**WATKIN JONES HOMES**

**CONSTRUCTION PHASE HEALTH & SAFETY PLAN**

**PROJECT**

Thames Quarter
Reading

| | **Issue Date:** | |
|---|---|---|
| | | |
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| | Phil Barlow | Tier Consult (Structural Eng.) |
| | Phil Barlow | Temporary Works Co-Ordinator |

# CONSTRUCTION PHASE HEALTH & SAFETY PLAN

## INTRODUCTION

This health and safety plan is an information document providing an outline for the arrangements, which exist on site and the measures that are required by the Pre -Tender Health and Safety Plan to manage the site in a safe and efficient way.

Watkin Jones Homes are committed to positive, proactive health and safety management and require the full commitment, co-ordinated effort and co-operation of all employees and contractors, to ensure that conditions on site remain healthy and safe for all personnel. Therefore, we rely on the tradesmen and the management to use their skills, knowledge and experience to see the programme through and prevent undue risk to themselves, other workers and members of the public, who might be affected by the work activities.

**This document is live and will be subject to review and amendment as the project develops. All subsequent reviews and amendments must be copied to the Principal Designer and to Head Office to ensure that all copies of the plan are current**

## Construction Phase Plan - History

| Rev. No | Additions/Alterations | Signed | Dated |
|---|---|---|---|
| | | | |

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# CONSTRUCTION PHASE HEALTH & SAFETY PLAN

## 1. PROJECT DESCRIPTION

The project involves the construction of 338 new apartments adjacent to a Network Rail line.

Target Project Timescale: 160 weeks

Works shall include but not limited to:-

- Trial Holes
- Drainage
- Foundations
- Tower Crane erection & dismantle
- Piling works
- Concrete frame construction
- Cladding system
- Roof coverings
- Balcony installation
- Dry lining works
- A full electrical and mechanical services installation will be provided throughout the building
- Full internal fit out & testing
- Foul and surface water drainage works
- Car Parking
- Hard & Soft Landscaping
- Connection to existing site drainage
- New service connections
- New sub station

# PROJECT LOCATION

The Project is at the following address:
Napier Road *(leading to Kings Meadow Rd)*
Reading

LOCAL MAP OF PROJECT



## 2. COMPANY STATEMENT ON HEALTH, SAFETY & WELFARE

In addition to the moral and commercial obligations to prevent accidents, the Company has to meet specific legal requirements for health, safety & welfare.

The general duties of an employer are laid down in the Health & Safety at Work Act Etc. 1974 and are expanded upon in subordinate legislation and the associated Approved Codes of Practice. These form an integral part of the overall company policy.

It is therefore the policy of Watkin Jones Group Ltd, to wherever reasonably practicable:

- To demonstrate an ongoing & determined commitment to improving health and safety at work throughout the organization.
- Safeguard the health, safety and welfare of all employees and sub-contractors whilst at work.
- Ensure that persons who are not in its employment, but who may be affected by its work activities, are protected from any hazards created by those work activities.
- Provide safe plant and equipment for use at work and to ensure it is properly inspected and maintained.
- Identify hazards associated with work activities, assess the risks and define the systems of work required to eliminate or minimize the risk.
- Provide the necessary information, instruction, training and supervision for employees and others who may be affected by hazards associated with work activities.
- Provide adequate resources to ensure that work activities can be carried out safely.
- Ensure that the work place, the access to it and egress from it, is safe and without risk to health.
- Ensure that any substances, e.g. chemicals, oils, greases, gases etc. which are used as part of the work process, are assessed for their possible effect on health and appropriate systems of work adopted for their safe transportation, storage, use and disposal.
- Ensure that dusts, fumes, noise, vibration and other occupational hazards, are controlled within safe limits.
- Ensure that no adverse environmental impact results from the work

activities.

- Ensure that provision is made for adequate welfare facilities for employees and sub-contractors.
- Involve the workforce in all aspects of health, safety and welfare and solicit their co-operation and assistance to create a safe working culture.
- Ensure that formal monitoring arrangements are adopted to identify hazards and to check on control measures and their enforcement.
- Ensure that consideration is given to dealing with accidents, incidents and emergencies and that contingency arrangements are specified
- Regularly review health and safety performance and arrangements to ensure they remain suitable and to enable measures to be put in place to allow the Company to continually improve its health and safety performance.

Health, safety, welfare and environmental issues rank equally with the Company's other objectives and observance of them is recognized as being consistent with the achievement of successful company performance. The Company is committed to continually improving its health & safety performance.

SIGNED:

POSITION: CHIEF EXECUTIVE OFFICER

DATE: 17TH January 2017

REFERENCE: h&sp.rev 14

## 2. RESTRICTIONS AFFECTING THE CONTRACT

Restrictions have been identified within the Pre-Construction Information. The Pre-Construction Information forms appendix 1 of this Construction Phase Health & Safety Plan.

Below is how Watkin Jones Homes expects to deal with the restrictions (see section 10 also):

### Asbestos Containing Materials (If located)

Prior to any demolition or refurbishment works being carried out a full Demolition and Refurbishment Asbestos Survey will be undertaken to determine the location, extent and type of asbestos containing materials on site by a competent asbestos surveying contractor. Any asbestos materials located will be removed by a competent and licensed asbestos removal contractor and taken to a tip licensed to accept such materials and a clean air/re-occupation certificate received prior to work commencing by other trades on site.

All persons will receive site specific asbestos awareness training at induction before commencing work on site. If any material is discovered which is suspected of containing asbestos fibres then work will cease immediately, the area will be sealed off and either the material will be sent for analysis by a competent licensed asbestos contractor to confirm it contains asbestos or it will be deemed to contain asbestos and removed by a competent asbestos removal contractor and work will not recommence until a clean air/re-occupation certificate has been received.

### Existing Services

Prior to any excavation, the Company's Permit to Dig and Risk Assessment Procedure must be followed (see appendix 15 of this Construction Phase Health & Safety Plan). All existing services must be located and physically marked on site. Any existing services to be cut off must be done so outside the site boundary and the cut off points clearly identified.

The Existing Services on site are identified in Appendix 4 of this Plan and Existing Stats file on located in the Site Manager office on site. It is to be noted that, from the PCIP, there are the following on site:

- 2no 132Kva oil filled Electric cables (NW corner of the site)
- 150mm Water main (running left to right across the width of the site)
- Vodafone Access Chamber and underground service (NW corner of the site)
- Live drainage serving local properties
- Pay & Display machines, plus power to the existing carpark

## Work in and with Excavations

As stated above prior to any excavation or breaking of ground the Companies Permit to Dig and Risk Assessment Procedure must be followed (see appendix 15 of this Construction Phase Health & Safety Plan).

All excavations will be inspected daily and the results entered into the Excavation Register of Inspections.

The sides of all excavations will be either battered back or suitably supported by shoring or the use of trench boxes. The edges of open excavations will be protected by a suitable barrier to kept mobile plant and pedestrians from the edge or where plant has to drive up to the edge (a dumper for example) stop blocks will be placed at the edge.

Where excavations are to be carried out adjacent to existing Buildings The structural engineer is to be consulted and agreed methodology for carrying out the works is to be formulated

Consideration needs to be given to works in excavations as they could be considered as confined spaces, Works to be carried out is such a manner as to avoid this. However, if it unavoidable then those working in confined spaces are to have undergone specific training and be provided with all the relevant equipment including that required for rescue.

All operatives working with the confined space will be given tool box talks on the necessity for hygiene and use of correct PPE.

Wash facilities will be available on site.

## Vertical Reinforcing Bars

All reinforcement bars where there is a risk of someone falling onto them and or causing cuts and abrasions will be protected by proprietary caps. Where possible barriers will also be erected around the vertical reinforcement bars.





## Preventing Falls and Working at Height

Risk assessments will be carried out by all trades working at height. Where there is a risk of falling suitable precautions such as handrails etc. will be used to eliminate such a risk. Where this is not practical other means will be employed such as harnesses for scaffolders in line with SG4 or bean bags and/or air bags will be employed for example.

Ladders will be used as a last resort only and be tied and/or footed and used as a means of access only. Other forms of platforms will be used instead of ladders, such as MEWP's or mobile towers. All work will comply with the Working at Height Regulations 2005.

Generally scaffolding will be used to work at height and erected by a competent scaffold company. Only qualified scaffolders will be permitted to erect, alter or dismantle scaffolding.

## Fall Protection Systems

Scaffold edge protection system will be employed on this project with the emphasis to reduce the risk of falls form heights

A Specific method statement & risk assessment will be prepared for the works involved. This will detail there fall prevention requirements [i.e. Nets, Leading edge protection etc.]

## Control of Lifting Operations

All lifting operations will be planned by a competent and trained Appointed Person. A trained and competent Lifting Supervisor together with a trained and competent slinger/ banksman will oversee lifting operations.

Lifting operations will be carried out using tower cranes, mobile cranes and telescopic fork trucks. Excavators may be used by the ground workers for lifting off manhole rings etc.

## Storage of Materials

Materials will be stored as per the manufacturer's instructions. The COSHH Data Sheet for hazardous materials will be followed and COSHH risk assessment will be carried out for all hazardous materials.

Bulk materials will be stored in the appropriate manner and if stacked, will be done so as to ensure their stability.







HSG 97 A Step by Step Guide to COSSH Assessment [second addition]
HSG 53 Respiratory Protective Equipment at Work [Third Addition]

## Manual Handling

Manual handling will be avoided wherever possible and mechanical means will be employed instead. Where this is not possible a manual handling risk assessment will be carried out and operatives will take part in a tool box talk to ensure they follow the correct procedures. Refer to Watkin Jones Procedure on Manual Handling in the Company Health and Safety Procedures Manual.

A crane or telehandler will be employed to move heavy or bulky items around site to significantly reduce the amount of manual handling required.

Kerbs and paving slabs will be laid using mechanically lifting devices to avoid the need to manually handle.

Any heavy lintels will be lifted into place using mechanical means.

HSG 115 Manual Handling – Solution you can Handle

## Noise, Dust & Vibration

Noise will be kept to a minimum wherever possible. All plant and machinery will be fitted with the manufacturers recommended silencer and will be serviced as appropriate by competent mechanics/fitters. All vehicles will have their engines turned off whilst waiting / unloading.

Dust will be kept to a minimum. Where reasonably practicable on tool dust extraction and dust suppression techniques will be used such as wet cutting or dampening down etc. Those involved in activities where there is a risk of dust being created, must be provided with suitable and adequate personal protective equipment (respiratory protective equipment). This task specific personal protective equipment must be readily available for the user and the user must have received a face fit test for the respiratory protective equipment being provided.

The effects of vibration on personnel will be closely monitored. Where possible hand held vibrating tools will not be used, alternatives such as pecker attachments fitted to excavators will be used instead. Where hand, held vibrating tools are necessary then exposure times will be strictly controlled to avoid any ill effects and equipment will be specifically chosen which have been designed to reduce the amount of vibration felt by the operator.

## Traffic Management

Traffic will be managed on site (see appendix 3 Site Set Up Plan for details).A one way system will be in place, and both gates will be manned by competent, qualified banksman at all times. All construction traffic will come from the main network onto Kings Meadow Road, past the site and will turn at the roundabout at the bottom of Napier Road (by the Supermarket). Deliveries will then return, back up Napier Road and into the designated loading / unloading area. Vehicles will then leave the loading / unloading area in the same direction, back on to Kings Meadow road and join the network. Site users will enter through a turnstile unit at the entrance and follow designated site routes.

There will be no onsite parking at any time

All vehicles and mobile plant will be checked for all round visibility and additional mirrors will be fitted where required.
A road brush attachment will be employed to ensure that the road is kept free of mud and site debris as required.

HSG 144 The Safe Use Of Vehicles on Construction Sites

## Work with service chambers, drainage systems, pipe work and ducts.

All those working in confined spaces will have undergone specific training and be provided with all the relevant equipment including that required for rescue.
All operatives working with the above will be given tool box talks on the necessity for hygiene and use of correct PPE.
Wash facilities will be available on site.
Where required and under the Advice of the Watkin Jones Safety Advisor a permit to work system will be employed on the site.

## Hot Works

All hot works will be carried out in accordance with the Watkin Jones Hot Works Permit Procedure, (see appendix 12).
All those carrying out hot works must have with them their own fire extinguisher and this must be suitable to the task they are carrying out.

## Accommodating adjacent Land use

During the works to the site the local neighbours will be informed of any works that will affect them/potential cause disruption, either by letter drop or by visit by the site team. The working hours onsite are being restricted to 0800 hours and 1800 hours Monday to Friday, 0800 hours to 1300 hours on Saturday and not at any time on Sunday or Bank Holidays, where noise can be heard at the Boundary.

Noise will be kept to a minimum wherever possible. All plant and machinery will be fitted with the manufacturers recommended silencer and will be serviced as appropriate by competent mechanics/fitters.
All the Adjacent access roads will be regular inspected for cleanliness from muck/

deposits etc. from site and clean as required

**Work with or near fragile Materials**

In the event of Personnel having to work on or near any fragile materials [roof coverings, roof lights, glass partitions, glass panels etc. advise will be sought from a competent and suitably qualified person to ensure that a safe method of working is established to prevent harm coming to any personnel & visitors on the site.

## 3. MANAGEMENT STRUCTURE

**Principal Contractor**

Watkin Jones Homes
Business Address
55 Ffordd William Morgan
St Asaph Business Park
St Asaph
Denbighshire LL17 0JG

Tel: 01745588200
Email: www.watkinjones.com

**Project Manager**

**TBC**

Tel:
Mob:
Email:

**Principal Designer**

Tristan Rhodes
Stride Treglown
33 Oldfield Rd
Bath
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Email: tristanrhodes@stridetreglown.com

**Architect**

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Stride Treglown
33 Oldfield Rd
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BA2 3NE

Tel: 01255 466 173
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**Structural Engineer**

Phil Barlow
Richmond House
Sandpiper Court
Chester Business Park,
Chester
CH4 9QZ

Tel: 01244 684 900
Email: Philip.Barlow@tieruk.com

**Temporary Works Co-Ordinator**

Phil Barlow
Richmond House
Sandpiper Court
Chester Business Park,
Chester
CH4 9QZ

Tel: 01244 684 900
Email: Philip.Barlow@tieruk.com

## PRINCIPAL CONTRACTOR

## CONSTRUCTION TEAM APPOINTMENTS

The names of individuals within the Watkin Jones and Son Limited management organisation with responsibility for health, safety and welfare on the project are as detailed below:

### Board of Directors

G. Watkin Jones, M. Watkin Jones, G. Morgan, B. Evans, G. Davies, A. McDonough, J. Davies, P. Byrom, A.Pease

| Position within the Group | Name |
|---|---|
| Chief Executive Officer | Mark Watkin Jones |
| Managing Director Homes | Berwyn Evans |
| Deputy Managing Director Homes | Gwyn Pritchard |
| Construction Director | Sean Curran |
| Health, Safety & Environmental Director | Miles Littlewood |
| Visiting SH&E Advisor | Paul Christopherson |
| Buyer | Skye Shields |
| Project Manager | TBC |
| Commercial Director | Andy Savage |
| Quantity Surveyor | Richard Massey |
| | |

# JOB DESCRIPTIONS

**Job Title**
Chief Executive Officer

**Purpose of Job**
Overall responsibility for Group activities

**Job Title**
Managing Director Division

**Purpose of Job**
Overall responsibility for the Division activities

**Job Title**
Construction Director

**Accountable to**
Managing Director Division

**Purpose of Job**
To manage construction projects effectively to company and client satisfaction of a high quality and profitable.
To develop client relationship with a view to generating future contracts with them.

**Major Tasks**
*The following tasks are not in priority order*

1. Managing the subcontractors appointed on the project and ensuring they each deliver on time and within budget
2. Auditing and monitoring my sites in respect of health and safety and along with the site agent for ensuring the site is well managed from a safety point of view
3. Other duties include producing monthly management reports on the contract status for the directors
4. Monitoring site progress in the form of weekly internal site meetings
5. Reporting to the client on site progress in the form of contract site meetings
6. Monitoring plant usage on site
7. Produce site reports
8. Review diary reports
9. Organise and lead site meetings
10. Communicate and liaise with relevant directors to ensure smooth site operations
11. Discuss and review progress with Managing Director Homes Division daily
12. Formulate and present progress reporting structure both internally and to the client
13. Overall responsibility for construction, through to the completion of the building, to the agree programme
14. Formulating and agreeing main contract programmes

15. To set the agenda for the construction process
16. Ensure site team manage in overall terms Site Health and Safety Policy, security and fire policies
17. Ensure site team set up and work too main site filling system
18. Control contractual correspondence and distribution of information
19. Oversee preparation and issuing of Operating and Maintenance manuals
20. Attend post hand over review meetings
21. Plan, direct and review Health & Safety Training requirements
22. Encourage and develop communication methods employed by staff and nurture positive supportive approach to developing staff
23. To discuss, support and advise team members on a regular, individual and team basis
24. Liaise with Human Resources for additional support)

**Job Title**
Project Manager

**Accountable to**
Construction Director

**Purpose of Job**
To manage site to a high standard and complete within budget and time whilst ensuring compliance with Health & Safety regulations and project specification at all times

**Tasks**
*The following tasks are not in priority order*

1. Assist setting up working programme with Contracts Manager and review on a weekly basis
2. Study drawings and bills of quantities
3. Requisition of plant, labour and materials as required to meet programme
4. Ensure effective communication with sub-contractors and operatives
5. Maintain efficiency and high standards
6. Complete on time or ahead of time
7. Arrange and ensure meetings with quantity surveyors regularly throughout contract
8. Attend regular internal progress meetings
9. Liaise with Quantity Surveyor and sub-contractors to discuss possible damages and time loss immediately as they arise
10. Produce correspondence in conjunction with Quantity Surveyor and Contracts Manager
11. Monitor and review quality assurance
12. Review and manage Health & Safety in accordance with WJS procedure
13. Discuss site issues and progress with Contract Manager
14. Minimise by monitoring and reviewing site wastage, materials, time, labour and plant
15. Maintain morale on site by communicating regularly with all site operatives by discussing and reviewing issues and sharing good practice
16. Ensure good public relations with neighbours and the public
17. Attend subcontractor pre-start meetings with Contracts Manager and Quantity Surveyor

18. Check material measurement and take offs from drawings including checking drawing practicality
19. Supervision and direction of subcontractors to meet programme requirements
20. Deliver induction to site operatives
21. Checking of material deliveries
22. Communicate site programme regularly with site operatives
23. Maintain site filing system in accordance with WJS procedure
24. Maintain good working relationship with clients and consultants
25. Discuss and review site operatives and subcontractors tasks

**Job Title**
Health and Safety Advisor

**Accountable to**
Health, Safety & Environmental Director

**Purpose of Job**
Advise on Health and Safety for organisation on site and offices

**Major Tasks**
*The following tasks are not in priority order*

1. Create a positive health and safety culture at all levels throughout the organization.
2. Assist and advise management at all levels with the preparation, implementation and where necessary, review of the health and safety policy.
3. Carry out as necessary periodic inspections and investigations of the company's activities and report to the contract and line management any apparent breaches of Health & Safety legislation, company policy or company procedures.
4. Liaise with enforcing authorities and with safety organizations to promote the interests of the company.
5. Ensure you are fully conversant with current health and safety legislation, codes of practice and guidance information to ensure the health, safety and welfare of all the Company's employees, sub-contractors and persons who may be affected by the Company's activities.
6. Prepare and issue general health and safety information in the form of health and safety information memos to relevant members of staff.
7. When invited to do so assist line management with the drawing up of any risk assessments and method statements as is necessary.
8. Support management and operatives at all levels in their efforts to improve health and safety performance and set a good personal example.
9. As a last resort and at your absolute discretion, stop an activity or indeed the whole job, if you have any safety concerns that justify that action, and will receive the full support of the Board of Directors for this action.

**Job Title**
Buyer

**Accountable to**
Supply Chain Manager

**Purpose of Job**
Purchase of materials within necessary budget and timescale.

**Major Tasks**
*The following tasks are not in priority order*

1. Fortnightly site meetings are executed to ascertain and anticipate impending material requirements
2. Continuous update and provision of monthly material budgets
3. Resolving invoice queries
4. Assist in take-off of various materials at site meetings and establish materials are requisitioned in accordance with relevant specification and drawings
5. Monitor surplus stock materials at WJS head office and utilise where possible elsewhere
6. Close liaison with relevant Contract Managers and Quantity Surveyors to forecast profit/loss of procurement
7. Attend pre-start contract meetings with relevant site operatives
8. Standardise material purchasing to maximise cost savings where possible
9. Produce monthly purchasing report for purchase provision of materials
10. Source materials taking into account best value and best quality for WJS in the long term

**Job Title**
Estimator

**Accountable to**
Estimating Director

**Purpose of Job**
Provide prices for design & build new tenders, contractor design and Bills of Quantities

**Major Tasks**
*The following tasks are not in priority order*

1. Analysing drawings to produce costs and additional costs
2. Check specification against drawing and current client standards including BSI/ISO, Building Regulations
3. Produce Bills of Quantities with costing for all requirements including quantity, amount, unit rate, labour & plant resources and constants
4. Produce net cost tender document for the relevant project
5. Provide input into possible areas of risk on project to Estimating Director for discussion at tendering process
6. Attend client meetings to discuss tender
7. Visit site for relevant tender process
8. Discuss with clients or employer agent where necessary on tender issues and queries
9. Discuss with subcontractor's work involved on proposed projects
10. Provide input on successful tenders to WJS departments when required
11. Arrange handover of all relevant documentation for successful tender with WJS departments
12. Provide regular update reports to Estimating Director
13. Provide comparison schedules of subcontractors and supplier costs
14. Calculation of prices using Estimating software package
15. Compile estimates including monitoring prices to identify compliant and non-compliant prices and source additional/ alternative prices
16. Provide tracking correspondence for pricing enquiries
17. Provide regular updates to Estimating Director and Estimator on work and discuss issues on a regular basis to develop own learning

**Job Title**
Commercial Manager

**Accountable to**
Commercial Director / Divisional Managing Director

**Purpose of Job**

**Major Tasks**
*The following tasks are not in priority order*

1. Manage and support Quantity Surveyor.
2. To motivate and provide direction to the construction division to deliver quality products within time and financial constraints
3. To encourage, manage and develop the commercial department to allow the staff to perform to their abilities, encourage decision making and provide support to those with problems, suggest solutions and implement procedures
4. Report punctually and accurately on all financial aspects of the division. Collate and evaluate forecasts and incorporate into monthly reports.
5. Recognise and exploit commercial opportunities to maximise returns, or minimise losses
6. Vet and authorise subcontract orders
7. Conduct management meetings, review budgets, performance, and expectations and put measures in place to rectify problems. Praise achievements and encourage as necessary
8. To develop business relationships with clients, encourage and promote a positive image of the company
9. Monitor the financial progress of a project, promote a positive attitude towards variations, their valuing, encourage regular meetings and an honest up front approach to clients to ensure a fair resolution of accounts and claims
10. Review and authorise subcontract payments
11. Ensure monthly valuations are submitted by the surveyors within the time frames stipulated
12. Ensure the commercial interests of the company are protected. Act to mitigate disputes and resolve these if possible to limit the financial risk to the company
13. Increase the percentage of contracts that better their tender main.
14. Provide and implement ideas to encourage good practice across the Division and organisation
15. Reduce proforma balances to nil within 3 months of each contract completion
16. Arrange monthly team meetings to discuss and communicate good practice
17. Discuss training requirements with HR Department to encourage continuous professional development of team members.

