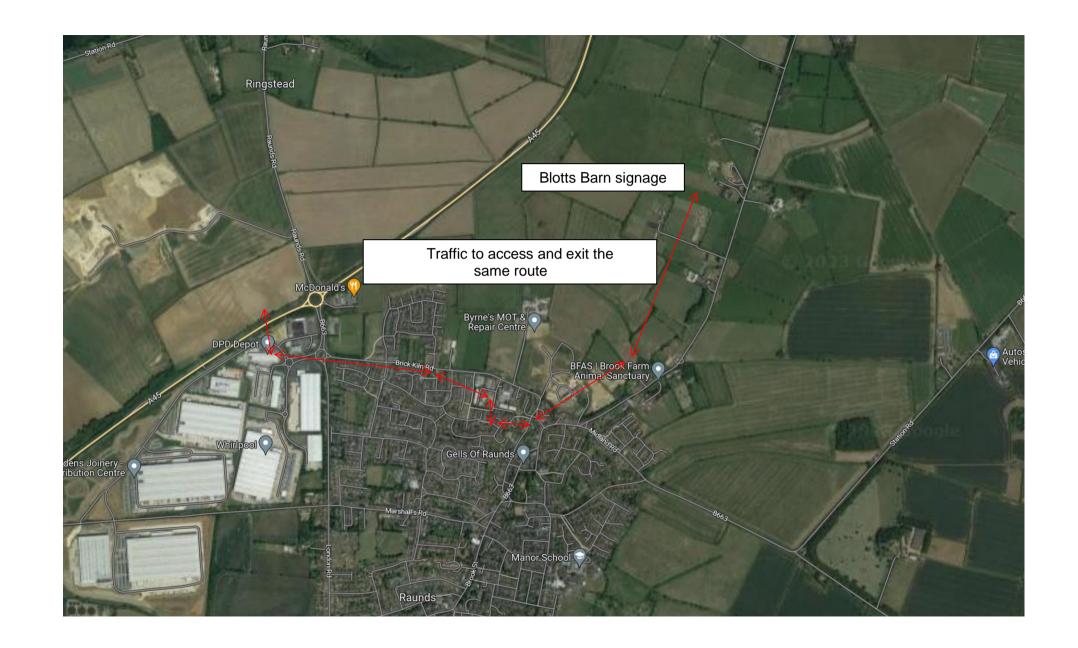
(Approximately 17 miles / 24 minutes by car).

# E DEVELOPMENT 'S BARN, RAUNDS R AND AMANDA DENTON LTD

APPENDIX 8 - Illustrative site plan

See Traffic Management Plan

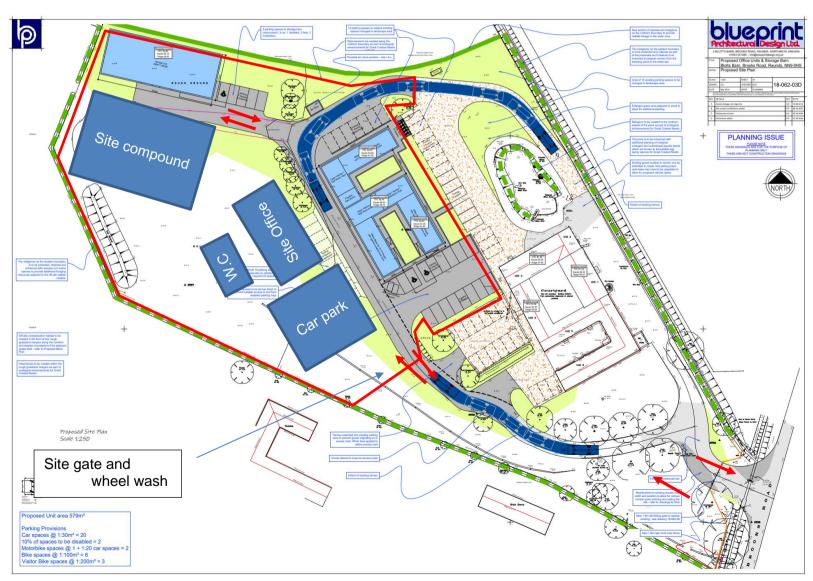
APPENDIX 9 - Off-site traffic management plan