**Job Title**
Quantity Surveyor

**Accountable to**
Commercial Manager

**Purpose of job**
To monitor and ensure effective cost reporting

**Major Tasks**
*The following tasks are not in priority order*

1. Prepare monthly cost reports and management reports forecasting accurately from commencement to completion of the project on financial and progress issues on a daily, weekly and monthly basis
2. Updating information on progress of projects and passing to Commercial Director as required
3. Working to deadlines set by myself and others within the team
4. Delegate and monitor tasks to trainee Quantity Surveyor if necessary
5. Ensure continuous communication with other team members to review contract progress and address immediately associated issues
6. Attending site weekly (or as required) to review issues including providing solutions and advice to ensure successful project completion.
7. Ensuring the workforce employed on site are treated fairly and communication is filtered through to them.
8. Ensure that payment applications for subcontractors are paid in accordance with the conditions agreed and provide accordingly any supporting information relevant to their claim.
9. Properly advise the client of variations and forecasting of the account including advising them of progress and delays and supporting this with relevant document correspondence.
10. Ensure cash flow is maintained in our favour during course of the contract and provide early forecasting of any short fall should that be relevant.
11. Ensure continuous correspondence with consultants including monitoring content of correspondence to be specific, relevant and grammatically correct.
12. Identify and review key performance indicators with Commercial Director
13. Monitor and review procurement – including placing subcontract orders and ensure they arrive on time and within budget
14. Set and monitor subcontract final accounts
15. Closing off final accounts and liabilities on the balance sheet
16. Ensure all team members are aware of any issues on site including any potential claim disputes on a daily, weekly and monthly basis.
17. Ensuring filing of site project correspondence is maintained
18. Review adjustment to costs to be pursued on old contracts
19. Ensure weekly photos are stored on file and backed-up.

## 4. CO-ORDINATION

Aspects of the project regarding Health and Safety issues are brought to the attention of contractors at the pre-contract letting meeting and are made a condition of the terms of the sub-contract order.

Matters which arise throughout the currency of the contract are aired through continual site dialogue and at regular progress meetings. Issues of sufficient importance shall be confirmed in correspondence or written directions.

## 5. HEALTH AND SAFETY STANDARDS

Minimum standard for health, safety and environmental protection are established by legislation. However, Watkin Jones Group strives to work to a better standard whenever possible.

Guidance is available from a variety of sources for instance, approved codes of practice (AcoPs) produces by H.S.C., British Standards produced by industry and government departments and industry interest groups such as C.I.T.S. and C.I.R.I.A. All produce technical notes and current best practice guidance.

Watkin Jones also has internal Health and Safety Advisors available to give advice and guidance as necessary.

Below is a short list of the more prominent legislation which is relevant to the construction industry.

### LEGISLATION

1. The Lifting Operations and Lifting Equipment Regulations 1998.
2. The Construction (Design & Management) Regulations 2015.
3. Employers Liability (Compulsory Insurance) Act 1969 & Regulations 1998.
4. The Regulatory Reform (Fire Safety) Order 2005. [HSG168 Fire Safety in construction]
5. The Dangerous Substances and Explosives Atmospheres Regulations 2002.
6. The Health and Safety at Work etc. Act 1974.
7. The Control of Pollutions Act [Amendment] 1989.
8. The Control of Lead at Work Regulations 2002.
9. The Control of Pollutions (Special Wastes) Regulations 1980.

10. The Health and Safety (First Aid) Regulations 1981.
11. The Ionising Radiations Regulations 1999.
12. Occupiers Liability Act 1957 and 1984.
13. The Reporting of Injuries, Disease and Dangerous Occurrence Regulations 2013.
14. The Working at Height Regulations 2005
15. The Control of Asbestos at Work Regulations 2012.
16. The Control of Noise at Work Regulations 2005.
17. The Control of Vibration at Work Regulations 2005
18. The Electricity at Work Regulations 1989.
19. The Construction (Head Protection) Regulations 1989.
20. The Environmental Protection Act 1990.
21. The Management of Health and Safety at Work Regulations 1999.
22. The Manual Handling Operations Regulations 1992.
23. The Personal Protective Equipment at Work Regulations 1992.
24. The Provision and Use of Work Equipment Regulations 1992.
25. The Supply of Machinery (Safety) Regulations 2008.
26. The Radioactive Substance Act 1993.
27. The Safety Signs & Signals Regulations 1996.
28. The Control of Substances Hazardous to Health Regulations 2004.
29. The Food Safety (General Food Hygiene) Regulations [Amendment] 2005.
30. The Health and Safety (Consultation with Employees) Regulations 1996
31. The Health and Safety (Display Screen Equipment) Regulations 1992 (as amended 2002.

## 6. INFORMATION FOR CONTRACTORS

Registers, placards and statutory instruments shall be provided on site for the use of all contractors. Other relevant information regarding the contract shall be circulated in writing or discussed at regular contract review meetings.

All contractors and their operatives will be inducted on site before they commence their operations. The induction will provide information on the identification of responsible persons appointed for the project, hazards on site and the site rules. A record of inductees including relevant competency details specific to their role will be maintained and they will be asked to sign agreeing to abide by the site safety rules.

Site management and Sub-Contractors will carry out Tool Box Talks at regular intervals to site operatives (including subcontractors) on subjects pertinent at the time.

Site Hours are restricted to 0800 hours and 1800 hours Monday to Friday, 0800 hours to 1300 hours on Saturday and not at any time on Sunday or Bank Holidays where noise can be heard at the boundary.

## 7. SELECTION PROCEDURES

The company operates a Quality Management System which addresses the requirements of BS EN 1S0 9001:2008. It is a condition of the standard that the company uses suppliers of assessed capability, this applying to sub-contractors, materials suppliers, plant suppliers, consultancies and suppliers of services.

With regard to competence and provision for Health and Safety, the Company will hold a pre order meeting with sub-contractors with health and safety forming a part of the agenda at this meeting. We would ask for copies of their company health and safety policy, insurance details, method statements and risk assessments including COSHH assessments for our approval prior to commencement on site.
Further to this we carry out at the end of every contract a performance review, health and safety forming a part of the performance assessment. This is then kept on file and used to assess competence and adequacy of resources for future contracts.

## 8. COMMUNICATIONS AND CO-OPERATION

**General**

Watkin Jones Group Health and Safety is a subject which forms part of the agenda for Contract Progress meetings with the client and his representative. Details of the discussion and names of persons to take action shall be noted in the minutes.

The company holds regular internal progress meetings and meetings with sub-contractors. Again, details of actions are noted in meeting minutes.

On a practical level, toolbox talks are given to operatives by suitably qualified staff for specific hazards. A note is made of the names of attendees.

Watkin Jones Group are Members of the North Wales Contractors Group and the North Wales Working Well Together Group. These groups are designed to provide advice and guidance on all aspects of Health & Safety to the Sub-Contract resources that we employ on our sites.

## 9. ACTIVITIES WITH RISK TO HEALTH AND SAFETY

Activities with significant risk to health and safety will be identified from the project construction programme using the Company's Programming for Safety Procedure.

Specific method statement and risk assessments will be added during the currency of the contract (including those submitted by subcontractors), for specific work elements. These will be submitted at least 10 days prior to the commencement of each activity. All risk assessments and method statements must be assessed and reviewed by the site management team and signed off as accepted prior to the work activity commencing. All those involved in work activities must be briefed in the contents of the specific risk assessments and method statements and sign to confirm their understanding of, and agreement to follow the specific risk assessments and method statements.

Generic risk assessments are available on the Health & Safety Forms section of the server and also on the Agility UK Website. The site management team is able to make these generic risk assessments site/task specific by completing the rear/page 2 section of the form. A list of available generic risk assessments is available on the Health and Safety Forms section of the server and cover general risk assessments, COSHH Assessments and Manual Handling Assessments.

# 10. EMERGENCY PROCEDURES

## First Aid Provision

2no First Aid kits for up to **50** site personnel are to be kept in the site office and a sign highlighting the fact positioned on the site office door.

A first aider will be on site at all times, their names will also be positioned in the site office and canteen facility.

The first aider(s) for this site is TBC

## Fire Prevention/Control

Fire Extinguishers are kept in each facility on site in case of fire, trades undertaking hot work will be required to carry their own extinguishers at all times. A Hot Work Permit will be carried out prior to such activity taking place. See Appendix 12 of this Construction Phase Health & Safety Plan for details of the Hot Works Procedure for this site.

It will also be highlighted at induction that good housekeeping must be maintained at all times by all to ensure that no combustible materials are available for combustion.

This will be complemented by the use of posters and notices positioned in the facilities on site.

It will be the responsibility of the Site Manager to ensure all site personnel are mustered at the muster point in the event of an emergency and a roll taken of names. In case of the Site Manager being absent, he will nominate another person to undertake this role.

Smoking including the use of E-cigarettes will not be allowed on site and will be restricted to an area designated by the Site Manager away from combustibles. A sand bucket will be provided for but ends.

A specific fire risk assessments and detailed fire plan will be developed prior to commencement of the project; this will include emergency evacuation procedures. See Appendix 2.

# FIRE SAFETY PLAN GENERAL

## Induction of Personnel

All site operatives must be given an induction on fire safety awareness and to include, policy on smoking, Hot Works Procedures, burning of waste, site housekeeping, the use of extinguishers and evacuation procedures.

## Flammable Substances

The use of flammables must be kept to a minimum. All flammable substances must only be stored in the correct storage facilities and away from all combustible materials and sources of ignition.

## Smoking Policy

Smoking including the use of E-cigarettes will not be permitted inside the building or welfare facilities and will only be permitted in an external designated area identified by the Site Manager.

## Hot Works

A Hot Works permit will be issued before the commencement of any hot works, and will be under the control of the Site Manager. All hot works procedures must be adhered to. (See Appendix 12 of the Construction Phase Health and Safety Plan).

## Housekeeping

A high standard of housekeeping must be achieved throughout the project duration. The build-up of rubbish and/or waste materials will be kept to a minimum. No burning of rubbish will be allowed on site. A cleaning regime will be set up by the Site Manager and a Waste Management Plan by the Group Environmental Manager.

## Co-operation and Co-ordination

Full co-operation is to be maintained with adjacent properties. In the event of a fire the Site Management is to notify all adjacent properties immediately.

## EVACUATION PLAN

What to do in the event of a fire.

Any person discovering a fire must.

a) Operate the nearest alarm call point or shout fire, fire.

b) Summon help by phoning the fire service, giving the site address and location of the fire.
c) Inform the site manager who can co-ordinate with adjacent properties. Fight the fire if it is safe and practicable to do so by using the correct type of fire extinguisher and by having your means of escape behind you.
d) The muster point for all personnel and site visitors is identified on the site set up plan (Appendix 3 of the Construction Health and Safety Plan). Account for all personnel by using the site signing in register.

The Site Manager is the fire marshal and has the following duties:

1) Contact adjacent properties in the event of a fire.
2) Weekly carry out inspections of fire escape routes and firefighting equipment.
3) To carry out roll call using the signing in register. Liaise with fire brigade in the event of an emergency.
4) Appoint a deputy to carry out the above in his absence.

## 11. REPORTING OF RIDDOR INFORMATION

**Procedures for reporting specific injuries, diseases and dangerous occurrences**

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 requires that specific injuries, diseases and dangerous occurrences are reported to the relevant authority.

Failure to comply is a criminal offence.

**WHAT YOU HAVE TO REPORT**

You have to report any injury which results in a person or persons being off work for **seven days** or more, or if the person or persons are in hospital for 24 hours or more.

As well as this you have to report a fatality and any dangerous occurrence where an incident happens and no persons are injured but there has been a potential for injury or harm.

The specific diseases to be notified are related to particular work activities, the general diseases covered are:-

1. Certain poisoning by chemicals etc.,
2. Some skin diseases such as skin cancer, acne
3. Lung diseases including asbestosis,
4. Infections such as leptospirosis, hepatitis and anthrax
5. Cataracts and decompression sickness or vibration white finger.

All of the above should be reported to the relevant authority as quickly as possible by telephone and followed up with a written report within seven days, normally on a F2508 for injuries and a F2508A for diseases or dangerous occurrences.

If any such incident or occurrence happens on your site you must do the following immediately:-

1. Telephone the emergency service required, then:
2. Your immediate supervisor, then:
3. Your health and safety adviser, you will then be given instructions of how to deal with the matter further.

| | |
|---|---|
| AMBULANCE: | 999 |
| FIRE BRIGADE: | 999 |
| POLICE: | 999 |
| A&E HOSPITAL: | Royal Berkshire NHS Foundation Trust<br>London Road<br>Reading<br>RG1 5AN<br><br>Tel: 0118 322 5111 |
| HSE: | Priestley House<br>Priestley Road<br>Basingstoke<br>RG24 9NW<br><br>Tel: 01256 404 000 |

The incident will be investigated and the action taken will depend on the outcome, the company will deal with the Health & Safety Executive on your behalf and complete the relevant forms.

All accidents no matter how trivial must be reported in the site accident book. This will help us to identify problem areas from which additional controls/precautions can be implemented. These will also act as our main database for accident statistics.

If you are not sure about an accident, record it in the book and telephone the Safety Advisor who will be able to give you advice.

## 13.WELFARE ARRANGEMENTS

The Principal Contractor shall provide welfare facilities, which conform to the recommendation of the Construction (Design & Management) Regulations 2015.

These will consist of a Site Manager Offices, Canteen/Mess Facilities, Toilet Facilities (plumbed in), Drying room and Storage Containers. Hot and Cold water and First Aid facilities shall be provided in line with the regulations.
(See Site Set Up Plan Appendix 3).

## 14. INFORMATION AND TRAINING

Site specific rules and codes of practice shall be issued to all site personnel at a Site Induction prior to them entering the site. Copies of the induction literature shall be displayed in the welfare facilities. A record of persons undergoing the induction process shall be maintained.
Only those with the correct competency details for their individual tasks will be permitted access onto the site. This is managed by the Site Manager. Only trained and competent personnel will be permitted to operate plant and machinery.

## 15. CONSULTATION

The views of all persons involved in the project shall be taken into account at all times and actioned wherever necessary. Tool box talks will be carried out to discuss tasks with operatives and gain their views. Operatives are encouraged to fill out suggestion forms to identify areas of concern and to gain ideas for continual improvements on all matters.

## 16. SITE RULES

In addition to the restrictions laid out in the Pre-Construction Information Pack the following also apply. All operatives and visitors will be inducted on these rules and sign them to agree to abide by them whilst on site.

1. All visitors and contractors to report to the site office and sign the site register before entering the site. Prior to leaving site you must sign out of site.
2. All persons, including visitors, must be inducted prior to entering site for the first time.
3. Always wear a Safety Helmet, Safety Boots, High Visibility Vest, Gloves & Eye Protection.
4. Request P.P.E you feel is appropriate if it has not already been offered to you.
5. Do not attempt to operate any plant or equipment unless you have been trained and authorised to do so by your supervisor.
6. Stop using any plant or equipment that is defective (including fuel, oil or water leaks) and report the defect to your supervisor.
7. Clear up and report all spillages of fuel, oil and hazardous substances.
8. Do not carry out any excavation (either by hand or machine) unless you have been issued a "permit to dig" by the Site Manager.
9. Do not enter any excavation unless it has been battered back or adequately supported.
10. Only a competent person, who has been authorised to do so, may erect, alter or dismantle scaffolding, falsework or excavation support structures.
11. De-nail any timbers that you have stripped.
12. Keep your work area tidy and store materials required for the work in a safe manner.
13. Report any damaged ladders and do not attempt to climb any ladder unless it is tied at the top or footed.
14. Do not work from any edge from which you could fall unless a double guard rail and toe board is in place or other suitable safety precautions have been put in place to prevent injury.
15. Do not use any substance that may be hazardous to health unless you have seen the COSHH Assessment and taken the appropriate precautions.
16. Eat food in the canteen facilities provided. Do not consume food at the workplace. Place any waste food in the bins provided.
17. Use the site toilets. Anyone found fouling the site will be dismissed immediately.
18. Keep the site welfare facilities in a clean tidy condition.
19. Report to the Site Manager immediately any accident you have had or witnessed.
20. Report to the Site Manager immediately any unsafe practice that you have seen that could have led to an injury.
21. No smoking including the use of E-cigarettes on site, except in designated areas.

22. Being under the influence of alcohol/drugs is strictly forbidden and the company reserves the right to remove anyone suspected of being under the influence of alcohol or drugs from the site.
23. No mobile phones to be used on site except in designated areas.
24. Work within the site boundary, do not trespass outside it unless you are sure the access/work has been authorised.
25. Understand the fire and emergency procedures, and do not tamper with any emergency or firefighting equipment.
26. Do not take instructions to carry out work from anyone other than your own supervisor or a member of Watkin Jones Management as anyone else may be unaware of any health & safety implications involved with the work.
27. Sub-contractors must not issue instructions to any Watkin Jones Group personnel. If you require Watkin Jones Group personnel to carry out any activity you must request this via a Watkin Jones Group Manager only.
28. Do not undertake any work or activity that you consider is unsafe irrespective of any instructions given by any party.
29. Keep to the designated access routes. Do not take shortcuts.
30. Do not shout or use abusive language on site.
31. Do not display offensive material on site or in the canteen/toilets.
32. No radios / music players to be used on site.
33. Ensure you are covered up during sunny days to prevent sun burn.
34. Shorts are not permitted to be worn on site.

## 17. HEALTH AND SAFETY FILE

The Company shall ensure that all information necessary for compilation of the Health and Safety File shall be collated and passed to the Principal Designer at contract completion stage.

The information shall include:

(a) record or "as built" drawings and plans used and produced throughout the construction process along with the design criteria

(b) general details of the construction methods and materials used;

(c) Details of the structure's equipment and maintenance facilities;

(d) Maintenance procedures and requirements for the structure;

(e) Manuals produced by specialist contractors and suppliers which outline operating and maintenance procedures and schedules for plant and equipment installed as part of the structure; and

(f) Details on the location and nature of utilities and services, including emergency and fire-fighting systems.

## 18. MONITORING

The Company Health and Safety Advisor will make regular visits to site to ensure that operations are carried out in accordance with current Health and Safety Regulations.

The Site Manager shall monitor the site on a daily basis to ensure that safety standards are maintained and that any incidents or complaints are dealt with.

Site Managers shall complete a weekly safety checklist (See Appendix 16) and ensure that all statutory registers are maintained.

Contracts Managers will carry out a monthly Health & Safety Audit of the contract.

## 19. PROJECT REVIEW

Project review shall take place regularly to assess project needs to implement changes required and to formalise details of amendments made to the Health and Safety Plan.

This shall take place in conjunction with the Principle Designer, Design Team, Sub-Contractors and Project Staff

## REQUIREMENTS ON AND POWERS OF PRINCIPAL CONTRACTOR UNDER THE CONSTRUCTION (DESIGN and MANAGEMENT) REGULATIONS 2015

As principal contractor appointed for any project we shall:

- Satisfy ourselves that the Client is aware of their duties; that a Principle Designer has been appointed and HSE notified (where project is notifiable) before work starts.
- Ensure they are competent to address the health & safety issues likely to be involved in the management of the construction phase.
- Ensure that the construction phase is properly planned, managed and monitored, with adequately resourced, competent site management, appropriate to the risk and activity.
- Ensure that every contractor who will work on the project is informed of the minimum amount of time which they will be allowed for planning and preparation before they begin work on site.
- Ensure that all contractors are provided with the information about the project that they need to enable them to carry out their work safely and without risk to health. Requests from contractors for information will be met promptly.
- Ensure that a suitable construction phase plan is:

1. prepared before construction work begins

2. developed in discussion with, and communicated to, contractors affected by it

3. implemented, and

4. kept up to date as the project progresses

- Satisfy ourselves that the designers and contractors that we engage are competent and adequately resourced.
- Ensure that suitable welfare facilities are provided from the start of the construction phase.
- Take reasonable steps to prevent unauthorised access onto site.
- Prepare and enforce necessary site rules.
- Provide copies of or access to relevant parts of the construction phase plan and other information to contractors, including self-employed, in time for them to plan their work.
- Liaise with the Principle Designer on design carried out during the construction phase, including design by specialist contractors, and its implication for the plan.
- Provide the Principle Designer promptly with any information relevant to the health and safety file.
- Ensure that all workers and visitors are provided with suitable health and safety induction, information and training.
- Ensure that the workforce is consulted about health and safety matters via team/tool box talks.
- Display the project notification.

# APPENDIX 1

## PRE-CONSTRUCTION INFORMATION PACK

(DUE TO SIZE – REFER TO WJ SERVER)

# APPENDIX 2

## FIRE SAFETY PLAN

(TO BE COMPLETED BY PROJECT MANAGER POST SUB-STRUCTURES)

# On Site Fire Risk Assessment
## (TO BE COMPLETED POST GROUNDWORKS)

| Site Address: | Assessment by: | |
|---|---|---|
| | Name: | |
| | Title: | |
| | Signature: | |
| Risk Assessment Reference: | Issue Date: | |
| | Review Date: | |
| Activity Specific Details *(site locations/activities/zones)* | | |
| | | |
| Other work being carried out in this area: | Interfaces with other trades: | |
| | | |
| Period of validity of this Risk Assessment: | | |
| Start date | | Expiry date |

| Step 1 – Identify Hazards. *Consider how a fire could start and what could burn.* | | |
|---|---|---|
| Sources of ignition (Hot works, faulty electrical equipment, uncontrolled smoking) | Sources of fuel (Untidy site, off-cuts, paper, wrappings) | Areas of particular risk (Near site boundary, waste skips, hot work areas) |
| | | |

**Step 2 – People at risk.** *Employees, contractors, visitors and anyone who is vulnerable (for example, people nearby or anyone with a disability).*

- Contractors
- Visitors
- Watkin Jones Employees

**Step 3 – Evaluation and action.** *Consider the hazards and people identified in Steps 1 and 2 and act to remove and reduce risk to protect people and premises.*

**Step 4 – Record, plan and train.** *Keep a record of the risks and actions taken. Make a clear plan for fire safety and ensure that people know what they need to do in the event of a fire.*

| Checklist | Tick |
|---|---|
| Fire plan prepared and made known to all who may be affected. | |
| Record hazards and risks kept under constant review. | |
| Record actions taken to reduce hazards and risks to the lowest level. | |
| Select suitable people and arrange for training and updates for people involved. | |
| Practise alarm and evacuation procedures. | |
| Put plan into place to measure and correct defects from lessons learned. | |

| | | |
|---|---|---|
| Remember: All hot works must cease at least one hour before the site closes. | Plan for rewarding good performance awareness and good housekeeping. | |

## Site Fire Safety Plan

| | |
|---|---|
| Project: | |
| Site Fire Safety Co-ordinator: | |
| Training Details: | |
| Deputy: | |
| Contact name and number for local Fire Brigade | |

## Project Specific Risks

| Fire Hazards: | Precautions: |
|---|---|
| | |

## Warning Alarms

| | Site: | Temporary Accommodation: |
|---|---|---|
| Type: | | |
| Location(s): | | |
| Assembly Point(s): | | |
| Fire Brigade access: | | |

## Fire Points

| | Site: | Temporary Accommodation: |
|---|---|---|
| Location(s): | | |
| Type of firefighting equipment at each point: | | |
| Plant & Equipment: | All enclosed pieces of mobile plant must be fitted with an appropriate fire extinguisher. Open ride on plant (rollers, dumpers) whilst not requiring an extinguisher to be fitted to the machine, must be operated where a site fire extinguisher point is readily accessible. | |
| Storage of LPG and highly flammable materials: | | |
| Security Arrangements: | | |
| Frequency of fire drills: | | |

## Temporary Offices/Accommodation

| |
|---|
| Location: |
| Fire Resistance: |
| Date Review Required: |

**Pre-commencement and/or fire plan review check sheet**

**•circle as appropriate**

| Subject | Yes/No | Comments | Date |
|---|---|---|---|
| Is fire certificate required? | | | |
| Outline fire plan completed | | | |
| Warning systems in place | | | |
| Fire detection system in place | | | |
| Hot work permit system in place | | | |
| Fire escapes, exit routes defined | | | |
| Procedure in place for calling Fire Brigade | | | |
| Fire points established and in place | | | |
| Signage | | | |
| Directional | | | |
| Fire Points | | | |
| Fire Exits | | | |
| Assembly Point | | | |
| Dry Riser | | | |
| Fire Hydrant | | | |
| No Smoking | | | |
| Highly Flammable | | | |
| Fire action notices displayed | | | |
| Site plans displayed | | | |
| Emergency lighting | | | |
| Temporary coverings identified | | | |
| Waste removal procedure established | | | |
| No smoking policy adopted | | | |
| Instruction to workforce | | | |
| Fire Marshall(s) delegated | | | |

| | |
|---|---|
| Completed by: | Date: |

# APPENDIX 3

## SITE SET UP PLAN & TRAFFIC MANAGEMENT PLAN

A1

EXISTING DROPPER KERB

EXISTING PEDESTRIAN CROSSING POINT TO REMAIN

1.60m MIN. (EXTG)

SINGLE STEEL GATE WITH DIAL LOCK

SMOKING AREA & MOBILE PHONE ZONE

EXISTING CYCLE WAY TO REMAIN

2.0m (Extg)

SITE PEDESTRIAN AREA

SITE PEDESTRIAN AREA

EMERGENCY ESCAPE DOOR & SOUNDER

OFFICE WELFARE

SITE ENTRANCE

EXISTING CONTROLLED PEDESTRIAN CROSSING TO REMAIN

2.70m

EMERGENCY ESCAPE DOOR & SOUNDER

WJ MATERIAL STORAGE AREA

ASSEMBLY POINT

BANKSMAN

OUT

GALVANISED STEEL DOUBLE GATES

FLOW OF SITE DELIVERIES

15m ARTICULATED DELIVERY WAGON

15m ARTICULATED DELIVERY WAGON

PEDESTRIAN ACCESS 1

PEDESTRIAN ACCESS 2

OUTLINE OF PROPOSED BUILDING

PROPOSED RESIDENTIAL BUILDING

PROPOSED LOCATION OF TOWER CRANE

TC1

PROPOSED LOCATION OF TOWER CRANE

TC2

EXISTING DROPPER KERBS

BANKSMAN

IN

GALVANISED STEEL DOUBLE GATES

PROPOSED TIMBER SITE HOARDING LINE

EXISTING PEDESTRIAN STEPS TO BE RETAINED DURING THE WORKS

EXISTING NETWORK RAIL BRIDGE PARAPET (ABOVE)

RAIL TRACK LAND

NETWORK RAIL LAND/EASEMENT - ACCESS TO BE RETAINED DURING WORKS

173900N

173840N

NOTES:

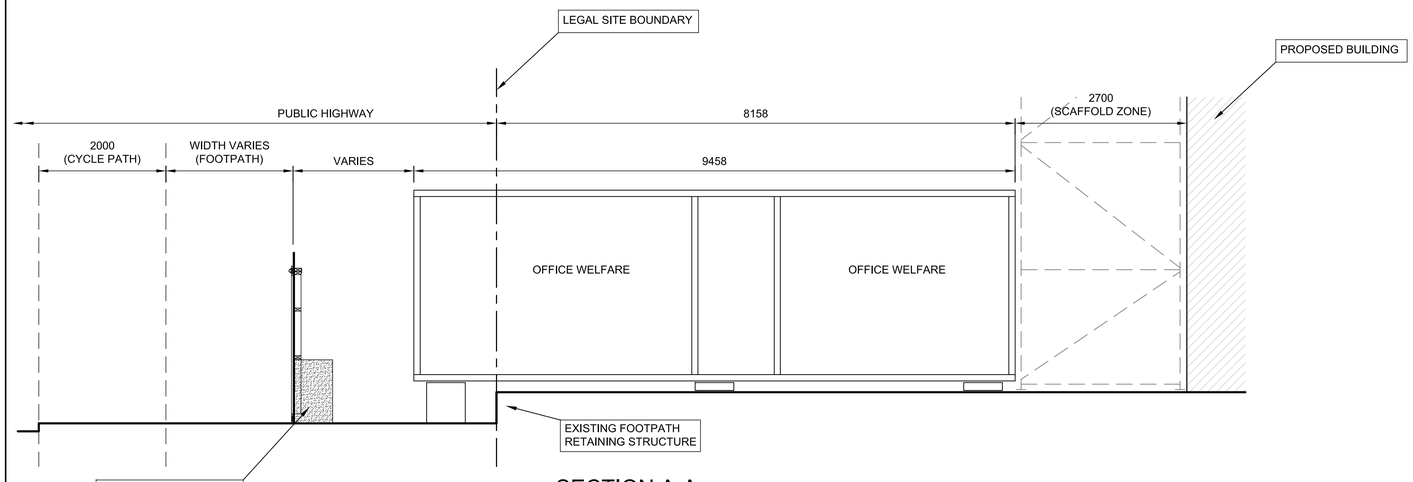
1. ALL DIMENSIONS ARE IN MILLIMETERS U.N.O.

KEY

SCAFFOLD/MASTER CLIMBER ZONE

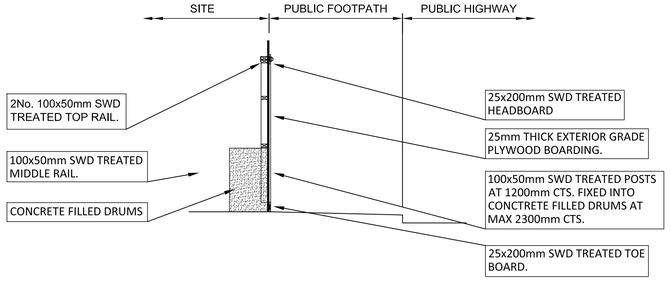
PERSPEX VISION PANEL IN SITE HOARDING (HIGH LEVEL)

PERSPEX VISION PANEL IN SITE HOARDING (LOW LEVEL)




SECTION A-A

(SCALE 1:50)




SECTION B-B

(SCALE 1:50)

| REV | DESC. | DATE | BY |
|---|---|---|---|
| P1 | PRELIMINARY ISSUE | 20.02.18 | GMN |

DRG STATUS: PRELIMINARY

CONTRACT

THAMES QUARTER, READING

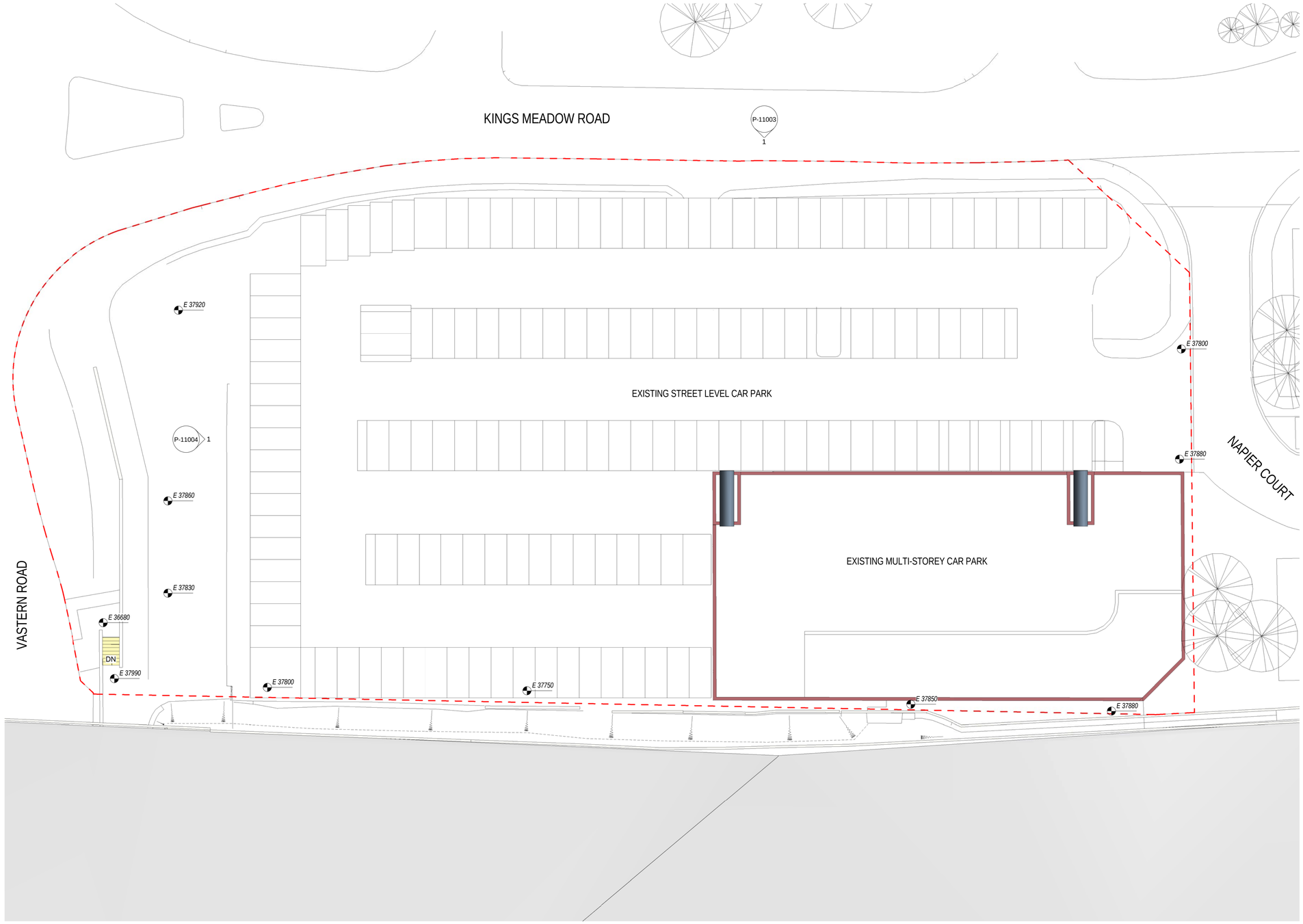
TITLE:

PROPOSED CONSTRUCTION MANAGEMENT PLAN


WATKIN JONES BUILD TO RENT

55 Ffordd William Morgan
St.Asaph Business Park
St.Asaph
Denbighshire
LL17 0JG
TEL:01745 538200


| SCALE: | DATE: | DRAWN: | DRG No: | REV: |
|---|---|---|---|---|
| A/S @ A1 | 20.02.18 | GMN | WJH_SK07 | P1 |




## 1 EXISTING SITE PLAN

1 : 200

GENERAL NOTES

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Notes and material designations are typical for similar conditions unless otherwise indicated.

Do not scale from this drawing except for planning

| REV NO. | DATE | DESCRIPTION |
|---|---|---|
| A | 18/11/2016 | Issued for Planning |

0 2m 4m 8m

Scale 1:200

PROJECT

**Kings Meadow, Reading**

CLIENT

**Lochailort Reading Ltd**

CALLISONRTKL
A DESIGN CONSULTANCY OF ARCADIS

CallisonRTKL,25 Farringdon Street, 10th Floor, London, EC4A 4AB, T:+44(0)20 7306 0404

SHEET IDENTIFICATION

TITLE

**Existing Site Plan**

STATUS

**FOR PLANNING**

| | | | |
|---|---|---|---|
| PROJECT NUMBER | 050-160068 | DATE DRAWN: | 10/12/16 |
| | | SCALE @ A1: | 1 : 200 |
| | | DRAWN BY: | CL |
| | | CHECKED BY: | MD |

DRAWING NUMBER **P-11001**

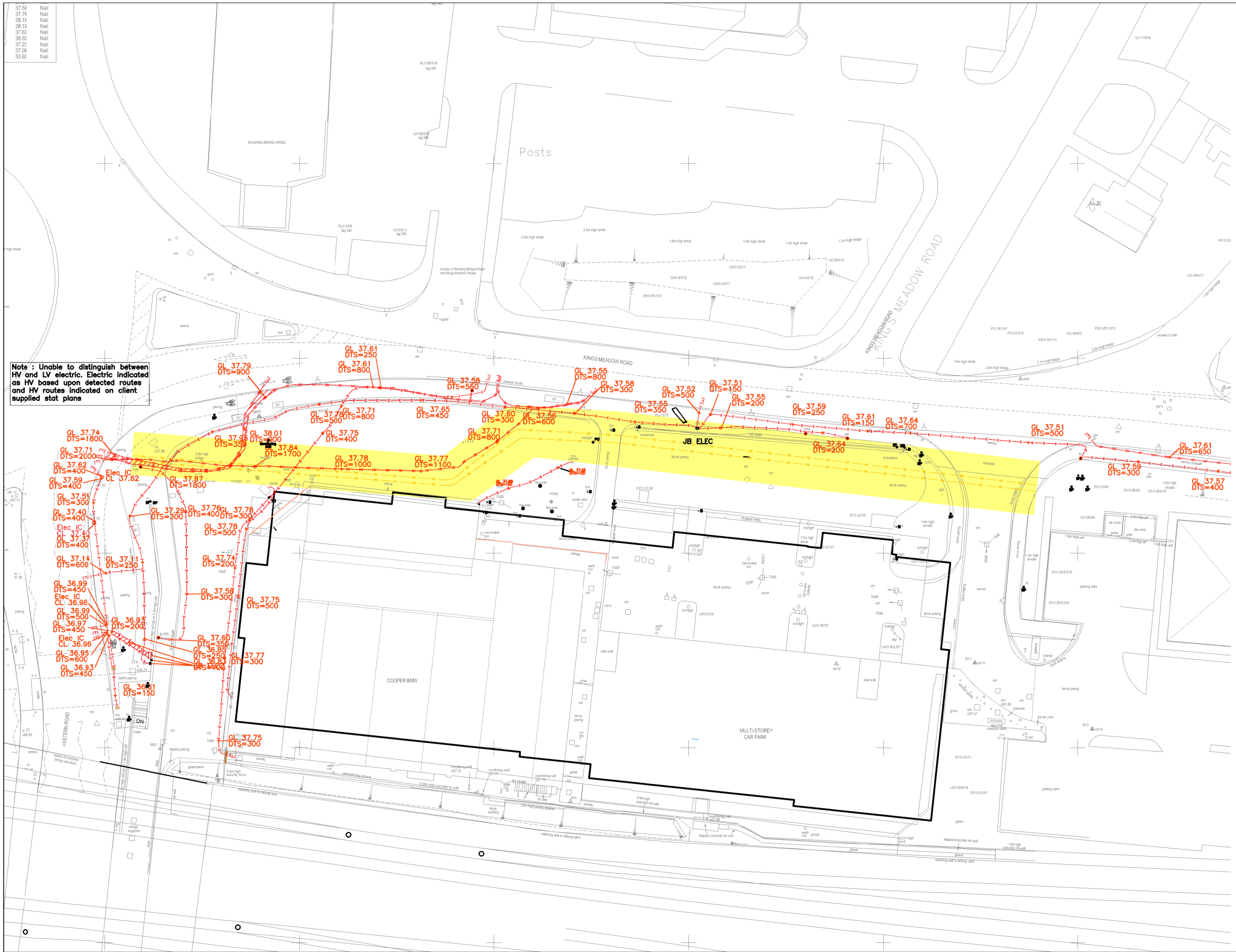
REVISION **A**

29/11/2016 09:49:26

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# APPENDIX 4

# STATS PLANS




## SUMO SERVICES LEGEND

### UTILITY LINETYPES

| | | | |
|---|---|---|---|
| British Telecom | | Gas | |
| Cable Television | | Heating Pipes | |
| Closed Circuit Television | | HV Cables | |
| Communications | | Multiple Services Route | |
| Drainage | | Oil | |
| Drainage – Combined Water | | Oxygen | |
| Drainage – Foul Water | | Street Lighting | |
| Drainage – Storm Water | | Traffic Signal Loop | |
| Empty Duct | | Unknown | |
| Electric | | Underground Cable | |
| Fire Hydrant Main | | Underground Pipeline | |
| Fibre Optic | | Water | |
| Fuel | | High Voltage Cables | |

Assumed Service Route – See Utility Survey Notes (Using abbreviation of service and colour as above)

### UTILITY SURVEY INFORMATION

| | | | |
|---|---|---|---|
| Area of Concern | | Unable to Survey | UTS |
| Contracted Survey Area | SVY AREA | Unable to Lift (cover) | UTL |
| Depth to Top of Service (mm) | DTS=400 | Unable to Trace | UT |
| End of Trace | ET | Unable to Trace (due to blockage) | UTB |
| Previous Survey Area | PREVIOUS | Unable to Trace Further | UTF |

### TOPOGRAPHIC & UTILITY DETAILS

| | | | |
|---|---|---|---|
| Barrier (symbol – sized) | | Post (symbol) | PO |
| Belisha Beacon (symbol) | | Rain Water Pipe (symbol) | RW |
| Bollard (symbol) | B | Road Sign (symbol) | RS |
| Borehole (symbol) | | Rodding Eye (symbol) | RE |
| British Telecoms IC | BTMH | Sapling (symbol) | |
| Building (incomplete detail) | | Sign Post (symbol) | SP |
| Cable into Ground (symbol) | | Soak Away | SA |
| Cable TV Box (symbol) | | Spot Light (symbol) | SL |
| CCTV Camera | | Spot Height | 50.00 |
| Cover Level in metres | CL 50.00 | Stop Cock (symbol) | |
| Direction of Flow (Drainage) | | Stop Valve (symbol) | |
| Distribution Board (symbol) | DB | Survey Station (symbol) | |
| Earth Rod (symbol) | ER | Telephone Pole (symbol) | |
| Electric Cabinet | EC | Telephone Box (symbol) | |
| Electric Pole (symbol) | EP | Traffic Bollard (symbol) | |
| Electric Sign (symbol) | | Tree (dimensions in metres – e.g.) | |
| Embankment | | Diameter at 1mh: (bole) | Dia: 0.3 |
| Feeder Pillar | FP | Height: | Ht: 10.2 |
| Fire Hydrant | FH | Spread: | Spr: 7.5 |
| Flag Pole (symbol) | | Species: | Maple |
| Flat Roof Level in metres | FRL 50.00 | Traffic Light (symbol) | |
| Flood Light (symbol) | FL | Unknown Valve (symbol) | UV |
| Gas Valve (symbol) | GV | Vent Pipe (symbol) | VP |
| Gate | Single / Double | Wall | |
| Ground Level in metres | GL 50.00 | Waste Pipe (symbol) | WP |
| Gulley | GU | Water Meter (symbol) | WM |
| Inspection Cover | IC | Water Valve (symbol) | WV |
| Invert Level in metres | IL 50.00 | Building Canopy | |
| Junction Box – BT | JB BT | Crash Barrier | |
| Junction Box – Comms | JB COM | Drainage Channel | |
| Junction Box – Elec | JB | Drop Kerb (level in metres) | 50.00 |
| Lamp Post (symbol – sized) | LP | Edge Detail (level in metres) | 50.00 |
| Light Bollard (symbol) | LB | Footpath (level in metres) | 50.00 |
| Light in ground (symbol) | | Fence | |
| Manhole | MH | Heras Fence | |
| Manhole Capped Port | | Kerb channel (level in metres) | 50.00 |
| Parapet Level in metres | PL 50.00 | Kerb top (level in metres) | 50.00 |
| Pipe Diameter in millimetres | Ø100 | Overhead Service Line | OHS |
| | | Pedestrian Railing | |


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JOB TITLE

# THAMES QUARTER, READING

DRAWING TITLE

# DEVELOPABLE AREA WITHIN CONSTRAINTS ELECTRICITY

| Rev | Description | Drn | Chk | Date |
|---|---|---|---|---|
| | REVISIONS | | | |

| Preliminary | | Approval | | Tender | | Const. | |
|---|---|---|---|---|---|---|---|