OFFICE DEVELOPMENT BLOTTS BARN, RAUNDS ROGER AND AMANDA DENTON LTD

APPENDIX 10 - On-site traffic management plan

### TRAFFIC MANAGEMENT PLAN





OFFICE DEVELOPMENT BLOTTS BARN, RAUNDS ROGER AND AMANDA DENTON LTD

APPENDIX 11 - Avoidance of Electric Services (Western Power Distribution guidance)



Avoidance of Danger from Electricity Overhead Lines and Underground Cables



# ance of Danger from Electricity Overhead Lines and Underground Cables Introduction

In the UK on average, 20 people are killed and 400 people are injured as a result of coming into contact (or close proximity) with electricity overhead lines and underground cables.

Although electric shock is the first thing that people associate with coming into contact with our network, those who have witnessed the effects of damage to our system are shocked by the amounts of heat, light and noise that are the result of an electrical flashover.

In the Midlands, South West and South Wales, Western Power Distribution (WPD) have had to attend to incidents where people have accidentally made contact with one of our live electricity overhead lines or damaged an underground cable and become seriously injured.

A significant number of these accidents occurred whilst people were working in the vicinity of overhead and underground electrical apparatus and this booklet has been produced to provide general guidance on how you and your employees can avoid becoming one of these statistics.

#### **Our Operational Area**



#### INING YOUR WORK.

It makes sense to consider your safety while in the vicinity of our equipment as early in your planning process as possible.

One of the first things you should do whenever you are planning your work is to check whether there is any of our equipment in the immediate vicinity. You should do this whether your work is taking place on public (e.g. highways and footpaths) or on private land.

For instance, take a good look around your site to see if there are any visible overhead lines. You should also bear in mind that we have a very extensive network of underground cables, and we are always happy to supply a plan from our Map Response Team who can be contacted via the following;

Tel: 0121 623 9780 Fax: 0121 623 9223

WPDMapResponse@westernpower.co.uk

An online mapping service is available at www.westernpower.co.uk/locationplans

It is always safer to assume that there are underground cables present in the ground until you have proven otherwise.

# KING IN THE VICINITY OF UNDERGROUND CABLES

Having obtained copies of our network maps, it is important to recognise that in most cases there will be no surface indication of the presence of our underground cables. We therefore advise that you take the following actions:

- Make sure that you have up-to-date copies of our cable record plans ON SITE not back in the office.
- Don't assume that these plans are to scale if they have been faxed or copied.
- Make sure that a competent person using a Cable Avoidance Tool (CAT) locates all of the cables shown on these plans.
- Mark the locations of cables on the ground surface with waterproof road paint or other permanent marker.
- Always assume that our cables are live unless we have informed you, in writing, otherwise.



By hand, dig trial holes to locate the exact position of all cables.
 Always use a spade or shovel – never use a pick, fork or power tool – push the spade or shovel into the ground applying foot pressure.

- Look out for ducts, marker tape or tiles but do not rely on these. Even if a cable route was originally laid in a duct or with a marker tape, these may have been removed during other excavations at a later date along all or part of the cable route.
- Briefall people working in the vicinity of the presence and location of all underground cables.

## UNDER NO CIRCUMSTANCES SHOULD YOU ATTEMPT TO WORK ON, OR INTERFERE WITH, ANY OF OUR UNDERGROUND CABLES.

The only people qualified to work on this equipment are our operatives; who have been specifically trained and are authorised in writing to do so.