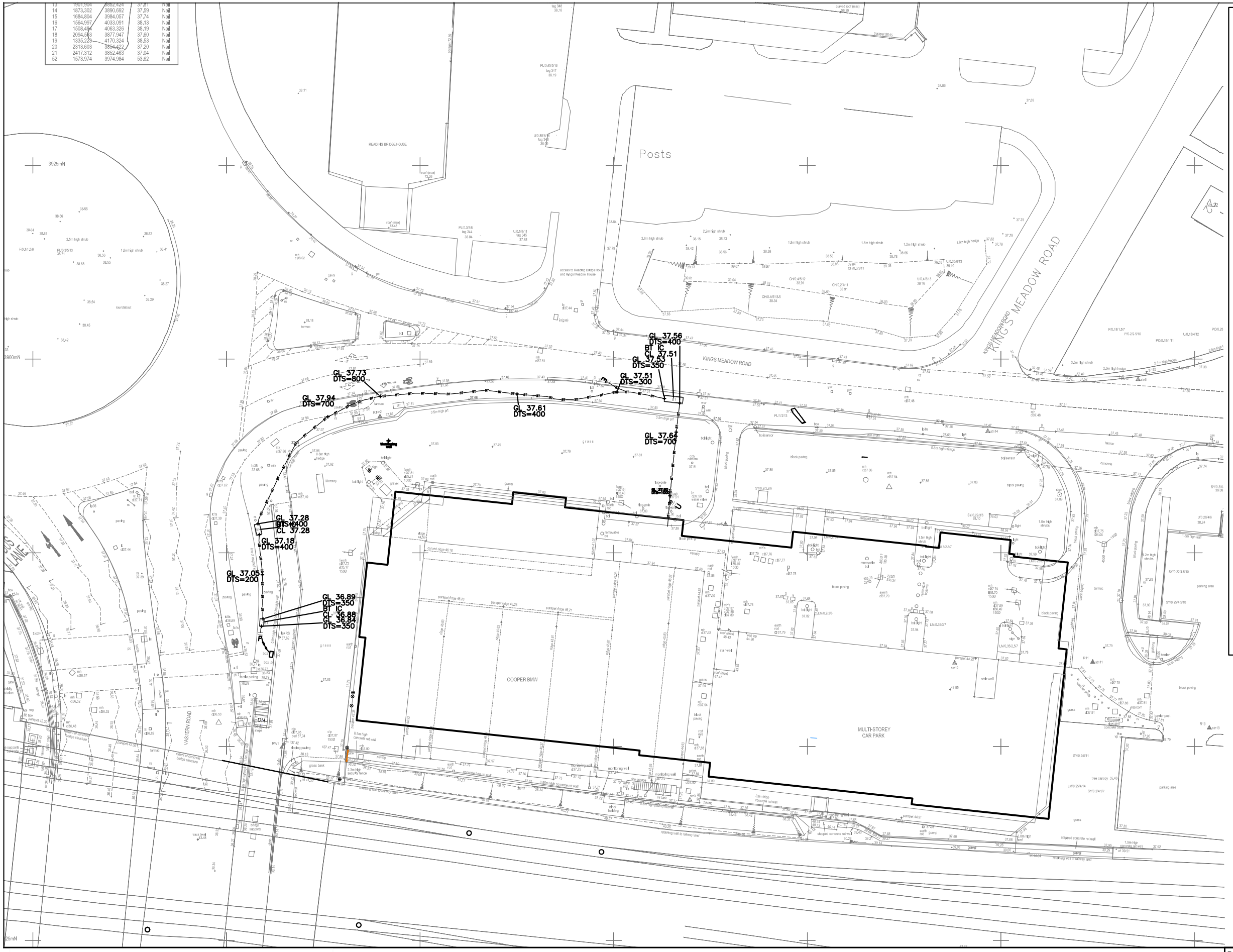
DRAWING STATUS

| DATE | DRAWN | CHECKED | ISSUE CHECKBOX |
|---|---|---|---|
| AUGUST '17 | JPM | SWA | |

| DRAWING No. | REV | SCALE | |
|---|---|---|---|
| 5277.051 | . | 1:500 | @ A3 |


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| | | | | |
|---|---|---|---|---|
| 13 | 1901.304 | 3852.426 | 37.81 | Nail |
| 14 | 1873.302 | 3890.692 | 37.59 | Nail |
| 15 | 1684.804 | 3984.057 | 37.74 | Nail |
| 16 | 1564.997 | 4033.091 | 38.13 | Nail |
| 17 | 1508.494 | 4063.326 | 38.19 | Nail |
| 18 | 2094.543 | 3877.947 | 37.60 | Nail |
| 19 | 1335.225 | 4170.324 | 38.53 | Nail |
| 20 | 2313.603 | 3854.422 | 37.20 | Nail |
| 21 | 2417.312 | 3852.463 | 37.04 | Nail |
| 52 | 1573.974 | 3974.984 | 53.62 | Nail |




## SUMO SERVICES LEGEND

### UTILITY LINETYPES

| | | | |
|---|---|---|---|
| British Telecom | | Gas | |
| Cable Television | CATV | Heating Pipes | |
| Closed Circuit Television | CCTV | HV Cables | |
| Communications | | Multiple Services Route | |
| Drainage | | Oil | |
| Drainage – Combined Water | | Oxygen | |
| Drainage – Foul Water | | Street Lighting | |
| Drainage – Storm Water | | Traffic Signal Loop | |
| Empty Duct | | Unknown | |
| Electric | | Underground Cable | |
| Fire Hydrant Main | | Underground Pipeline | |
| Fibre Optic | | Water | |
| Fuel | | High Voltage Cables | |

Assumed Service Route – See Utility Survey Notes
(Using abbreviation of service and colour as above)

### UTILITY SURVEY INFORMATION

| | | | |
|---|---|---|---|
| Area of Concern | | Unable to Survey | UTS |
| Contracted Survey Area | SVY AREA | Unable to Lift (cover) | UTL |
| Depth to Top of Service (mm) | DTS=400 | Unable to Trace | |
| End of Trace | | Unable to Trace (due to blockage) | |
| Previous Survey Area | PREVIOUS | Unable to Trace Further | |

### TOPOGRAPHIC & UTILITY DETAILS

| | | | |
|---|---|---|---|
| Barrier (symbol – sized) | | Post (symbol) | PO |
| Belisha Beacon (symbol) | | Rain Water Pipe (symbol) | RWP |
| Bollard (symbol) | B | Road Sign (symbol) | RS |
| Borehole (symbol) | | Rodding Eye (symbol) | RE |
| British Telecoms IC | BTMH | Sapling (symbol) | |
| Building (incomplete detail) | | Sign Post (symbol) | SP |
| Cable into Ground (symbol) | | Soak Away | SA |
| Cable TV Box (symbol) | | Spot Light (symbol) | SL |
| CCTV Camera | | Spot Height | 50.00 |
| Cover Level in metres | CL 50.00 | Stop Cock (symbol) | |
| Direction of Flow (Drainage) | | Stop Valve (symbol) | SV |
| Distribution Board (symbol) | DB | Survey Station (symbol) | |
| Earth Rod (symbol) | ER | Telephone Pole (symbol) | TP |
| Electric Cabinet | EC | Telephone Box (symbol) | |
| Electric Pole (symbol) | EP | Traffic Bollard (symbol) | |
| Electric Sign (symbol) | | | |
| Embankment | | Tree (dimensions in metres – e.g.) | |
| | | Diameter at 1mh: (bole) | Dia: 0.3 |
| | | Height: | Ht: 7.5 |
| | | Spread: | Sp: 10.2 |
| | | Species: | Maple |
| Feeder Pillar | FP | Traffic Light (symbol) | |
| Fire Hydrant | FH | Unknown Valve (symbol) | UV |
| Flag Pole (symbol) | | Vent Pipe (symbol) | VP |
| Flat Roof Level in metres | FRL 50.00 | Wall | |
| Flood Light (symbol) | FL | Waste Pipe (symbol) | WP |
| Gas Valve (symbol) | GV | Water Meter (symbol) | WM |
| Gate | Single / Double | Water Valve (symbol) | WV |
| Ground Level in metres | GL 50.00 | Building Canopy | |
| Gulley | GU | Crash Barrier | |
| Inspection Cover | IC | Drainage Channel | |
| Invert Level in metres | IL 50.00 | Drop Kerb (level in metres) | 50.00 |
| Junction Box – BT | JB BT | Edge Detail (level in metres) | 50.00 |
| Junction Box – Comms | JB COM | Footpath (level in metres) | 50.00 |
| Junction Box – Elec | JB | Fence | |
| Lamp Post (symbol – sized) | LP | Heras Fence | |
| Light Bollard (symbol) | LB | Kerb channel (level in metres) | 50.00 |
| Light in ground (symbol) | | Kerb top (level in metres) | 50.00 |
| Manhole | MH | Overhead Service Line | OHS |
| Manhole Capped Port | | Pedestrian Railing | |
| Parapet Level in metres | PL 50.00 | | |
| Pipe Diameter in millimetres | Ø100 | | |


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**F:** 01635 861 715 **w:** www.stuartmichael.co.uk


JOB TITLE
THAMES QUARTER, READING

DRAWING TITLE
DEVELOPABLE AREA WITHIN CONSTRAINTS BT

| Rev | Description | Drn | Chk | Date |
|---|---|---|---|---|
| | REVISIONS | | | |

| Preliminary | | Approval | | Tender | | Const. | |
|---|---|---|---|---|---|---|---|

DRAWING STATUS

| DATE | DRAWN | CHECKED | ISSUE CHECKBOX |
|---|---|---|---|
| AUGUST '17 | JPM | SWA | |

| DRAWING No. | REV | SCALE | |
|---|---|---|---|
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a BT Group business

SEARCH ACUMEN
BOX SA100
MAYFLOWER HOUSE
11 CAXTON HILL
HERTFORD
SG13 7NE

Date : 09 February 2018

Your Ref : 9264878

Our Ref : Archives

Dear Sirs,

**WAYLEAVE SEARCH at LAND AT KINGS MEADOW ROAD READING RG1 8BN**

Thank you for your request. We have now completed a search of our Wayleave Archives and:-

- We enclose copies of any wayleave agreements found [ ]
- We have been unable to find any wayleave agreements for this location [X]

Any rights of entry or otherwise are detailed in the relevant wayleave agreement and/or by the Electronic Communications Code, which is Schedule 3A of the Communications Act 2003, as amended by the Digital Economy Act 2017. No liability falls on the owner/occupier for the maintenance of BT structures and no fee is payable to BT.

**SITE DEVELOPMENT**

If your client is proposing to develop their site, any proposed method for serving your clients property would need to be discussed in detail with the BT planner following an order for telecommunications service.

**BT APPARATUS LOCATION PLAN**

If you require production of a plan showing the location of BT apparatus please email nnhc@openreach.co.uk, there is a charge for this service. The fee allows for the production of up to 20 maps. Alternatively you may be interested in our online mapping service "Maps by Email", for further information please contact us on maps.by.email@openreach.co.uk

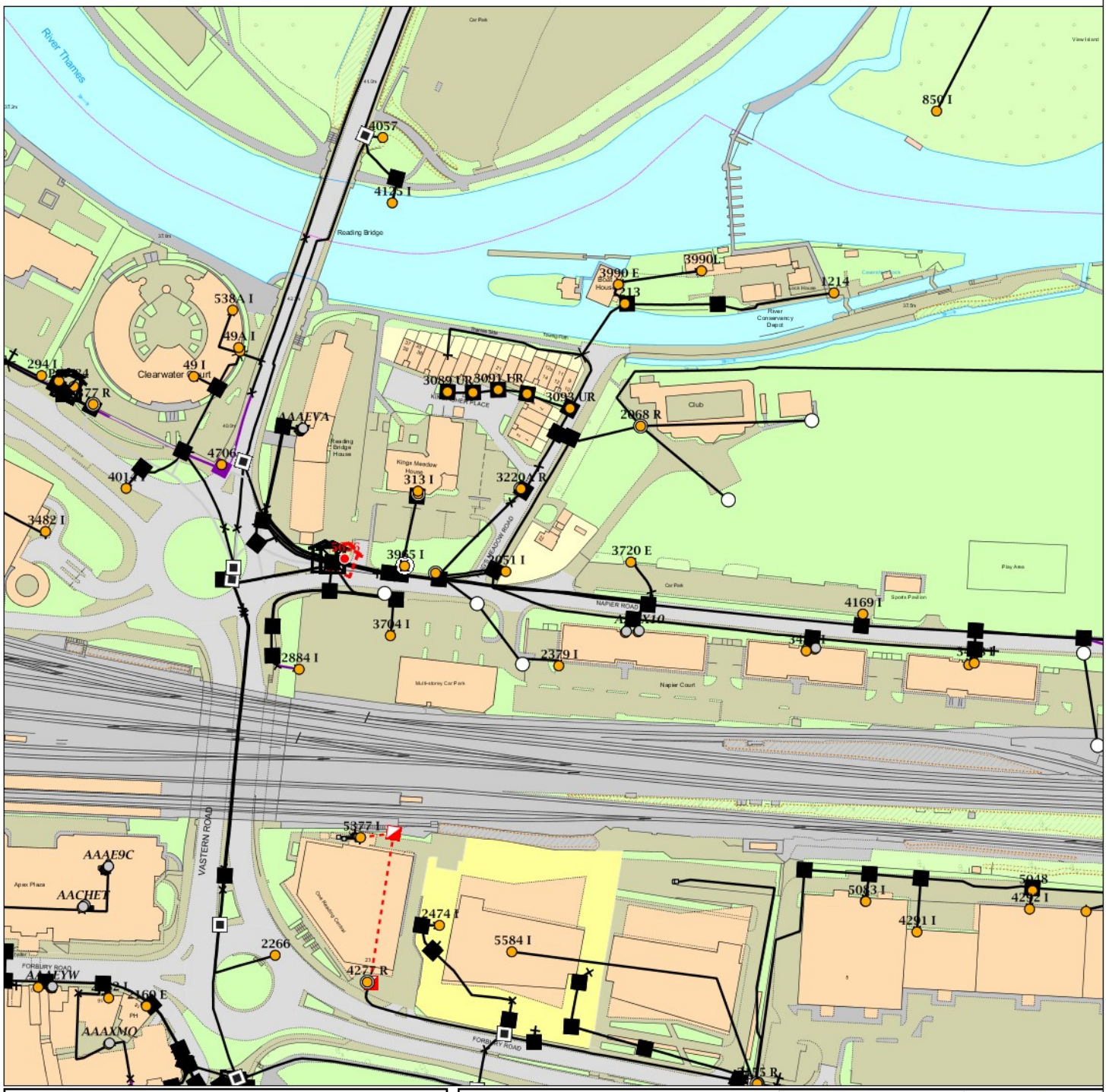
Yours faithfully

Sean Round

WAYLEAVE ARCHIVE MANAGER

Please contact us at BT Wayleaves, PP215W, Shrewsbury ATE, Town Walls, Shrewsbury, Shropshire, SY1 1TY Tel : 01743 275310 Fax : 01743 231396

# Maps by email Plant Information Reply




## IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

openreach

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email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

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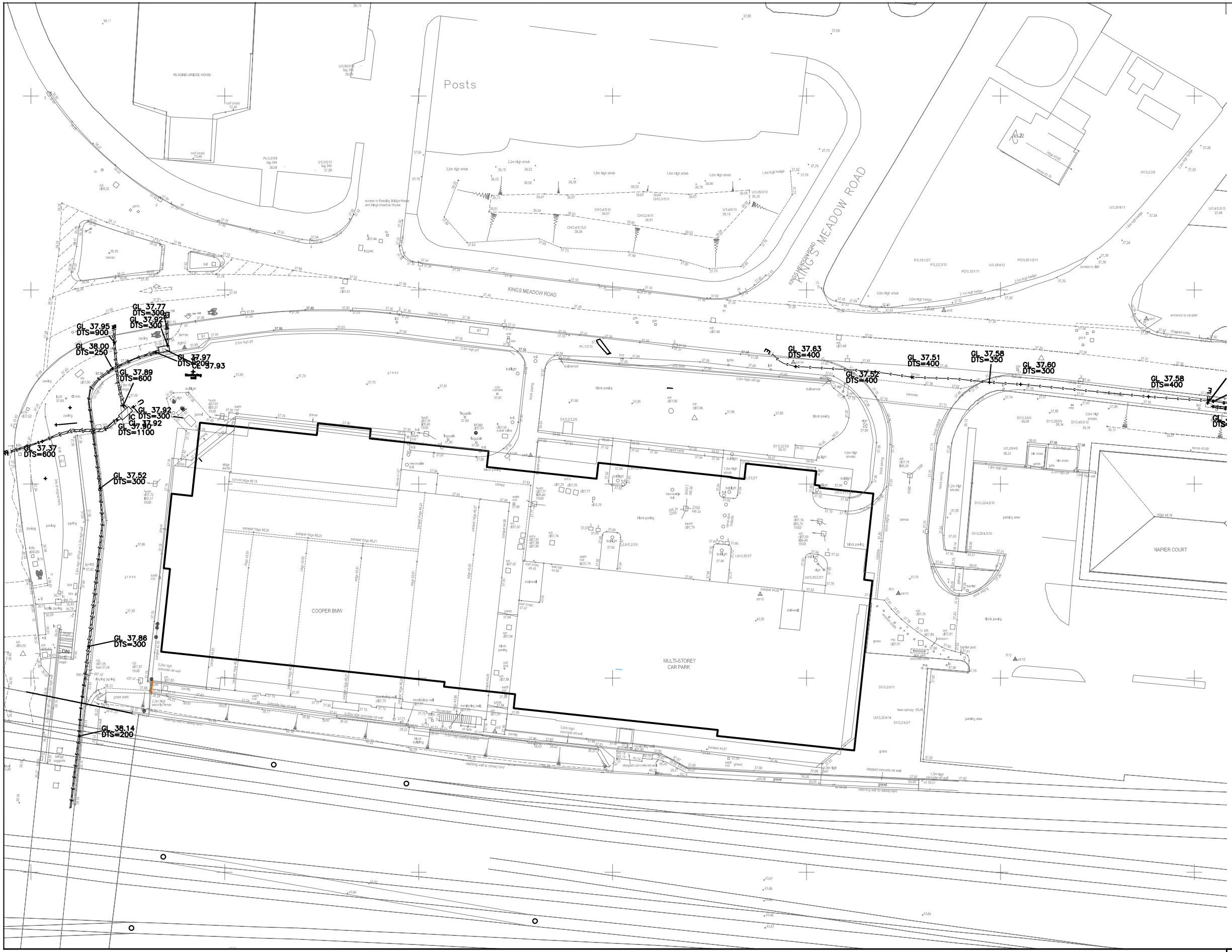
## KEY TO BT SYMBOLS

| | | | |
|---|---|---|---|
| DP | | Pole | |
| Planned DP | | Planned Pole | |
| PCP | | Joint Box | |
| Planned PCP | | Change Of State | + |
| Built | | Split Coupling | |
| Planned | | Duct Tee | |
| Inferred | | Planned Box | |
| Building | | Manhole | |
| Kiosk | K | Planned Manhole | |
| Hatchings | | Cabinet | |
| | | Planned Cabinet | |

Other proposed plant is shown using dashed lines.
BT Symbols not listed above maybe disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation

BT Ref : FZI10049T
Map Reference : (centre) SU7190873916
Easting/Northing : (centre) 471908,173916
Issued : 17/01/2018 10:04:52

**WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk**




## SUMO SERVICES LEGEND

### UTILITY LINETYPES

| | | | |
|---|---|---|---|
| British Telecom | BT | Gas | G |
| Cable Television | CATV | Heating Pipes | HP |
| Closed Circuit Television | CCTV | HV Cables | HV |
| Communications | C | Multiple Services Route | MSR |
| Drainage | DR | Oil | OIL |
| Drainage – Combined Water | CW | Oxygen | OXY |
| Drainage – Foul Water | FW | Street Lighting | SL |
| Drainage – Storm Water | SW | Traffic Signal Loop | TSL |
| Empty Duct | ED | Unknown | U |
| Electric | E | Underground Cable | UC |
| Fire Hydrant Main | FH | Underground Pipeline | UPL |
| Fibre Optic | FO | Water | W |
| Fuel | FUEL | High Voltage Cables | HV |

Assumed Service Route – See Utility Survey Notes (Using abbreviation of service and colour as above)

### UTILITY SURVEY INFORMATION

| | | | |
|---|---|---|---|
| Area of Concern | AOC | Unable to Survey | UTS |
| Contracted Survey Area | SVY AREA | Unable to Lift (cover) | UTL |
| Depth to Top of Service (mm) | DTS=400 | Unable to Trace | UT |
| End of Trace | EOT | Unable to Trace (due to blockage) | UTB |
| Previous Survey Area | PREVIOUS | Unable to Trace Further | UTF |

### TOPOGRAPHIC & UTILITY DETAILS

| | | | |
|---|---|---|---|
| Barrier (symbol – sized) | | Post (symbol) | PO |
| Belisha Beacon (symbol) | | Rain Water Pipe (symbol) | RP |
| Bollard (symbol) | B | Road Sign (symbol) | RS |
| Borehole (symbol) | | Rodding Eye (symbol) | RE |
| British Telecoms IC | BTMH | Sapling (symbol) | |
| Building (incomplete detail) | | Sign Post (symbol) | SP |
| Cable into Ground (symbol) | | Soak Away | SA |
| Cable TV Box (symbol) | | Spot Light (symbol) | SL |
| CCTV Camera | | Spot Height | 50.00 |
| Cover Level in metres | CL 50.00 | Stop Cock (symbol) | |
| Direction of Flow (Drainage) | | Stop Valve (symbol) | SV |
| Distribution Board (symbol) | DB | Survey Station (symbol) | |
| Earth Rod (symbol) | ER | Telephone Pole (symbol) | TP |
| Electric Cabinet | EC | Telephone Box (symbol) | |
| Electric Pole (symbol) | EP | Traffic Bollard (symbol) | |
| Electric Sign (symbol) | | | |
| Embankment | | Tree (dimensions in metres – e.g.) | |
| | | Diameter at 1mh: (bole) | Dia: 0.3 |
| | | Height: | Ht: 7.5 |
| | | Spread: | Sp: 10.2 |
| | | Species: | Maple |
| Feeder Pillar | FP | Traffic Light (symbol) | |
| Fire Hydrant | FH | Unknown Valve (symbol) | UV |
| Flag Pole (symbol) | FP | Vent Pipe (symbol) | VP |
| Flat Roof Level in metres | FRL 50.00 | Wall | |
| Flood Light (symbol) | FL | Waste Pipe (symbol) | WP |
| Gas Valve (symbol) | GV | Water Meter (symbol) | WM |
| Gate | Single / Double | Water Valve (symbol) | WV |
| Ground Level in metres | GL 50.00 | Building Canopy | |
| Gulley | GU | Crash Barrier | |
| Inspection Cover | IC | Drainage Channel | DC |
| Invert Level in metres | IL 50.00 | Drop Kerb (level in metres) | 50.00 |
| Junction Box – BT | JB BT | Edge Detail (level in metres) | 50.00 |
| Junction Box – Comms | JB COM | Footpath (level in metres) | 50.00 |
| Junction Box – Elec | JB | Fence | |
| Lamp Post (symbol – sized) | LP | Heras Fence | HERAS |
| Light Bollard (symbol) | LB | Kerb channel (level in metres) | 50.00 |
| Light in ground (symbol) | | Kerb top (level in metres) | 50.00 |
| Manhole | MH | Overhead Service Line | OHS |
| Manhole Capped Port | | Pedestrian Railing | |
| Parapet Level in metres | PL 50.00 | | |
| Pipe Diameter in millimetres | Ø100 | | |


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**F:** 01635 861 715 **w:** www.stuartmichael.co.uk


JOB TITLE

# THAMES QUARTER, READING

DRAWING TITLE

# DEVELOPABLE AREA WITHIN CONSTRAINTS COMMUNICATIONS

| Rev | Description | Drn | Chk | Date |
|---|---|---|---|---|
| | REVISIONS | | | |

| Preliminary | | Approval | | Tender | | Const. | |
|---|---|---|---|---|---|---|---|

DRAWING STATUS

| DATE | DRAWN | CHECKED | ISSUE CHECKBOX |
|---|---|---|---|
| AUGUST '17 | JPM | SWA | |

| DRAWING No. | REV | SCALE | |
|---|---|---|---|
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| | | | | |
|---|---|---|---|---|
| 13 | 1901.304 | 3852.424 | 37.81 | Nail |
| 14 | 1873.302 | 3890.692 | 37.59 | Nail |
| 15 | 1684.604 | 3984.057 | 37.74 | Nail |
| 16 | 1564.597 | 4033.091 | 38.13 | Nail |
| 17 | 1508.484 | 4063.326 | 38.19 | Nail |
| 18 | 2094.163 | 3877.947 | 37.60 | Nail |
| 19 | 1335.225 | 4170.324 | 38.53 | Nail |
| 20 | 2313.603 | 3854.422 | 37.26 | Nail |
| 21 | 2417.312 | 3852.463 | 37.04 | Nail |
| 52 | 1573.574 | 3974.984 | 53.62 | Nail |

## SUMO SERVICES LEGEND

### UTILITY LINETYPES

| | | | |
|---|---|---|---|
| British Telecom | BT | Gas | G |
| Cable Television | CATV | Heating Pipes | HP |
| Closed Circuit Television | CCTV | HV Cables | HV |
| Communications | C | Multiple Services Route | |
| Drainage | DR | Oil | OIL |
| Drainage – Combined Water | CW | Oxygen | |
| Drainage – Foul Water | FW | Street Lighting | SL |
| Drainage – Storm Water | SW | Traffic Signal Loop | TSL |
| Empty Duct | | Unknown | U |
| Electric | E | Underground Cable | UG |
| Fire Hydrant Main | FH | Underground Pipeline | UPL |
| Fibre Optic | FO | Water | W |
| Fuel | FUEL | High Voltage Cables | HV |

Assumed Service Route – See Utility Survey Notes (Using abbreviation of service and colour as above)

### UTILITY SURVEY INFORMATION

| | | | |
|---|---|---|---|
| Area of Concern | | Unable to Survey | UTS |
| Contracted Survey Area | SVY AREA | Unable to Lift (cover) | UTL |
| Depth to Top of Service (mm) | DTS=400 | Unable to Trace | |
| End of Trace | | Unable to Trace (due to blockage) | |
| Previous Survey Area | PREVIOUS | Unable to Trace Further | |

### TOPOGRAPHIC & UTILITY DETAILS

| | | | |
|---|---|---|---|
| Barrier (symbol – sized) | | Post (symbol) | PO |
| Belisha Beacon (symbol) | | Rain Water Pipe (symbol) | RP |
| Bollard (symbol) | B | Road Sign (symbol) | RS |
| Borehole (symbol) | | Rodding Eye (symbol) | RE |
| British Telecoms IC | BTMH | Sapling (symbol) | |
| Building (incomplete detail) | | Sign Post (symbol) | SP |
| | | Soak Away | SA |
| Cable into Ground (symbol) | | Spot Light (symbol) | SL |
| Cable TV Box (symbol) | | Spot Height | 50.00 |
| CCTV Camera | | Stop Cock (symbol) | |
| Cover Level in metres | CL 50.00 | Stop Valve (symbol) | SV |
| Direction of Flow (Drainage) | | Survey Station (symbol) | |
| Distribution Board (symbol) | DB | Telephone Pole (symbol) | TP |
| Earth Rod (symbol) | ER | Telephone Box (symbol) | |
| Electric Cabinet | EC | Traffic Bollard (symbol) | |
| Electric Pole (symbol) | EP | | |
| Electric Sign (symbol) | | Tree (dimensions in metres – e.g.) | |
| Embankment | | Diameter at 1mh: (bole) | Dia: 0.3 |
| | | Height: | Sp: 7.5 |
| Feeder Pillar | FP | Spread: | Ht: 10.2 |
| Fire Hydrant | FH | Species: | Maple |
| Flag Pole (symbol) | | Traffic Light (symbol) | |
| Flat Roof Level in metres | FRL 50.00 | Unknown Valve (symbol) | UV |
| Flood Light (symbol) | FL | Vent Pipe (symbol) | VP |
| Gas Valve (symbol) | GV | Wall | |
| Gate | Single / Double | Waste Pipe (symbol) | WP |
| | | Water Meter (symbol) | WM |
| Ground Level in metres | GL 50.00 | Water Valve (symbol) | WV |
| Gulley | GU | | |
| Inspection Cover | IC | Building Canopy | |
| Invert Level in metres | IL 50.00 | Crash Barrier | |
| Junction Box – BT | JB BT | Drainage Channel | DC |
| Junction Box – Comms | JB COM | Drop Kerb (level in metres) | 50.00 |
| Junction Box – Elec | JB | Edge Detail (level in metres) | 50.00 |
| Lamp Post (symbol – sized) | LP | Footpath (level in metres) | 50.00 |
| Light Bollard (symbol) | LB | Fence | |
| Light in ground (symbol) | | Heras Fence | |
| Manhole | MH | Kerb channel (level in metres) | 50.00 |
| Manhole Capped Port | | Kerb top (level in metres) | 50.00 |
| Parapet Level in metres | PL 50.00 | Overhead Service Line | OHS |
| Pipe Diameter in millimetres | Ø100 | Pedestrian Railing | |


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JOB TITLE

# THAMES QUARTER, READING

DRAWING TITLE

# DEVELOPABLE AREA WITHIN CONSTRAINTS FIBRE OPTIC CABLES

| Rev | Description | Drn | Chk | Date |
|---|---|---|---|---|
| | REVISIONS | | | |

| Preliminary | | Approval | | Tender | | Const. | |
|---|---|---|---|---|---|---|---|

DRAWING STATUS

| DATE | DRAWN | CHECKED | ISSUE CHECKBOX |
|---|---|---|---|
| AUGUST '17 | JPM | SWA | |

| DRAWING No. | REV | SCALE | |
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| | | | | |
|---|---|---|---|---|
| 13 | 1901.304 | 3852.424 | 37.81 | Nail |
| 14 | 1873.302 | 3890.692 | 37.59 | Nail |
| 15 | 1684.604 | 3984.057 | 37.74 | Nail |
| 16 | 1564.597 | 4033.091 | 38.13 | Nail |
| 17 | 1508.484 | 4063.326 | 38.19 | Nail |
| 18 | 2094.163 | 3877.947 | 37.60 | Nail |
| 19 | 1335.225 | 4170.324 | 38.53 | Nail |
| 20 | 2313.603 | 3854.422 | 37.26 | Nail |
| 21 | 2417.312 | 3852.463 | 37.04 | Nail |
| 52 | 1573.574 | 3974.984 | 53.62 | Nail |

## SUMO SERVICES LEGEND

### UTILITY LINETYPES

| | | | |
|---|---|---|---|
| British Telecom | BT BT BT | Gas | G G G |
| Cable Television | CATV CATV | Heating Pipes | HP HP HP |
| Closed Circuit Television | CCTV CCTV | HV Cables | HV HV HV |
| Communications | C C C | Multiple Services Route | MSR MSR |
| Drainage | DR DR DR | Oil | OIL OIL OIL |
| Drainage – Combined Water | CW CW CW | Oxygen | O O O |
| Drainage – Foul Water | FW FW FW | Street Lighting | SL SL SL |
| Drainage – Storm Water | SW SW SW | Traffic Signal Loop | TSL TSL TSL |
| Empty Duct | ED ED ED | Unknown | U U U |
| Electric | E E E | Underground Cable | UC UC UC |
| Fire Hydrant Main | FH FH FH | Underground Pipeline | UPL UPL UPL |
| Fibre Optic | FO FO FO | Water | W W W |
| Fuel | FUEL FUEL | High Voltage Cables | HV HV HV |

Assumed Service Route – See Utility Survey Notes (Using abbreviation of service and colour as above)

### UTILITY SURVEY INFORMATION

| | | | |
|---|---|---|---|
| Area of Concern | ACC ACC ACC | Unable to Survey | UTS |
| Contracted Survey Area | SVY AREA | Unable to Lift (cover) | UTL |
| Depth to Top of Service (mm) | DTS=400 | Unable to Trace | |
| End of Trace | | Unable to Trace (due to blockage) | |
| Previous Survey Area | PREVIOUS | Unable to Trace Further | |

### TOPOGRAPHIC & UTILITY DETAILS

| | | | |
|---|---|---|---|
| Barrier (symbol – sized) | | Post (symbol) | PO |
| Belisha Beacon (symbol) | | Rain Water Pipe (symbol) | RWP |
| Bollard (symbol) | B | Road Sign (symbol) | RS |
| Borehole (symbol) | | Rodding Eye (symbol) | RE |
| British Telecoms IC | BTMH | Sapling (symbol) | |
| Building (incomplete detail) | | Sign Post (symbol) | SP |
| | | Soak Away | SA |
| Cable into Ground (symbol) | | Spot Light (symbol) | SL |
| Cable TV Box (symbol) | | Spot Height | 50.00 |
| CCTV Camera | | Stop Cock (symbol) | |
| Cover Level in metres | CL 50.00 | Stop Valve (symbol) | SV |
| Direction of Flow (Drainage) | | Survey Station (symbol) | |
| Distribution Board (symbol) | DB | Telephone Pole (symbol) | |
| Earth Rod (symbol) | ER | Telephone Box (symbol) | |
| Electric Cabinet | EC | Traffic Bollard (symbol) | |
| Electric Pole (symbol) | EP | | |
| Electric Sign (symbol) | | Tree (dimensions in metres – e.g.) | |
| Embankment | | Diameter at 1mh: (bole) | Dia: 0.3 |
| | | Height: | Ht: 10.2 |
| Feeder Pillar | FP | Spread: | Sp: 7.5 |
| Fire Hydrant | FH | Species: | Maple |
| Flag Pole (symbol) | | Traffic Light (symbol) | |
| Flat Roof Level in metres | FRL 50.00 | Unknown Valve (symbol) | UV |
| Flood Light (symbol) | FL | Vent Pipe (symbol) | VP |
| Gas Valve (symbol) | GV | Wall | |
| Gate | Single Double | Waste Pipe (symbol) | WP |
| Ground Level in metres | GL 50.00 | Water Meter (symbol) | WM |
| Gulley | GU | Water Valve (symbol) | WV |
| Inspection Cover | IC | Building Canopy | |
| Invert Level in metres | IL 50.00 | Crash Barrier | |
| Junction Box – BT | JB BT | Drainage Channel | DC |
| Junction Box – Comms | JB COM | Drop Kerb (level in metres) | 50.00 |
| Junction Box – Elec | JB | Edge Detail (level in metres) | 50.00 |
| Lamp Post (symbol – sized) | LP | Footpath (level in metres) | 50.00 |
| Light Bollard (symbol) | LB | Fence | |
| Light in ground (symbol) | | Heras Fence | HERAS |
| Manhole | MH | Kerb channel (level in metres) | 50.00 |
| Manhole Capped Port | | Kerb top (level in metres) | 50.00 |
| Parapet Level in metres | PL 50.00 | Overhead Service Line | OHS |
| Pipe Diameter in millimetres | Ø100 | Pedestrian Railing | |


STUART MICHAEL ASSOCIATES
CONSULTING ENGINEERS

**Stuart Michael Associates Ltd**
Coombe House, Coombe Square, Thatcham, Berkshire RG19 4JF

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F: 01635 861 715 w: www.stuartmichael.co.uk


JOB TITLE

THAMES QUARTER,
READING

DRAWING TITLE

DEVELOPABLE AREA
WITHIN CONSTRAINTS
CCTV

| Rev | Description | Drn | Chk | Date |
|---|---|---|---|---|
| | REVISIONS | | | |

| Preliminary | | Approval | | Tender | | Const. | |
|---|---|---|---|---|---|---|---|
| DRAWING STATUS | | | | | | | |

| DATE | DRAWN | CHECKED | ISSUE CHECKBOX |
|---|---|---|---|
| AUGUST '17 | JPM | SWA | |

| DRAWING No. | REV | SCALE | |
|---|---|---|---|
| 5277.054 | . | 1:500 | @ A3 |


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# Special Requirements relating to the External Plant Network of Vodafone

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# 1. Introduction

This document sets out the procedure that will apply when Other Parties intend or are undertaking works in the vicinity of Vodafone apparatus (see Appendix B for further information on what constitutes Vodafone apparatus).

# 2. Purpose of document

This document provides a means by which the Vodafone specific special requirements relating to their apparatus, regardless of it being situated in the public highway / road, private street, land or any other areas, is made aware to Other Parties.


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# 3. Scope

This document will be presented to Other Parties or Contractors to encourage those undertaking works within the vicinity of Vodafone apparatus to refer to and comply with. This is in order to protect where necessary the Vodafone apparatus and to avoid damage to the apparatus and loss of service.

A National Joint Utilities Group (NJUG) document NJUG Volume 3 Guidelines on the Management of Third Party Cable Ducting provides useful reference material.

It should be noted that, where appropriate, additional information on avoiding danger from underground apparatus is contained within the HSG47 guidance book titled "Avoiding Danger from Underground Services."

# 4. Vodafone Network and Apparatus

Damage to Vodafone apparatus is extremely disruptive and can be expensive to repair, especially where long lengths of cable have to be replaced.

In order to maintain the network integrity and minimise disruption to service, it is essential that disturbances are absolutely minimal. When working within the vicinity of Vodafone apparatus, extreme care is necessary in order to avoid costly repairs. The Other Parties / Contractor shall make every effort to ensure that disturbance of Vodafone apparatus is no more than is absolutely necessary for the completion of the works in accordance with their contract. It should be noted that it is an offence to interfere with Vodafone apparatus without first contacting the company for advice.

# 5. Plant records

It is the responsibility of the Other Parties undertaking works which may affect Vodafone apparatus to obtain all relevant Vodafone plant records from our agent Atkins Global prior to works commencing. This may be done by contacting the Atkins Global Plant Enquiries Team listed in Appendix B.

Plant records for such enquiries will generally be provided within 10 working days of receipt and in compliance with the New Roads and Street Works Act 1991 [NRSWA] requirements.

# 6. Definitions

The following definitions are applicable in this document:

a) **Apparatus -** means all surface or sub-surface equipment and plant used by Vodafone including any associated cables or ducts owned, leased or rented by Vodafone.

b) **Cable** - means any polythene or other sheath containing optical fibres or metallic conductors.

c) **Depth of cover** - means the depth from the surface to the topmost barrel of the duct nest, in the case of ducts encased in concrete, to the top of the concrete, and in the case of directly buried cable, the top of the cable.

d) **Jointing chamber** - means any manhole, surface box or other chamber giving access to Vodafone apparatus or their network.

e) **Utility** - means an organisation licensed to provide gas, water, electricity, Cable TV or telecommunications services.

f) **Developer** - means an organisation licensed to develop industrial/residential premises or given license to connect to utility apparatus.

g) Contractor - means the individual, firm or company contracted to undertake the work for a Utility or Other Parties.

h) Other Parties - means the Utilities, Highway or Roads Authorities, Developers, Street/Roads Authority Section 50/109 licensees

i) Site - means the location of, or in the vicinity of, the various works.

# 7. Requirements

Prior to commencing any work or moving heavy plant or equipment over any portion of the site, the Other Parties or Contractor shall notify Vodafone of their intentions. This may be done by contacting Vodafone via the contact list in Appendix B.

Upon receipt of this notification, Vodafone will identify if their apparatus is affected. If any Vodafone apparatus is affected by the works then they will arrange for the necessary records to be provided and confirm details of Vodafone apparatus and network operated within the affected area or adjacent to the proposed work site.

### 7.1 Location of Plant

It is the responsibility of the Other Parties or Contractors to undertake adequate plant location procedures. These may include searches for metallic cables which must be performed by actively inducing a signal in a cable conductor via a transmitter. A passive search is not considered sufficient.

Before applying a tracing signal to the Vodafone apparatus, the Other Parties or Contractors shall seek confirmation from Atkins Global that the Vodafone apparatus will not suffer any disruption to its networks normal workings as a result of the nature of the signal being induced.

### 7.2 Trial excavations

Optic fibre cables are very susceptible to damage from excavation tools. They are not electrically conductive and cannot be located by radio induction methods. Once an approximate location is known, the exact location must be ascertained by means of hand dug pilot holes. Where the work to be carried out by the Other Party or Contractor involves excavation in the vicinity of our apparatus, the Other Party or Contractor shall, by trial excavation at his own expense, determine the exact location and depth of the Vodafone apparatus. All excavations adjacent to the Vodafone apparatus are to be carried out by hand until the extent and /or location of the apparatus is known.

**All excavation work shall be executed in accordance with the current issue of Health and Safety series booklet HSG47, Avoiding danger from underground services.**

# 8. Depths of cover

The Other Party or Contractor should note that the minimum depths of cover for Vodafone apparatus shall be maintained together with specified separation requirements. Where the minimum depths of cover specified by Vodafone cannot be maintained, the Other Party or Contractor shall at their own expense, carry out the instructions of Vodafone requirements for the protection or diversion of their apparatus.

**The Other Party or Contractor should have particular regard to the possibility of encountering Vodafone apparatus (including ducts and cables), at depths of cover other than that reported.**

Surface cables (such as cables on bridges or walls) which are liable to be placed in danger from the Other Parties or Contractors works shall be protected, at the Other Parties expense, as directed by the Vodafone representative.


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# 9. Separation

Reference should be made to HSG47 to ensure that adequate separation is achieved. The following details outline the specific requirements of Vodafone and capture the HSG47 requirements.

## 9.1 High voltage cables

High voltage single core cables of 1000 V and above shall have a minimum clearance from Company Apparatus of 500 mm.

High voltage multi-core cables of 1000 V and above shall have a minimum clearance from Company Apparatus of 350 mm.

In exceptional circumstances where the above clearances cannot be maintained, the separating distance may be reduced to a minimum of 175 mm. In such circumstances, concrete, of a quality as directed by the Company Representative, must be inserted to completely fill the space between the High Voltage cable and the Company Apparatus, in accordance with the requirements of the Company Representative. Any further services must have a minimum clearance of 250 mm from the concrete.

## 9.2 Low voltage cables

Low voltage cables of less than 1000 V shall have a minimum clearance from Company Apparatus of 180 mm. In exceptional circumstances where the above clearance cannot be maintained, the separating distance may be reduced to a minimum of 75 mm. In such circumstances, concrete, of a quality as directed by the Company Representative, must be inserted to completely fill the space between the services, in accordance with the requirements of the Company Representative. Any further services must have a minimum clearance of 250 mm from the concrete.

## 9.3 Ancillary electrical apparatus

Street furniture such as lamp posts, traffic posts and other such ancillary electrical apparatus shall have a minimum clearance of 150 mm from underground Company Apparatus and 600mm clearance from above ground Company Apparatus.

## 9.4 High pressure gas mains and other Undertakers plant/equipment

High pressure gas mains shall have a minimum clearance of 450 mm from Company Apparatus. All other undertakers' plant and equipment, when running in parallel with Company Apparatus, shall have a minimum clearance of 200mm. Where gas mains cross Company Apparatus, the minimum clearance shall be 200mm. All other undertakers' plant and equipment, when running across Company Apparatus, shall have a minimum clearance of 100 mm. NJUG Volume 1, Guidelines on the positioning and colour coding of underground utilities' apparatus refers.

## 9.5 Other Undertakers plant

Other undertakers' plant and equipment which runs in parallel with Company Apparatus shall have a minimum clearance of 200mm. All other undertakers' plant and equipment when running across Company Apparatus shall have a minimum clearance of 100mm.

## 9.6 Tramways

Each separating distance shall be individually agreed with the Company Representative.


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# 10. Jointing chambers

### 10.1 Protection

Footway type jointing chambers are not designed to withstand carriageway loadings.

Where such chambers are liable to be placed at risk, either temporarily or permanently, from vehicular traffic or from the movement of plant and/or equipment, they will need to be adequately protected. Alternatively, they may have to be demolished and rebuilt to carriageway standards, at the Other Parties or Contractors expense under supervision of Vodafone representative.

All Vodafone jointing chambers and / or other access points shall be kept clear and unobstructed. Access for vehicles, winches, cable drums and / or any further equipment required by Vodafone for the maintenance of its apparatus, must be maintained at all reasonable times.

### 10.2 Access

The covers to Vodafone jointing chambers and / or apparatus shall only be lifted by means of the appropriate keys and under the direct supervision of a Vodafone representative. Other Parties or Contractors shall not enter any Vodafone jointing chamber and / or apparatus unless under the supervision of a Vodafone representative and in any case not before the mandatory gas test has been carried out in the presence of Vodafone representative and such checks have shown it to be safe to enter the Vodafone chamber and / or apparatus. The Other Parties or Contractors shall be given reasonable access to Vodafone apparatus and chambers when required.

# 11. Notification periods

Where the Other Parties or Contractors works or the movement of plant or equipment may endanger Vodafone apparatus, the Other Party or Contractor shall give the Vodafone at least 7 working days' notice in writing of the intended date to commence operations.

No excavation should be made without first consulting the relevant Vodafone apparatus layout drawings, which will be made available from the Vodafone agent Atkins Global on request and allowing 28 working days for processing the relevant drawings. However, should this not be possible, direct contact should be made to the Atkins Global Plant Enquiries Team as soon as possible to assess the situation.

When excavating, moving or backfilling (including use of Foamed Concrete for Reinstatements – FCR) around Vodafone apparatus, Vodafone shall be given adequate prior written notice of the Other Parties or Contractors intentions, in order that the works may be adequately supervised. Such notice shall not be less than 3 working days.

# 12. Excavation and backfill

All excavations adjacent to Vodafone apparatus are to be carried out by hand until the extent and or location of the Vodafone apparatus is known.

Use of mechanical borers and / or excavators shall not be used without the supervisory presence of a Vodafone representative or a given exemption.

Shuttering of the excavation or support to Vodafone apparatus, at the Other Parties or Contractors expense, shall be used as directed by the Vodafone representative.