#### Please also be aware that:

- Cable record plans are not guaranteed to be completely accurate. Kerb lines, roads and buildings may have been moved or altered since the cables were laid.
- Cables should ordinarily be at least 450mm deep but don't assume this to be the case where you are working ground levels could have changed.
  - Not all service cables are shown on record plans, so look for cables running down poles and bear in mind that all buildings, street lights and street furniture are likely to have cables running to them. Cables feeding street furniture may be relatively shallow near to the furniture.
- Cables do not run in straight lines. They often "snake" through the ground avoiding surface and buried obstacles that may not be visible to you.
  - Cables are flexible and can change direction and depth abruptly for this reason never use mechanical excavators within 0.5m of any underground electricity cable even if you have located it with trial holes.

- No attempt should be made to break out concrete surrounding a cable.

  Please contact us immediately on our general enquiries number and we will discuss the options for safe working which may include making the cable dead or you moving your work site if possible. If we need to make the cable dead we may need to provide our customers with two weeks notice of the power interruption.
  - Our cables and joints are not designed to act as steps or to be left unsupported. If you remove support from any cable, you will need to support it using temporary hangers at not more than 0.5m intervals.
  - When backfilling, please consolidate the ground under the cables, cover the cable with soil free of stones or with stone dust and replace any cable marker tiles, ducts and tape.

#### IF YOU DAMAGE AN UNDERGROUND CABLE

- you must immediately clear the area of personnel, because the cable could still be live, or become live again.
- If a machine is still in contact with the cable, instruct the driver to JUMP clear. Do not touch any part of the machine.
- Please contact us on our emergency number immediately and tell us what has happened. Please be ready to provide us with a contact telephone number and an accurate location or set of directions this will help us in getting our staff to site quickly to minimise any danger and lessen the disruption to your work.

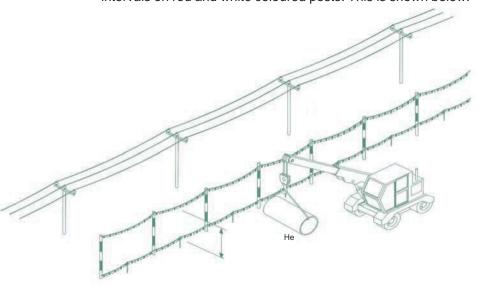
Please report any damage to a cable, however superficial it might seem. The cable may not fail at the time of damage, but it could fail later, causing danger to our staff and other tractors, disruption to our customers' supplies, and also – if we trace the damage back to you – a very much larger repair bill.

#### WORKING IN THE VICINITY OF OVERHEAD LINES

- UNDER NO CIRCUMSTANCES SHOULD YOU ATTEMPT TO WORK ON, OR INTERFERE WITH ANY OF OUR OVERHEAD LINE EQUIPMENT OR SERVICE WIRES.
- The only people qualified to work on this equipment are our operatives; who have been specifically trained and are authorised in writing to do so.
- Overhead lines have the advantage that, unlike underground cables, they can easily be seen.
  - Always assume that our overhead lines are live unless we have informed you otherwise in writing.
    - We will be able to advise you about the type and voltage of the overhead lines in question and provide you with information about the clearances that you must adhere to during your work. Please ring our regional general enquiries number for further advice.
    - If you are in any doubt about whether the overhead lines in question are power or telephone (this is a very common mistake) please ask us.
    - In some circumstances, we may be able to temporarily shroud low voltage overhead lines and services running to buildings if you need to work in the vicinity e.g. for scaffolding erection, fascia repairs and painting work on domestic properties. We don't normally charge for the shrouding of overhead lines, but please give us as much notice as possible.
    - If you think that you will be working close to our overhead lines and they need shrouding please don't start work until we have agreed what needs to be done and all safety precautions are in place.
    - Please note that it is not technically possible to shroud high voltage lines, so if you cannot avoid working near to our high voltage lines, contact us and we will be happy to meet with you to discuss safe alternatives.