At least 7 working days' notice must be given to Vodafone in order that any special protective measures which may be required to protect Vodafone apparatus, at the Other Parties or Contractors expense, when equipment such as pile driving, explosives, laser cutting high powered RF equipment or RF test gear, is to be used in conjunction with the works.


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Other Parties or Contractors are advised to refer to the National Joint Utilities Group publication: NJUG Volume 1- Guidelines on the Positioning and Colour Coding of Underground Utilities' Apparatus

# 13. Foam concrete

If foam concrete is being used as the backfill material, it shall not be used either above or within 500 mm of any Company Apparatus. A suitable material in accordance with the specification for the Reinstatement of Openings in Highways shall be substituted.

# 14. Attendance of Company Representative

If a situation requires the attendance on site of a Vodafone representative for a continuous period of more than 6 hours, suitable facilities shall be provided by the Other Party or Contractor, at their expense, to meet the office and ablution requirements. If a situation arises that requires urgent attention Vodafone will endeavour to attend site within 2 hours for all other occasions arising, 24 hours.

# 15. Damage reports

In the event of any damage whatsoever occurring to Vodafone apparatus, the Other Party or Contractor shall immediately inform Vodafone by contacting their 24/7 number , (for contact details please refer to Appendix A).

All relevant costs of any subsequent repair and / or removal of the Vodafone apparatus shall be charged to the Other Party or Contractor, irrespective of who affects the repair.

The above requirements do not relieve the Other Party or Contractor of any of their obligations under their contract.


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# 16. Appendix A – Street Works Team Contacts for Vodafone

| Function | Address | Phone | Email Address |
|---|---|---|---|
| Streetworks Team | Vodafone Damage Claims, Pavilion 4, 1-2 Berkeley Square , 99 Berkeley Street Glasgow G3 7HR | 0333 304 0759 | utilitiescentre@vodafone.com |
| Customer Complaints | n/a | 0333 304 0762 | n/a |
| Liability Claims<br>Or<br>Damage to<br>Vodafone Apparatus | Vodafone Damage Claims, Pavilion 4, 1-2 Berkeley Square , 99 Berkeley Street Glasgow G3 7HR | 0333 304 1104 | claims@vodafone.com |
| Diversionary Works C2 | Atkins Global,<br>The Hub,<br>500 Park Avenue,<br>Aztec West,<br>Bristol,<br>BS32 4RZ | T: 01454 662881 | osm.enquiries@atkinsglobal.com |
| Diversionary Works C3/C4 Escalations | Smale House, Floor 2E, 114 Great Suffolk Street, London, SE1 OSL | 02075281485 | c3requests@vodafone.com |
| Emergencies<br>24 Hour – Defects & Faults | n/a | 0333 304 0762 | n/a |
| Plant Enquiries<br>**Vodafone** inc: Cable & Wireless; Mercury Communications;<br>Thus Plc; Energis; Scottish Telecom; Your Comms;<br>Norweb Comms | Atkins Global,<br>The Hub,<br>500 Park Avenue,<br>Aztec West,<br>Bristol,<br>BS32 4RZ | T: 01454 662881 | osm.enquiries@atkinsglobal.com |


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# 17. Appendix B – What constitutes Vodafone Network

Vodafone own fibre network dedicated to business and residential users of telecommunications and has an international cable network that provides connectivity to 153 countries, either directly or indirectly through partners, reaching across the Atlantic Ocean, through Europe and on to India and throughout Asia. Spanning approximately 500,000 km in length, including interests in more than 69 major global cable systems, our next-generation network improves the quality and performance of telecommunications services through our use of advance optical and IP transmission.

In the UK & Ireland Vodafone's overall network includes the following legacy networks now owned through acquisitions or Company name changes.

Below are examples of what you could see on the streets and should be aware of:

vodafone

Vodafone Limited




Cable & Wireless U.K





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Mercury Communications Limited



Energis Communications Limited




Thus plc





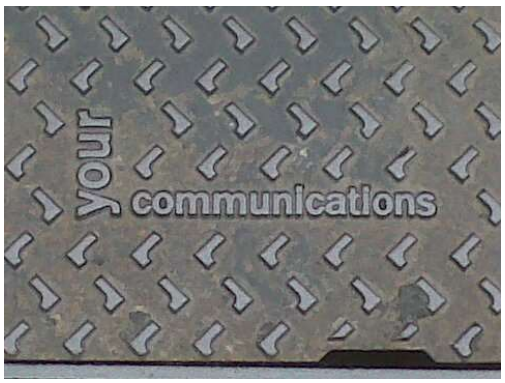
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Scottish Telecom




Your Communications





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Norweb Communications






Our apparatus is installed in roads and streets of UK and Ireland, however in some places is undistinguishable from other operators' apparatus, for example in City Centres where high quality infill modular paving chamber covers are found; some with labels and some without.

See below as examples:




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The apparatus shown here is now owned, maintained and still in operation by Vodafone and includes.

Vodafone Limited

Cable & Wireless U.K

Mercury Communications Limited

Energis Communications Limited

Thus plc, now Thus Group Holdings Limited

Your Communications Group Limited

Please see the Contact Details in Appendix A for Plant Enquiries and help on site.


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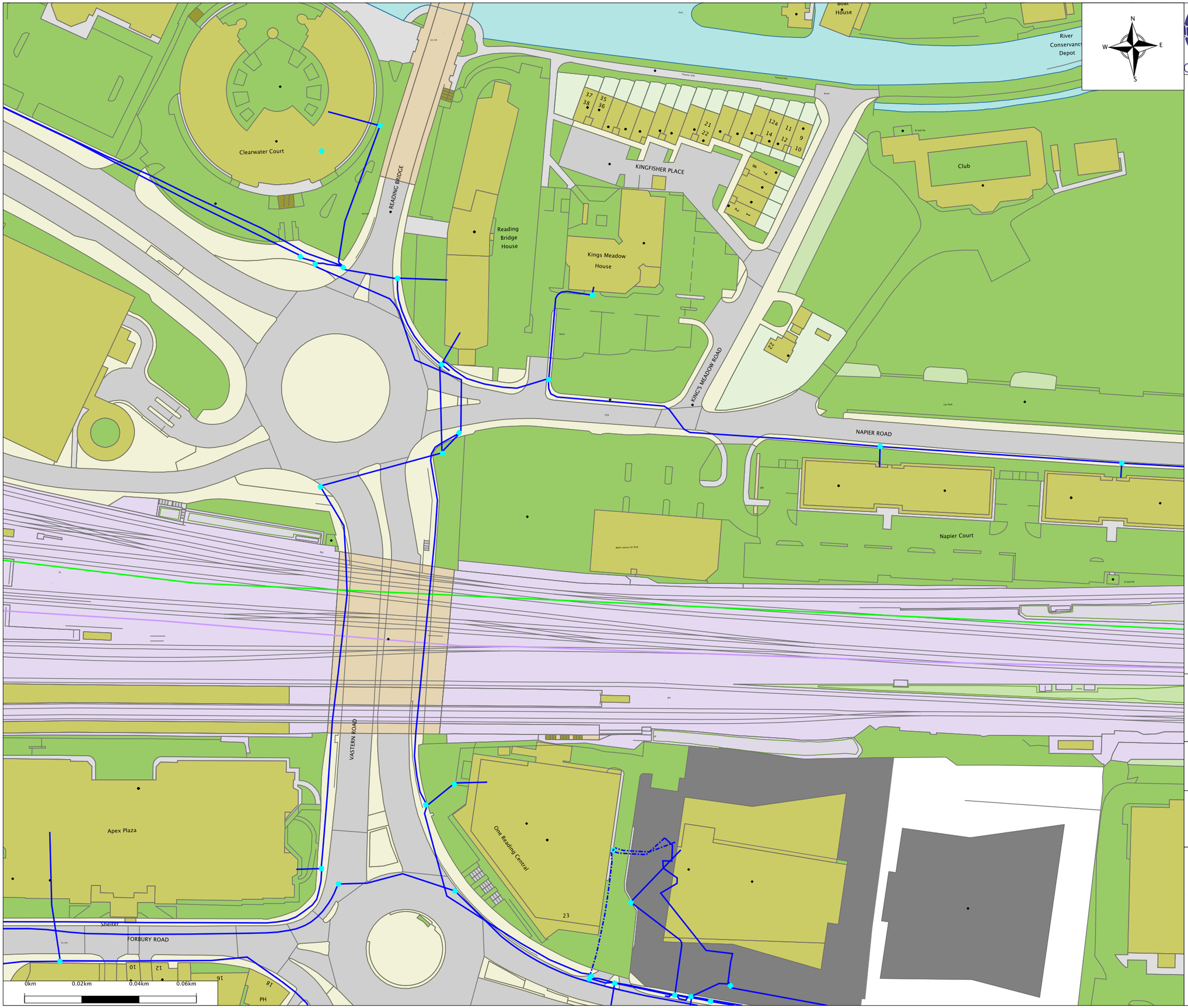
# 18. About this Document

| Content Owner |
| --- |
| |

| Changes since last version |
| --- |
| Reformatted using the current Vodafone template to include updated Contact Details . |

End of Document


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## Legend

- Access Chamber.Location Abandoned Footway Chamber
- Access Chamber.Location Active Carriageway Chamber
- Access Chamber.Location Active Footway Chamber
- Underground Route.Route Aband. - Owned
- Underground Route.Route Act. - Owned
- Underground Route.Route Act. - Leased
- Underground Route.Route Act. - Third Party

vodafone

Vodafone Limited (No01471587) registered office is at Vodafone House, The Connection, Newbury, Berkshire, RG142FN

| Plot Date : 05/02/2018 | Scale : 1:1250 |
|---|---|

This plan shows apparatus owned by members of the Vodafone Group of companies (including legacy telecommunication companies currently within the group)

Information with regard to such apparatus should always be obtained from Vodafone or its appointed agents.

Search Acumen Limited
1 Capital Place
Harlow
Essex
CM19 5AS

Virgin Media
Field Services
Units 1-12
Broad Lane
Mayfair Business Park
Bradford
Yorkshire
BD4 8PW

Tel: 0870 888 3116 Opt 2
Fax: 01268 468557

| | |
|---|---|
| Plant Enquiry Ref: | VM.196020 |
| Your Letter Date: | 16.01.2018 |
| Your Ref: | 92648713 |
| Date: | 18.01.2018 |

Dear Sir /Madam

Enquiry Location: LAND AT KINGS MEADOW ROAD, READING, RG1 8BN

Thank you for your enquiry regarding work at the above location.

Virgin Media and Viatel plant should not be affected by your proposed work and no strategic additions to our existing network are envisaged in the immediate future.

Should your request be in relation to a New Development and you require an estimate to be prepared for Virgin Media to service your proposed development, please submit this request for costs along with site drawings (scale 1:500) to:

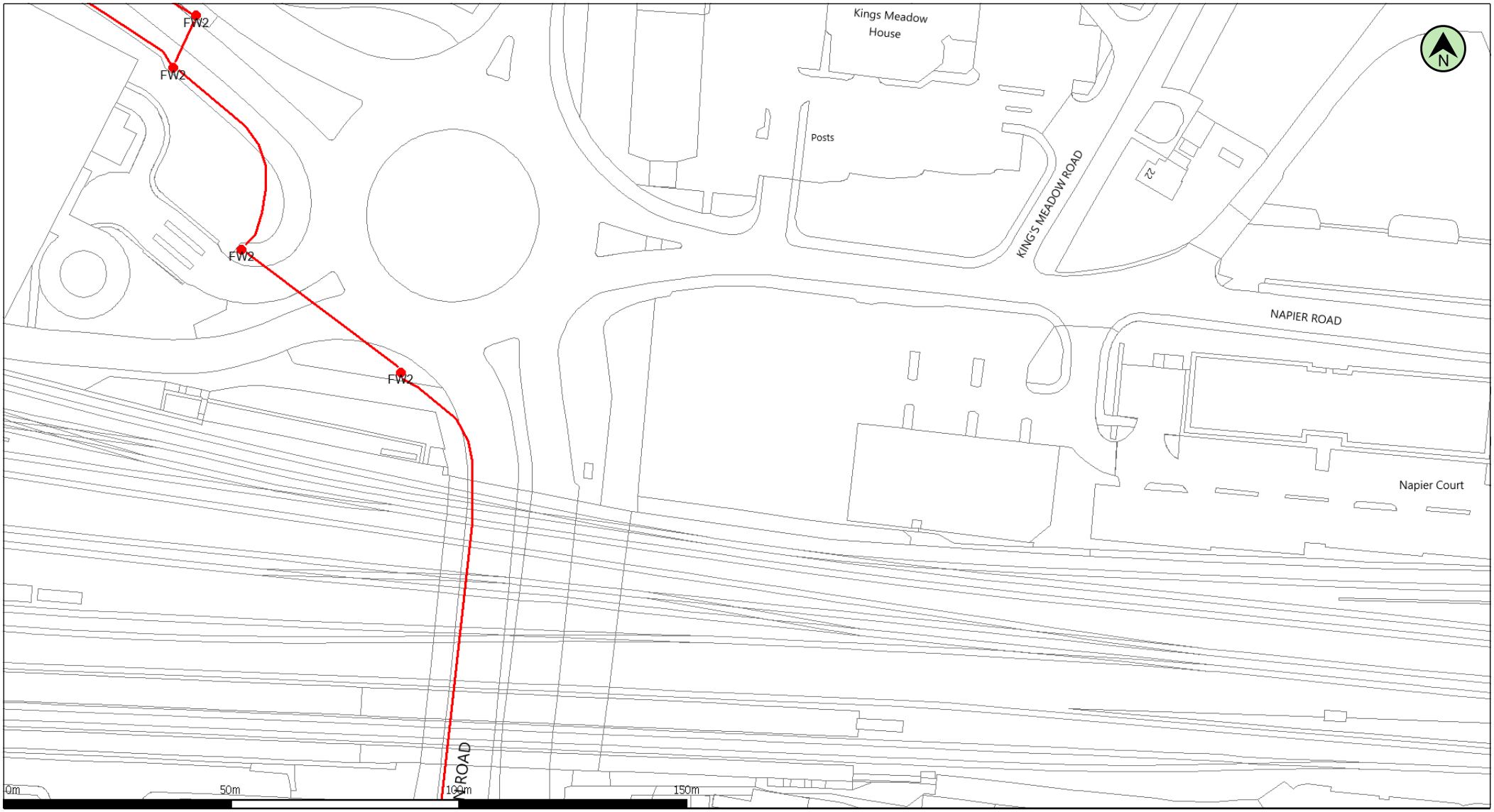
**Virgin Media**
New Build
Virgin Media
1 Dove Wynd
Strathclyde Business Park
Bellshill
ML4 3AL

This information is only valid on the date of issue. If your start date is 3 months or more from the date of this letter, please re-apply for updated information.

Yours faithfully,

National Plant Enquiries Team
email: plant.enquiries.team@virginmedia.co.uk

**Please note: National Plant Enquiries Team (Bradford) cover and respond to plant enquiries for all ex ntl:Telewest franchise areas.**




(c) Crown copyright and database rights 2018 Ordnance Survey 100019209 | Date: 18/01/18 | Scale: 1:1179 | Map Centre: 471814,173868 | Data updated: 07/01/18 | Telecoms Plan A4

Important Information - please read The purpose of this plan is to identify Virgin Media apparatus. We have tried to make it as accurate as possible but we cannot warrant its accuracy. In addition, we caution that within Virgin Media apparatus there may be instances where mains voltage power cables have been placed inside green, rather than black ducting. Further details can be found using the "Affected Postcodes.pdf", which can be downloaded from this website. Therefore, you must not rely solely on this plan if you are carrying out any excavation or other works in the vicinity of Virgin Media apparatus. The actual position of any underground service must be verified by cable detection equipment, etc. and established on site before any mechanical plant is used. Accordingly, unless it is due to the negligence of Virgin Media, its employees or agents, Virgin Media will not have any liability for any omissions or inaccuracies in the plan or for any loss or damage caused or arising from the use of and/or any reliance on this plan. This plan is produced by Virgin Media Limited (c) Crown copyright and database rights 2018 Ordnance Survey 100019209.

Duct, Trench | Chamber | Cabinet

stephy.jaison@virginmedia.co.uk

VM.196020

Miss Emma Constable
Search Acumen
The Maidstone Studios New Cut Road
Maidstone Kent
ME14 5NZ

Zayo Plant Protection Centre
c/o JSM Group Ltd
Plant Protection Department
Sterling House
Mutton Lane
Potters Bar
Herts, EN6 3AR

Date: 17/01/2018

Our Reference: 12015318
Your Reference: 9264879

Dear Miss Emma Constable,

## ZAYO GROUP UK LTD NOT AFFECTED C2 PRELIMINARY PLANT ENQUIRY

We acknowledge with thanks your request dated 17/01/2018 08:11:31 AM for information on the location of our services.

Having examined our records, we can confirm that ZAYO GROUP UK LTD has no owned apparatus within the search area of your enquiry detailed in the reference/location provided.

Please do not hesitate to contact us for further assistance.

Regards,

Zayo Group UK Ltd c/o JSM Group Ltd
JSM Plant Protection Department
T: 01992 655 919
zayoplantenquiries@jsmgroup.com




Date Requested: 17/01/2018

Requested by: Emma Constable

Company: Search Acumen

Job Reference: 12015318

Your Scheme/Reference: 9264879

ZAYO DUCT

or ZAYO CHAMBER

Dig Sites: Line Area

Scale on A4 paper: 1:1000

The information on this document is proprietary and shall not be used, copied, reproduced or disclosed in whole or in part without written consent of Zayo Group UK Ltd. Approximate location only is shown. To determine exact location a trial hole must be dug with a Zayo Group UK Ltd Supervisor present. Zayo Group UK Ltd and JSM Construction Ltd accept no liability for errors or omissions.

Linesearch before dig

**Protecting Lives, Cables & Pipes**

Warning: PDF designed for colour print only with no page scaling. This Information is given as a guide only and its accuracy cannot be guaranteed

N

In Emergency Only and if Zayo Plant or Cables damaged call: 0800 169 1646

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zayo GROUP

4th Floor Harmsworth House
13-15 Bouverie Street
London EC4Y 8DP

JSM

JSM Group Ltd
Sterling House
Mutton Lane, Potters Bar
Hertfordshire, EN6 3AR
T: 01992 788 019
zayoplantenquiries@jsmgroup.com

# CommercialDW
Drainage & Water Enquiry

Thames Water Property Searches

Search Acumen
Vinters Park
New Cut Road
Maidstone
ME14 5NZ

| | |
|---|---|
| Search address supplied | Land At, Kings Meadow Road, Reading, RG1 8BN |
| Your reference | SA926487-9264873 |
| Our reference | CDWS/CDWS Standard/2018_3722286 |
| Received date | 16 January 2018 |
| Search date | 19 January 2018 |

## Keeping you up-to-date

Identifying the status associated with drainage and water is a vital part of commercial property conveyancing. To get the most comprehensive view surrounding drainage and water, it is important to obtain an official search.

A CommercialDW Drainage & Water Enquiry will:

- Confirm to the buyer that a property is connected to the mains supply and mains drainage
- Bring to light any potential risk of internal sewer flooding
- Provide information about trade effluent consent licenses and invert and cover levels
- Find out if wayleaves and easements affect the property/site, and
- Offer £2 million, £5 million, or £10 million of indemnity against any potential risks.

Thames Water Utilities Ltd
Property Searches, PO Box 3189, Slough SL1 4WW
DX 151280 Slough 13

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COMMERCIALDW
DRAINAGE AND WATER ENQUIRY

searchcode

CommercialDW
Drainage & Water Enquiry

Thames Water Property Searches

| Question | | Summary Answer |
|---|---|---|
| **Maps, Wayleaves, Easements, Manhole Cover and Invert levels** | | |
| **1.1** | Where relevant, please include a copy of an extract from the public sewer map. | Map Provided |
| **1.2** | Where relevant, please include a copy of an extract from the map of waterworks. | Map Provided |
| **1.3** | Is there a wayleave/easement agreement giving Thames Water the right to lay or maintain assets or right of access to pass through private land in order to reach the Company's assets? | Yes |
| **1.4** | On the copy extract from the public sewer map, please show manhole cover, depth and invert levels where the information is available. | See Details |
| **Drainage** | | |
| **2.1** | Does foul water from the property drain to a public sewer? | See Details |
| **2.2** | Does surface water from the property drain to a public sewer? | See Details |
| **2.3** | Is a surface water drainage charge payable? | See Details |
| **2.4** | Does the public sewer map indicate any public sewer, disposal main or lateral drain within the boundaries of the property? | Yes |
| **2.4.1** | Does the public sewer map indicate any public pumping station or any other ancillary apparatus within the boundaries of the property? | No |
| **2.5** | Does the public sewer map indicate any public sewer within 30.48 metres (100 feet) of any buildings within the property? | See Details |
| **2.5.1** | Does the public sewer map indicate any public pumping station or any other ancillary apparatus within the 50metres of any buildings within the property? | No |
| **2.6** | Are any sewers or lateral drains serving, or which are proposed to serve the property, the subject of an existing adoption agreement or an application for such an agreement? | No |
| **2.7** | Has a sewerage undertaker approved or been consulted about any plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain? | No |
| **2.8** | Is the building which is or forms part of the property, at risk of internal flooding due to overloaded public sewers? | Not At Risk |
| **2.9** | Please state the distance from the property to the nearest boundary of the nearest sewage treatment works. | 3.302 Kilometres |
| **Water** | | |
| **3.1** | Is the property connected to mains water supply? | See Details |
| **3.2** | Are there any water mains, resource mains or discharge pipes within the boundaries of the property? | Yes |
| **3.3** | Is any water main or service pipe serving or which is proposed to serve the property, the subject of an existing adoption agreement or an application for such an agreement? | No |
| **3.4** | Is the property at risk of receiving low water pressure or flow? | See Details |
| **3.5** | What is the classification of the water supply for the property? | See Details |
| **3.6** | Please include details of the location of any water meter serving the property. | See Details |

| Question | | Summary Answer |
|---|---|---|
| **Charging** | | |
| **4.1.1** | Who are the sewerage undertakers for the area? | Thames Water |
| **4.1.2** | Who are the water undertakers for the area? | Thames Water |
| **4.2** | Who bills the property for sewerage services? | See Details |
| **4.3** | Who bills the property for water services? | See Details |
| **4.4** | Is there a meter installed at this property? | No |
| **4.5** | Are there any trade effluent consents relating to this site/property for disposal of chemically enhanced waste? | No |

CommercialDW
Drainage & Water Enquiry

Thames Water Property Searches

**Search address supplied:** Land At, Kings Meadow Road, Reading, RG1 8BN

Any new owner or occupier will need to contact Thames Water on 0800 316 9800 or log onto our website www.thameswater.co.uk and complete our online form to change the water and drainage services bills to their name.

The following records were searched in compiling this report: - the map of public sewers, the map of waterworks, water and sewer billing records, adoption of public sewer records, building over public sewer records, the register of properties subject to internal foul flooding, the register of properties subject to poor water pressure and the drinking water register.
Thames Water Utilities Ltd (TWUL) holds all of these.

TWUL, trading as Property Searches, are responsible in respect of the following:-

(i) any negligent or incorrect entry in the records searched

(ii) any negligent or incorrect interpretation of the records searched

(iii) any negligent or incorrect recording of that interpretation in the search report

(iv) and compensation payments

Please refer to the attached Terms & Conditions. Customers and clients are asked to note these terms, which govern the basis on which this Commercial Drainage and Water search is supplied.

COPSO
EXECUTIVE MEMBER

Thames Water Property Searches is an Executive member of CoPSO (Council of Property Search Organisations).

## Maps, Wayleaves, Easements, Manhole Cover and Invert levels

**1.1 Where relevant, please include a copy of an extract from the public sewer map.**

A copy of an extract of the public sewer map is included, showing the public sewers, disposal mains and lateral drains in the vicinity of the property.

**1.2 Where relevant, please include a copy of an extract from the map of waterworks.**

A copy of an extract of the map of waterworks is included, showing water mains, resource mains or discharge pipes in the vicinity of the property.

**1.3 Wayleaves & Easements**

**Is there a wayleave/easement agreement giving Thames Water the right to lay or maintain assets or right of access to pass through private land in order to reach the Company's assets?**

Yes, records indicate that there is a wayleave and/or an easement affecting this site. Please note that if you require further information about wayleaves and/or easements, these enquiries can not be dealt with over the phone and are dealt with by post only. To request more details about the wayleave and/or an easement please send a copy of your site plan, with the site clearly marked on it, together with copies of the Thames Water plans provided from this search to: Thames Water Property, Clearwater Court, Reading, RG1 8DB, and we will endeavour to respond within 14 days. Alternatively, for further information, please contact either treasa.walsh@thameswater.co.uk or linda.rushton@thameswater.co.uk.

**1.4 Manhole**

**On the copy extract from the public sewer map, please show manhole cover, depth and invert levels where the information is available.**

Details of any manhole cover and invert levels applicable to this site are enclosed.

## Drainage

**2.1 Does foul water from the property drain to a public sewer?**

The enquiry appears to relate to a plot of land or a recently built property. It is recommended that drainage proposals are checked with the developer.

**2.2 Does surface water from the property drain to a public sewer?**

Records indicate that this enquiry relates to a plot of land or a recently built property. It is recommended that the drainage proposals are checked with the developer. If the property was constructed after 6th April 2015 the Surface Water drainage may be served by a Sustainable Drainage System (SuDS). Further information may be available from the Developer.

**2.3 Is a surface water drainage charge payable?**

This enquiry appears to relate to a plot of land or a recently built property. It is recommended that charging proposals are checked with the developer. If the property was constructed after 6th April 2015 the Surface Water drainage may be served by a Sustainable Drainage System (SuDS). Further information may be available from the Developer.

**2.4 Does the public sewer map indicate any public sewer, disposal main or lateral drain within the boundary of the property?**

The public sewer map included indicates that there is a public sewer, disposal main or lateral drain within the boundaries of the property. However, from the 1st October 2011 there may be additional public sewers, disposal mains or lateral drains which are not recorded on the public sewer map but which may further prevent or restrict development of the property.

**2.4.1 Does the public sewer map indicate any public pumping station or any other ancillary apparatus within the boundaries of the property?**

The public sewer map included indicates that there is no public pumping station within the boundaries of the property.

**2.5 Does the public sewer map indicate any public sewer within 30.48 metres (100 feet) of any buildings within the property?**

The public sewer map indicates that there are no public sewers within 30.48 metres (100 feet) of any buildings within the property.
However, from the 1st October 2011 many private sewers were transferred into public ownership and may not be recorded on the public sewer map and it is our professional opinion that if the property is connected to a foul sewer it is likely that there will be a public sewer within 30.48 metres (100 feet) of any buildings within the property.

**2.5.1 Does the public sewer map indicate any public pumping station or any other ancillary apparatus within 50 metres of any buildings within the property?**

The public sewer map included indicates that there is no public pumping station within 50 metres of any buildings within the property.

**2.6 Are any sewers or lateral drains serving, or which are proposed to serve, the property the subject of an existing adoption agreement or an application for such an agreement?**

Records confirm that Foul sewers serving the development, of which the property forms part are not the subject of an existing adoption agreement or an application for such an agreement.

The Surface Water sewer(s) and/or Surface Water lateral drain(s) are not the subject of an adoption agreement.

**2.7 Has a sewerage undertaker approved or been consulted about any plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain?**

There are no records in relation to any approval or consultation about plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain. However, the sewerage undertaker might not be aware of a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain.

**2.8 Is the building which is or forms part of the property, at risk of internal flooding due to overloaded public sewers?**

The property is not recorded as being at risk of internal flooding due to overloaded public sewers.

From the 1st October 2011 most private sewers, disposal mains and lateral drains were transferred into public ownership It is therefore possible that a property may be at risk of internal flooding due to an overloaded public sewer which the sewerage undertaker is not aware of. For further information it is recommended that enquiries are made of the vendor.

**2.9 Please state the distance from the property to the nearest boundary of the nearest sewage treatment works.**

The nearest sewage treatment works is READING STW which is 3.302 kilometres to the south of the property.

## Water

**3.1 Is the property connected to mains water supply?**

The enquiry appears to relate to a plot of land or a recently built property. It is recommended that the water proposals are checked with the developer.

**3.2 Are there any water mains, resource mains or discharge pipes within the boundary of the property?**

The map of waterworks indicates that there are water mains, resource mains or discharge pipes within the boundaries of the property.

**3.3 Is any water main or service pipe serving, or which is proposed to serve, the property the subject of an existing adoption agreement or an application for such an agreement?**

Records confirm that water mains or service pipes serving the property are not the subject of an existing adoption agreement or an application for such an agreement.

**3.4 Is the property at risk of receiving low water pressure or flow?**

Records confirm that the property is not recorded on a register kept by the water undertaker as being at risk of receiving low water pressure or flow.

**3.5 What is the classification of the water supply for the property?**

The water supplied to the property has an average water Hardness of 128.13mg/l calcium which is defined as Hard by Thames Water.

**3.6 Please include details of the location of any water meter serving the property.**

This enquiry appears to relate to a plot of land or a recently built property. It is recommended that drainage proposals are checked with the developer.

## Charging

**4.1.1 – Who is responsible for providing the sewerage services for the property?**

Thames Water Utilities Limited, Clearwater Court, Reading, RG1 8DB is the sewerage undertaker for the area.

**4.1.2 – Who is responsible for providing the water services for the property?**

Thames Water Utilities Limited, Clearwater Court, Reading, RG1 8DB is the water undertaker for the area.

**4.2 Who bills the property for sewerage services?**

If you wish to know who bills the sewerage services for this property then you will need to contact the current owner. For a list of all potential retailers of sewerage services for the property please visit www.open-water.org.uk

**4.3 Who bills the property for water services?**

If you wish to know who bills the water services for this property then you will need to contact the current owner. For a list of all potential retailers of water services for the property please visit www.open-water.org.uk

**4.4 Is there a meter installed at this property?**

Records indicate that there is no meter installed at this property.

**4.5 Trade Effluent Consent**

**Are there any trade effluent consents relating to this site/property for disposal of chemically enhanced waste?**

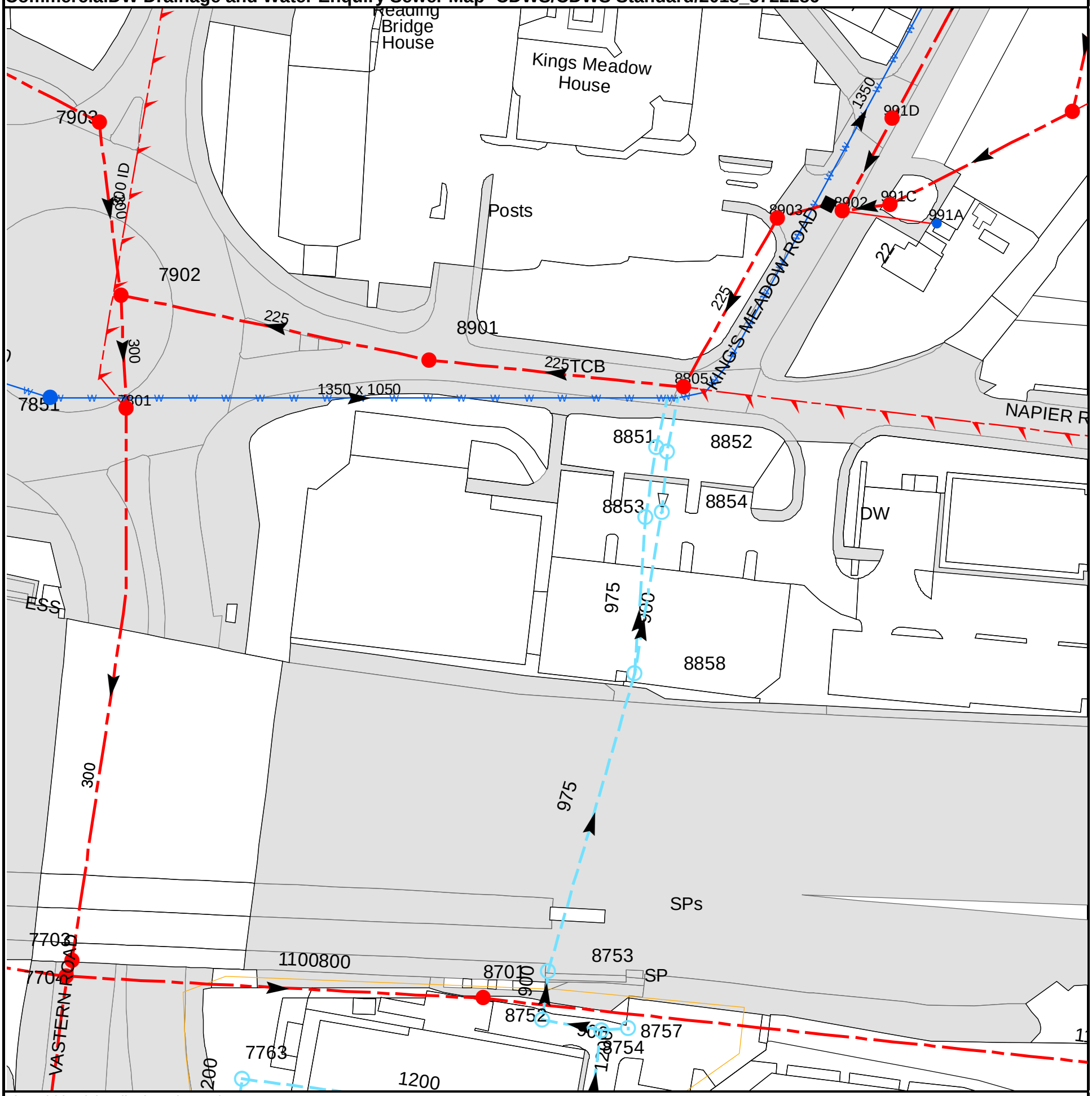
No.

**Payment for this Search**

**A charge will be added to your suppliers account.**

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information.

**CommercialDW Drainage and Water Enquiry Sewer Map- CDWS/CDWS Standard/2018_3722286**




The width of the displayed area is 200m

**The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.**

**Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.**

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates no survey information is available.

| Manhole Reference | Manhole Cover Level | Manhole Invert Level |
|---|---|---|
| 991E | 37.4 | 36.1 |
| 8754 | 38.6 | 35.88 |
| 8757 | n/a | n/a |
| 8752 | 38.23 | 35.81 |
| 8701 | n/a | n/a |
| 8753 | n/a | n/a |
| 8858 | 37.89 | 35.58 |
| 8853 | 37.81 | 35.64 |
| 8854 | 37.84 | 35.63 |
| 8852 | 37.89 | 35.61 |
| 8851 | 37.87 | 35.68 |
| 8805 | 37.53 | 35.21 |
| 991A | n/a | n/a |
| 8903 | 37.58 | 35.53 |
| 8902 | 37.29 | 36.21 |
| 991C | n/a | 35.81 |
| 991D | n/a | n/a |
| 7763 | 41 | 36.17 |
| 7704 | 36.66 | 33.93 |
| 7703 | 36.47 | 34.42 |
| 7801 | n/a | n/a |
| 7851 | 37.73 | 35.37 |
| 8901 | 37.57 | 35.01 |
| 7902 | 38.42 | 34.74 |
| 7903 | n/a | n/a |

**The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.**

# Sewer Key - Commercial Drainage and Water Enquiry

## Public Sewer Types (Operated & Maintained by Thames Water)

**Foul:** A sewer designed to convey waste water from domestic and industrial sources to a treatment works.

**Surface Water:** A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.

**Combined:** A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.

Trunk Surface Water

Trunk Foul

Storm Relief

Trunk Combined

Vent Pipe

Bio-solids (Sludge)

Proposed Thames Surface Water Sewer

Proposed Thames Water Foul Sewer

Gallery

Foul Rising Main

Surface Water Rising Main

Combined Rising Main

Sludge Rising Main

Proposed Thames Water Rising Main

Vacuum

## Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

Air Valve

Dam Chase

Fitting

Meter

Vent Column

## Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

Control Valve

Drop Pipe

Ancillary

Weir

## End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

Outfall

Undefined End

Inlet

## Other Symbols

Symbols used on maps which do not fall under other general categories

Public/Private Pumping Station

Change of characteristic indicator (C.O.C.I.)

Invert Level

Summit

**Areas**

Lines denoting areas of underground surveys, etc.

Agreement

Operational Site

Chamber

Tunnel

Conduit Bridge

## Other Sewer Types (Not Operated or Maintained by Thames Water)

Foul Sewer

Surface Water Sewer

Combined Sewer

Gulley

Culverted Watercourse

Proposed

Abandoned Sewer

**Notes:**

1) All levels associated with the plans are to Ordnance Datum Newlyn.

2) All measurements on the plans are metric.

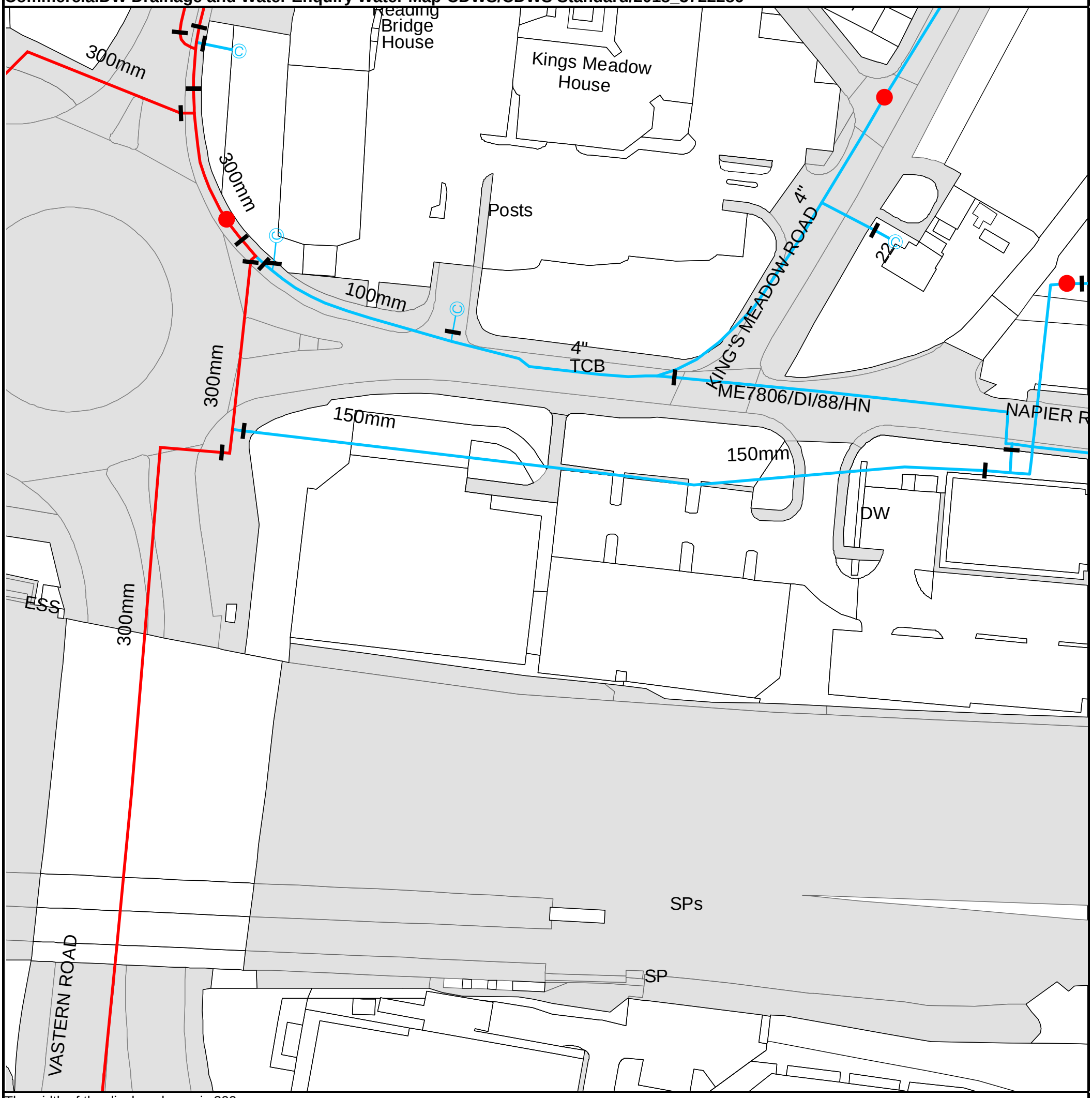
3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.

4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

5) 'na' or '0' on a manhole level indicates that data is unavailable.

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in milimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Searches on 0118 925 1504.

**CommercialDW Drainage and Water Enquiry Water Map-CDWS/CDWS Standard/2018_3722286**




The width of the displayed area is 200m

**The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.**

**Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.**

# Waterworks Key - Commercial Drainage and Water Enquiry

## Water Pipes (Operated & Maintained by Thames Water)

4"

**Distribution Main:** The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.

16"

**Trunk Main:** A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.

3" SUPPLY

**Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.

3" FIRE

**Fire Main:** Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.

3" METERED

**Metered Pipe:** A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.

**Transmission Tunnel:** A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.

**Proposed Main:** A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

| PIPE DIAMETER | DEPTH BELOW GROUND |
|---|---|
| Up to 300mm (12") | 900mm (3') |
| 300mm - 600mm (12" - 24") | 1100mm (3' 8") |
| 600mm and bigger (24" plus) | 1200mm (4') |

## Valves

- General Purpose Valve
- Air Valve
- Pressure Control Valve
- Customer Valve

## Hydrants

- Single Hydrant

## Meters

- Meter

## End Items

Symbol indicating what happens at the end of a water main.

- Blank Flange
- Capped End
- Emptying Pit
- Undefined End
- Manifold
- Customer Supply
- Fire Supply

## Operational Sites

- Booster Station
- Other
- Other (Proposed)
- Pumping Station
- Service Reservoir
- Shaft Inspection
- Treatment Works
- Unknown
- Water Tower

## Other Symbols

- Data Logger

## Other Water Pipes (Not Operated or Maintained by Thames Water)

**Other Water Company Main:** Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.

**Private Main:** Indiates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

For your guidance:

- Thames Water Property Searches Complaints Procedure:
  - Thames Water Property Searches offers a robust complaints procedure. Complaints can be made by telephone, in writing, by email (searches@thameswater.co.uk) or through our website (www.thameswater-propertysearches.co.uk)

As a minimum standard Thames Water Property Searches will:

- endeavour to resolve any contact or complaint at the time of receipt. If this isn't possible, we will advise of timescales;
- investigate and research the matter in detail to identify the issue raised (in some cases third party consultation will be required);
- provide a response to the customer within 10 working days of receipt of the complaint;
- provide compensation, if no response or acknowledgment that we are investigating the case is given within 10 working days of receipt of the complaint;
- keep you informed of the progress and, depending on the scale of investigation required, update with new timescales as necessary;
- provide an amended search, free of charge, if required;
- provide a refund if we find your complaint to be justified; take the necessary action within our power to put things right.

If you want us to liaise with a third party on your behalf, just let us know.

If you are still not satisfied with the outcome provided, we will refer the matter to a Senior Manager, for resolution, who will respond again within 5 working days.

If you remain dissatisfied with our final response you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). Please refer to the final page of the search for further details.

**Question 1.1**

For your guidance:

- The Water Industry Act 1991 defines Public Sewers as those which Thames Water have responsibility for. Other assets and rivers, watercourses, ponds, culverts or highway drains may be shown for information purposes only.
- The company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.
- Assets other than public sewers may be shown on the copy extract, for information.

**Question 1.2**

For your guidance:

- The “water mains” in this context are those, which are vested in and maintainable by the water company under statute.
- Assets other than public water mains may be shown on the plan, for information only.
- Water companies are not responsible for private supply pipes connecting the property to the public water main and do not hold details of these. These may pass through land outside of the control of the seller, or may be shared with adjacent properties. The buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

**Question 2.1**

For your guidance:

- Water companies are not responsible for any private drains that connect the property to the public sewerage system and do not hold details of these. The property owner will normally have sole responsibility for private drains serving the property. These may pass through land outside the control of the seller and the buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal.
- If foul water does not drain to the public sewerage system, the property may have private facilities in the form of a cesspit, septic tank or other type of treatment plant.
- An extract from the public sewer map is enclosed. This will show known public sewers in the vicinity of the property and it should be possible to estimate the likely length and route of any private drains and/or sewers connecting the property to the public sewerage system.