If it is decided that work can go ahead in the vicinity of our overhead lines but there is a risk of you infringing the safety clearances from the overhead lines, you have a responsibility to erect safety barriers to segregate your works from the area around the overhead lines. The detailed requirements for these barriers are provided in the HSE document GS6 'Avoidance of Danger from Overhead Lines'. As a summary they should consist of:

Red and white coloured posts erected at 6m intervals, with coloured bunting stretched between their tops, supplemented by low level bunting erected at 1m above ground level, supported at 3m intervals on red and white coloured posts. This is shown below.



We are able to advise you on the height of the barriers and any additional clearances necessary if you are using large plant on your site.

Any bunting, ropes and lanyards used should be made from an insulating material.

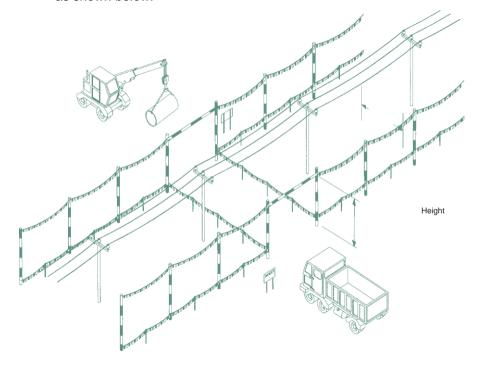
These barriers should be erected parallel to the overhead line at a minimum distance of 6m horizontally from the outermost conductor of the overhead line.

The supports may be supported by rubble or concrete filled barrels or buried directly in the ground.

Danger Notices should be fixed to all of your high level supports.

The ground enclosed within these barriers is best regarded as "dead ground" in which all foot and vehicular traffic is forbidden, in all circumstances, for the duration of your work.

Where it is necessary for foot and vehicular traffic to pass under the line, you will need to form a marked access way between the barriers as shown below

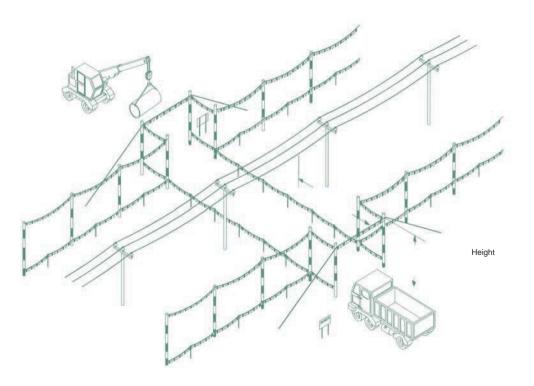


This access way should comprise of bunting erected 1m above ground, supplemented by high level "goal-posts" erected at either end.

The goal post cross bars should be rigid, made of insulating material and positioned in a location and at a height specified by us.

The access route should be as narrow as possible and should not normally exceed 10m in width.

If it is necessary to make the access route wider than this, you may find it impractical to use rigid cross bars, so you may use a tensioned rope and bunting instead. If you use rope and bunting as a cross bar, you should move the entrance to the access route out to a minimum distance of 12m from the outermost conductor of the line. This is to allow for any stretching of the rope if pulled by your plant.



- If you decide to use steel wire rope to support the barrier, this must be effectively connected to earth at both ends.
- You should also install Danger Notices at all probable directions of approach and clearly display the cross bar height.
- If you are working at night, or in conditions or poor visibility, you should ensure the area is well lit and that the overhead lines are clearly visible.
  - Whatever measures you take, you should ensure that everyone working in the vicinity of overhead lines is briefed about the risks and what safety measures are in place. Do not permit anyone to carry long objects, especially scaffold poles, ladders and irrigation pipes in the vicinity of overhead lines.
- You should ensure that all shrouding, barriers and signs are regularly inspected and maintained so that they remain effective.
- Overhead lines are not normally insulated and electricity at high voltages may jump, so a dangerous situation can arise just from a close approach.
  - Cranes and excavators working near overhead lines are at increased risk because of the possibility of the jib/arm slewing or being raised into the overhead line, or the load swinging into the overhead line. You may therefore also need to fit plant and vehicles with restricting chains etc. to physically restrain their operation we can advise on this if you wish.
  - If you are planning to carry out tree cutting or arboriculture work in the vicinity of our overhead lines, you need to be aware that this is a complex, high risk activity and we recommend that you employ a competent tree surgeon, who complies with all of the requirements of Forestry industry Safety Accord (FISA) publication FISA 804 Electricity at work: Forestry.

#### If contact is made with an overhead line

you must immediately clear the area and suspend all work within 50m of the damage because the line could still be live, or become live again.

The operator of a machine that is in contact with an overhead line should:

- if the machine is still operable and the operator is still in the cab:
- provided that you do not risk breaking the overhead line or dragging it to the ground, immediately lower the raised parts of the machine USING ONLY THE CONTROLS IN THE CAB and/or drive the vehicle clear of the overhead line
- contact us immediately on our emergency number so that we can check the overhead lines.

instruct other people in the vicinity not to approach the vehicle.

if the machine is not operable, cannot be driven clear of the overhead line or there is a risk that doing so will break the line or drag it to the ground:

stay in the cab.

- contact your site manager or us immediately on our emergency number by radio or mobile phone or as soon as possible by any other method.
- instruct everyone outside the vehicle not to approach it.

do not exit the cab until given confirmation BY WPD PERSONNEL that it is safe to do so.

## if the machine is inoperable or cannot be driven free and there is risk of fire or other immediate hazard:

- JUMP clear of the vehicle, avoiding simultaneous contact with any part of the machine and the ground.
- try to land with your feet as close together as possible.
- where possible, continue to move away from the vehicle using "bunny hops" with your feet together until at least 15m from the vehicle.
  - instruct other people in the vicinity not to approach the vehicle.
  - contact us immediately on our emergency number.
- do not return to the vehicle until given confirmation by WPD PERSONNEL that it is safe to do so.

Whatever the circumstances please contact us on our emergency number immediately and tell us what has happened. Please be ready to provide us with a contact telephone number and an accurate location or set of directions – this will help us in getting our staff to site quickly to minimise any danger and lessen any disruption to your work.

se report any damage or contact no matter how minor they may seem to you at the time. The damage may not cause a serious problem at the time of damage, but it could fail later, causing danger to our staff and members of the public, disruption to our customers' supplies, and – if we trace the damage back to you – a large repair bill.

#### **E INFORMATION**

For your information, we are legally obliged to report all contact with our system to the Health & Safety Executive (HSE), and, if you are an employer, you may be obliged to report incidents involving your staff or contractors to the HSE. Even if no one is hurt, you could be prosecuted for failing to report such an incident.

More detailed general information on this subject is available in the following publications from the HSE:

HSG(47) - Avoiding Danger from Underground Services GS6 -

Avoidance of Danger from Overhead Lines

Along with Forestry Industry Safety Accord (FISA) publication FISA 804 – Electricity at Work: Forestry

If you require more site-specific information relating to our equipment at your location please contact us on our regional general enquiries numbers.

Our general enquiries numbers are;

Midlands 0845 724 0240

**General Enquiries** 

South Wales 0845 601 3341

General Enquiries

South West 0845 601 2989

**General Enquiries** 

#### FINALLY...

Please, always remember that electricity cables and overhead lines can be very dangerous – the general rule is STAY AWAY and stay safe.



Serving the Midlands, South West and Wales

#### This booklet is issued by the Safety Team

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2014, 4th issue

# Our emergency number is: 0800 6783 105

Calling from a mobile? East
Midlands
0330 123 5009
West Midlands
0330 123 5008
South Wales
0330 123 5002
South West

0330 123 5001