**Question 2.2**

For your guidance:

- Sewerage Undertakers are not responsible for any private drains that connect the property to the public sewerage system, and do not hold details of these.
- The property owner will normally have sole responsibility for private drains serving the property. These private drains may pass through land outside of the control of the seller and the buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal.
- In some cases, 'Sewerage Undertakers' records do not distinguish between foul and surface water connections to the public sewerage system.
- At the time of privatisation in 1989, Sewerage Undertakers were sold with poorly-kept records of sewerage infrastructure. The records did not always show which properties were connected for surface water drainage purposes. Accordingly, billing records have been used to provide an answer for this element of the drainage and water search.
- Due to the potential inadequacy of 'Sewerage Undertakers' infrastructure records with respect to surface water drainage, it is the customer's responsibility to inform the Sewerage Undertaker that they do not receive the surface water drainage service. If on inspection, the buyer finds that surface water from the property does not drain to a public sewer, then the property may be eligible for a rebate of the surface water drainage charge. If you wish to know who bills the sewerage services for this property then you will need to contact the current owner. For a list of all potential retailers of sewerage services for the property please visit www.open-water.org.uk.
- If surface water from the property does not drain to the public sewerage system, the property may have private facilities in the form of a soakaway or private connection to a watercourse.
- An extract from the public sewer map is enclosed. This will show known public sewers in the vicinity of the property and it should be possible to estimate the likely length and route of any private drains and/or sewers connecting the property to the public sewerage system.

**Question 2.3**

For your guidance:

- If surface water from the property drains to a public sewer, then a surface water drainage charge is payable.
- Where a surface water drainage charge is currently included in the property's water and sewerage bill but, on inspection, the buyer finds that surface water from the property does not drain to a public sewer, then the property may be eligible for a rebate of the surface water drainage charge. If you wish to know who bills the sewerage services for this property then you will need to contact the current owner. For a list of all potential retailers of sewerage services for the property please visit www.open-water.org.uk.

**Question 2.4**

For your guidance:

- Thames Water has a statutory right of access to carry out work on its assets. Employees of Thames Water or its contractors may, therefore, need to enter the property to carry out work.
- Please note if the property was constructed after 1st July 2011 any sewers and/or lateral drain within the boundary of the property are the responsibility of the householder.
- The approximate boundary of the property has been determined by reference to the Ordnance Survey Record or the map supplied.
- The presence of a public sewer running within the boundary of the property may restrict further development. The Company has a statutory right of access to carry out work on its assets, subject to notice. This may result in employees of the Company, or its contractors, needing to enter the property to carry out work.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

**Question 2.4.1**

For your guidance:

- Private pumping stations installed before 1st July 2011 will be transferred into the ownership of the sewerage undertaker.
- From the 1st October 2016 private pumping stations which serve more than one property have been transferred into public ownership but may not be recorded on the public sewer map.
- The approximate boundary of the property has been determined by reference to the Ordnance Survey Record or the map supplied.
- The presence of a public pumping station within the boundary of the property may restrict further development. The company has a statutory right of access to carry out work on its assets, subject to notice. This may result in employees of the company, or its contractors, needing to enter the property to carry out work.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

**Question 2.5**

For your guidance:

- This is because there are no buildings from which to measure the distance to any public sewers.
- The presence of a public sewer within 30.48 metres (100 feet) of the building(s) within the property can result in the local authority requiring a property to be connected to the public sewer.
- The measurement is estimated from the Ordnance Survey record, between the building(s) within the boundary of the property and the nearest public sewer.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

**Question 2.5.1**

For your guidance:

- Private pumping stations installed before 1st July 2011 will be transferred into the ownership of the sewerage undertaker.
- From the 1st October 2016 private pumping stations which serve more than one property have been transferred into public ownership but may not be recorded on the public sewer map.
- The presence of a public pumping station within 50 metres of the building(s) within the property can result in the local authority requiring a property to be connected to the public sewer.
- The measurement is estimated from the Ordnance Survey record, between the building(s) within the boundary of the property and the nearest public sewer.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an 'as constructed' record. It is recommended these details be checked with the developer.

**Question 2.6**

For your guidance:

- Any sewers and/or lateral drains within the boundary of the property are not the subject of an adoption agreement and remain the responsibility of the householder. Adoptable sewers are normally those situated in the public highway.
- This enquiry is of interest to purchasers who will want to know whether or not the property will be linked to a public sewer.
- Where the property is part of a very recent or ongoing development and the sewers are not the subject of an adoption application, buyers should consult with the developer to ascertain the extent of private drains and sewers for which they will hold maintenance and renewal liabilities.
- Final adoption is subject to the developer complying with the terms of the adoption agreement under Section 104 of the Water Industry Act 1991 and meeting the requirements of 'Sewers for Adoption' 6th Edition.

**Question 2.7**

For your guidance:

- From the 1st October 2011 most private sewers, disposal mains and lateral drains were transferred into public ownership and the sewerage undertaker may not have been approved or consulted about any plans to erect a building or extension on the property over or in the vicinity of these.
- Buildings or extensions erected over a sewer in contravention of building controls may have to be removed or altered.

**Question 2.8**

For your guidance:

- For reporting purposes buildings are restricted to those normally occupied and used for residential, public, commercial, business or industrial purposes.
- A sewer is "overloaded" when the flow from a storm is unable to pass through it due to a permanent problem (e.g. flat gradient, small diameter). Flooding as a result of temporary problems such as blockages, siltation, collapses and equipment or operational failures are excluded.
- "Internal flooding" from public sewers is defined as flooding, which enters a building or passes below a suspended floor. For reporting purposes, buildings are restricted to those normally occupied and used for residential, public, commercial, business or industrial purposes.
- "At Risk" properties are those that the water company is required to include in the Regulatory Register that is presented annually to the Director General of Water Services. These are defined as properties that have suffered, or are likely to suffer, internal flooding from public foul, combined or surface water sewers due to overloading of the sewerage system more frequently than the relevant reference period (either once or twice in ten years) as determined by the Company's reporting procedure.
- Flooding as a result of storm events proven to be exceptional and beyond the reference period of one in ten years are not included on the At Risk Register.
- Properties may be at risk of flooding but not included on the Register where flooding incidents have not been reported to the Company.
- Public Sewers are defined as those for which the Company holds statutory responsibility under the Water Industry Act 1991.
- It should be noted that flooding can occur from private sewers and drains which are not the responsibility of the Company. This report excludes flooding from private sewers and drains and the Company makes no comment upon this matter.
- For further information please contact Thames Water Utilities Ltd on Tel: 0800 316 9800 or website www.thameswater.co.uk

**Question 2.9**

For your guidance:

- The nearest sewage treatment works will not always be the sewage treatment works serving the catchment within which the property is situated.
- The sewerage undertaker's records were inspected to determine the nearest sewage treatment works.
- It should be noted that there may be a private sewage treatment works closer than the one detailed above that has not been identified.
- As a responsible utility operator, Thames Water Utilities Ltd seeks to manage the impact of odour from operational sewage works on the surrounding area. This is done in accordance with the Code of Practice on Odour Nuisance from Sewage Treatment Works issued via the Department of Environment, Food and Rural Affairs (DEFRA). This Code recognises that odour from sewage treatment works can have a detrimental impact on the quality of the local environment for those living close to works. However DEFRA also recognises that sewage treatment works provide important services to communities and are essential for maintaining standards in water quality and protecting aquatic based environments. For more information visit www.thameswater.co.uk

**Question 3.1**

For your guidance:

- The Company does not keep details of private supplies. The situation should be checked with the current owner of the property.

**Question 3.2**

For your guidance:

- The boundary of the property has been determined by reference to the plan supplied. Where a plan was not supplied, the Ordnance Survey Record was used. If the Water undertaker mentioned in Question 4.1.2 is not Thames Water Utilities Ltd the boundary of the property has been determined by the Ordnance Survey.
- The presence of a public water main within the boundary of the property may restrict further development within it. Water companies have a statutory right of access to carry out work on their assets, subject to notice. This may result in employees of the Company, or its contractors, needing to enter the property to carry out work.

**Question 3.3**

For your guidance:

- This enquiry is of interest to purchasers who will want to know whether or not the property will be linked to the mains water supply.

**Question 3.4**

For your guidance:

- "Low water pressure" means water pressure below the regulatory reference level, which is the minimum pressure when demand on the system is not abnormal.
- Water Companies are required to include in the Regulatory Register that is presented annually to the Director General of Water Services, properties receiving pressure below the reference level, provided that allowable exclusions do not apply (i.e. events which can cause pressure to temporarily fall below the reference level)
- The reference level of service is a flow of 9 litres/minute at a pressure of 10metres / head on the customer's side of the outside stop valve (osv). The reference level of service must be applied on the customer's side of a meter or any other company fittings that are on the customer's side of the main stop tap. The reference level applies to a single property. Where more than one property is served by a common service pipe, the flow assumed in the reference level must be appropriately increased to take account of the total number of properties served. For two properties, a flow of 18 litres/minute at a pressure of 10metres/head on the customers' side of the osv is appropriate. For three or more properties the appropriate flow should be calculated from the standard loadings provided in BS6700 or the Institute of Plumbing handbook.
- **Allowable exclusions** The Company is required to include in the Regulatory Register properties receiving pressure below the reference level, provided that allowable exclusions listed below do not apply.
- **Abnormal demand:** This exclusion is intended to cover abnormal peaks in demand and not the daily, weekly or monthly peaks in demand, which are normally expected. Companies should exclude from the reported figures properties which are affected by low pressure only on those days with the highest peak demands. During the report year companies may exclude, for each property, up to five days of low pressure caused by peak demand.
- **Planned maintenance:** Companies should not report low pressures caused by planned maintenance. It is not intended that companies identify the number of properties affected in each instance. However, companies must maintain sufficiently accurate records to verify that low-pressure incidents that are excluded because of planned maintenance are actually caused by maintenance.
- **One-off incidents:** This exclusion covers a number of causes of low pressure; mains bursts; failures of company equipment (such as pressure reducing valves or booster pumps); firefighting; and action by a third party. However, if problems of this type affect a property frequently, they cannot be classed as one-off events and further investigation will be required before they can be excluded.
- **Low-pressure incidents of short duration:** Properties affected by low pressure, which only occur for a short period, and for which there is evidence that incidents of a longer duration would not occur during the course of the year, may be excluded from the reported figures.
- Please contact your water undertaker mentioned in Question 4.1.2 if you require further information on water pressure.

**Question 3.5**

For your guidance:

- Water hardness can be expressed in various indices for example the hardness settings for dishwashers are commonly expressed in Clark's degrees, but check with the manufacturer as there are also other units. The following table shows the normal ranges of hardness.

| Thames Water Hardness Category | Calcium (mg/l) | Calcium Carbonate (mg/l) | English Clarke degrees | French degrees | General/ German degrees |
|---|---|---|---|---|---|
| Soft | 0 to 40 | 0 to 100 | 0 to 7 | 0 to 10 | 0 to 5.6 |
| Medium | 41 to 80 | 101 to 200 | 8 to 14 | 11 to 20 | 5.7 to 11.2 |
| Hard | Over 80 | Over 200 | Over 14 | Over 20 | over 11.2 |

- Please contact your water undertaker mentioned in Question 4.1.2 if you require further information on water hardness.

**Question 3.6**

For your guidance:

- Where a meter does not serve the property and the customer wishes to consider this method of charging, they should contact the current owner if they wish to know who bills the water services for this property. For a list of all potential retailers of water services for the property please visit www.open-water.org.uk.

**Question 4.4**

For your guidance:

- The Water Industry Act 1991 Section 150, The Water Resale Order 2001 provides protection for people who buy their water or sewerage services from a person or company instead of directly from a water or sewerage company. Details are available from the Office of Water Services (OFWAT) website is www.ofwat.gov.uk.
- The Company may install a meter at the premises where a buyer makes a change of use of the property or where the buyer uses water for:
  - Watering the garden other than by hand (this includes the use of sprinklers).
  - Automatically replenishing a pond or swimming pool with a capacity greater than 10,000 litres.
  - A bath with a capacity in excess of 230 litres.
  - A reverse osmosis unit
- Where a meter does not serve the property and the customer wishes to consider this method of charging, they should contact the current owner if they wish to know who bills the sewerage and water services for this property. For a list of all potential retailers of sewerage and water services for the property please visit www.open-water.org.uk.

**Question 4.5**

For your guidance:

- If a Trade effluent consent applies to the premises which are the subject of this search, it is for the applicant to satisfy itself as to the suitability of the consent for its client's requirements. The occupier of any trade premises in the area of a sewerage undertaker may discharge any trade effluent proceeding from those premises into the undertaker's public sewers if he does so with the undertaker's consent. If, in the case of any trade premises, any trade effluent is discharged without such consent or other authorisation, the occupier of the premises shall be guilty of an offence.
- Please note any existing consent is dependent on the business being carried out at the property and will not transfer automatically upon change of ownership.
- For further information regarding Trade Effluent consents please contact: Trade Effluent Control, Crossness STW, Belvedere Road, Abbey Wood London SE2 9AQ.

# CommercialDW Drainage and Water Enquiry Terms and Conditions

Customer and Clients are asked to note these terms, which govern the basis on which this CommercialDW Drainage & Water Enquiry is supplied

**Definitions**

'Client' means the person, company or body who is the intended recipient of the Report with an actual or potential interest in the Property.
'Company' means a water service company or their data service provider producing the Report.
'Customer' means the person, company, firm or other legal body placing the Order, either on their own behalf as Client, or, as an agent for a Client.
'Order' means any request completed by the Customer requesting the Report.
'Property' means the address or location supplied by the Customer in the Order.
'Report' means the drainage and/or water report prepared by The Company in respect of the Property.
'Thames Water" means Thames Water Utilities Limited registered in England and Wales under number 2366661 whose registered office is at Clearwater Court, Vastern Road, Reading, Berks, RG1 8DB;

**Agreement**

1 Thames Water agrees to supply the Report to the Customer and the Client subject to these terms. The scope and limitations of the Report are described in paragraph 2 of these terms. Where the Customer is acting as an agent for the Client then the Customer shall be responsible for bringing these terms to the attention of the Client. The Customer and Client agree that the placing of an Order for a Report indicates their acceptance of these terms.

**The Report**

2. Whilst Thames Water will use reasonable care and skill in producing the Report, it is provided to the Customer and the Client on the basis that they acknowledge and agree to the following:-

2.1 The information contained in the Report can change on a regular basis so Thames Water cannot be responsible to the Customer and the Client for any change in the information contained in the Report after the date on which the Report was produced and sent to the Client.

2.2 The Report does not give details about the actual state or condition of the Property nor should it be used or taken to indicate or exclude actual suitability or unsuitability of the Property for any particular purpose, or relied upon for determining saleability or value, or used as substitute for any physical investigation or inspection. Further advice and information from appropriate experts and professionals should always be obtained.

2.3 The information contained in the Report is based upon the accuracy, completeness and legibility of the address and other information supplied by the Customer or Client.

2.4 The Report provides information as to the location and connection of existing services and should not be relied on for any other purpose. The Report may contain opinions or general advice to the Customer and the Client and Thames Water cannot ensure that any such opinion or general advice is accurate, complete or valid and accepts no liability therefore.

2.5 The position and depth of apparatus shown on any maps attached to the Report are approximate, and are furnished as a general guide only, and no warranty as to its correctness is given or implied. The exact positions and depths should be obtained by excavation trial holes and the maps must not be relied on in the event of excavation or other works made in the vicinity of apparatus shown on any maps.

**Liability**

3 Thames Water shall not be liable to the Client for any failure, defect or non-performance of its obligations arising from any failure of, or defect in any machine, processing system or transmission link or anything beyond Thames Water's reasonable control or the acts or omissions of any party for whom Thames Water are not responsible.

3.1 Where the Customer sells this report to a Client (other than in the case of a bona fide legal adviser recharging the cost of the Report as a disbursement) Thames Water shall not in any circumstances (whether for breach of contract, negligence or any other tort, under statute or statutory duty or otherwise at all) be liable for any loss or damage whatsoever and the Customer shall indemnify Thames Water in respect of any claim by the Client.

3.2 Where a report is requested for an address falling within a geographical area where Thames Water and another Company separately provide Water and Sewerage Services, then it shall be deemed that liability for the information given by Thames Water or the Company as the case may be will remain with Thames Water or the Company as the case may be in respect of the accuracy of the information supplied. Where Thames Water is supplying information which has been provided to it by another Company for the purposes outlined in this agreement Thames Water will therefore not be liable in any way for the accuracy of that information and will supply that information as agent for the Company from which the information was obtained.

3.3 Except in respect of death or personal injury caused by negligence, or as expressly provided in these Terms:

3.3.1 The entire liability of Thames Water or the Company as the case may be in respect of all causes of action arising under or in connection with the Report (whether for breach of contract, negligence or any other tort, under statute or statutory duty or otherwise at all) shall not exceed £2,000,000 (two million pounds); and

3.3.2 Thames Water shall not in any circumstances (whether for breach of contract, negligence or any other tort, under statute or statutory duty or otherwise at all) be liable for any loss of profit, loss of goodwill, loss of reputation, loss of business or any indirect, special or consequential loss, damage or other claims, costs or expenses;

**Copyright and Confidentiality**

4. The Customer and the Client acknowledge that the Report is confidential and is intended for the personal use of the Client. The copyright and any other intellectual property rights in the Report shall remain the property of Thames Water or the Company as the case may be. No intellectual or other property rights are transferred or licensed to the Customer or the Client except to the extent expressly provided

4.1 The Customer or Client is entitled to make copies of the Report but is not permitted to copy any maps contained in, or attached to the Report

4.2 The maps contained in the Report are protected by Crown Copyright and must not be used for any purpose outside the context of the Report.

4.3 The Customer and Client agree (in respect of both the original and any copies made) to respect and not to alter any trademark, copyright notice or other property marking which appears on the Report.

**Payment**

5. Unless otherwise stated all prices are inclusive of VAT. The Customer shall pay for the price of the Report specified by Thames Water, without any set off, deduction or counterclaim.

5.1 Unless payment has been received in advance, Customers shall be invoiced for the agreed fee once their request has been processed. Any such invoice must be paid within 14 days. Where the Customer has an account with Thames Water, payment terms will be as agreed with Thames Water.

5.2 No payment shall be deemed to have been received until Thames Water has received cleared funds.

5.3 If the Customer fails to pay Thames Water any sum due Thames Water shall be entitled but not obliged to charge the Customer interest on the sum from the due date for payment at the annual rate of 2% above the base lending rate from time to time of Natwest Bank, accruing on a daily basis until payment is made. Thames Water reserves the right to claim interest under the Late Payment of Commercial Debts (Interest) Act 1998.

5.4 Thames Water reserves the right to increase fees on reasonable prior written notice at any time.

**Cancellations or Alterations**

6. Once an Order is placed, Thames Water shall not be under any obligation to accept any request to cancel that Order and payment for the Order shall still be due upon completion of the Report. In cases where an error has been made in the original Order (e.g. the Customer has supplied an incorrect address), the Customer will need to place a second Order, detailing the correct information, and shall be liable to pay a second charge in accordance with clause 5 above.

**Delivery**

7. On receiving your order the reports will be posted to you within 10 working days from receipt.

7.1 Delivery is subject to local post conditions and regulations. All items should arrive within 12 working days, but Thames Water cannot be held responsible should delays be caused by local post conditions, postal strikes or other causes beyond the control of Thames Water.

**General**

8. If any provision of these terms is or becomes invalid or unenforceable, it will be taken to be removed from the rest of these terms to the extent that it is invalid or unenforceable. No other provision of these terms shall be affected.

8.1 These terms shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts.

8.2 Nothing in this notice shall in any way restrict the Customer or Clients statutory or any other rights of access to the information contained in the Report.

**These Terms & Conditions are available in larger print for those with impaired vision.**

## Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of TWUL until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. TWUL does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL's terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at TWUL's discretion for increased administration costs.

A copy of TWUL's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800.

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to her at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the goods or services covered by this invoice falls under the regulation of the Water Industry Act 1991, and you remain dissatisfied you can refer your complaint to CC Water on 0845 039 2837 (it will cost you the same as a local call) or write to them at 11 Belgrave Road, London SW1V 1RB.

### Ways to pay your bill

| | | | |
|---|---|---|---|
| **By Post –** Cheque only, made payable to 'Thames Water Utilities Ltd' writing your Thames Water account number on the back. Please fill in the payment slip below and send it with your cheque to Thames Water Utilities Ltd., PO Box 223, Swindon SN38 2TW | **By BACS Payment** direct to our bank on account number 90478703, sort code 60-00-01 may be made. A remittance advice must be sent to Thames Water Utilities Ltd., PO Box 223, Swindon SN38 2TW. Or fax to 01793 424599 or email: cashoperations@thameswater.co.uk | **Telephone Banking** By calling your bank and quoting your invoice number and the Thames Water`s bank account number 90478703 and sort code 60-00-01 | **By Swift Transfer** You may make your payment via SWIFT by quoting **NWBKGB2L** together with our bank account number 90478703, sort code 60-00-01 and invoice number |

Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.

## Search Code

**IMPORTANT CONSUMER PROTECTION INFORMATION**

This search has been produced by Thames Water Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB, which is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

**The Search Code:**

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom
- sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practise and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

**The Code's core principles**

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports
- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

**Complaints**

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if he finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

**Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.**

**TPOs Contact Details**

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk

**PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE**

Scottish & Southern Electricity Networks

**e-mail: alison.anderson@sse.com**

Search Acumen Ltd
Box SA 100
1 Capital Place
Harlow
Essex

**Please Reply to:**
**Central Wayleave Registry**
**Henderson Road**
**Inverness**
**IV1 1SN**

**Tel: 01463 728080**

**30/01/2018**

**Our Ref:** W/AA/Reading
**Your Ref:** 92648711

Dear Sir/Madam

**LAND AT KINGS MEADOW ROAD, READING, RG1 8BN**

Thank you for your enquiry dated 18 January 2018 regarding the above site.

Please find attached our plans showing the approximate position of the High and Low Voltage equipment in the area. The majority of the cables fall under the Roads & Streetworks Act. Having carried out a search, I have enclosed a copy of the wayleave agreement which covers the 132kv cables within the boundary marked.

Should you require any further information, please do not hesitate to contact us again.

Yours faithfully

Alison Anderson

Alison Anderson
Central Wayleave Registry

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having its Registered Office at 55 Vastern Road Reading Berkshire RG1 8BU which are members of the SSE Group www.ssen.co.uk




# WARNING

ENVIRONMENTAL ISSUES IN PLOT AREA

EHV CABLES & LINES IN PLOT AREA

| NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID | | | | |
|---|---|---|---|---|
| | services | l.v. | h.v. | e.h.v. |
| FOOTPATH | 0.40m | 0.45m | 0.60m | 0.75m |
| ROAD CROSSING | 0.60m | 0.60m | 0.75m | 0.90m |

l.v./services – up to 1000V.
h.v. – over 1000V. to 11,000V.
e.h.v. – 22,000V. to 132,000V.

**WARNING**

There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depth of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work (available from the HSE)

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTE GS6 SHOULD BE CONSULTED. (AVAILABLE FROM THE HSE)

BASED UPON THE ORDNANCE SURVEY MAP WITH THE SANCTION OF THE CONTROLLER OF H.M. STATIONERY OFFICE. CROWN COPYRIGHT RESERVED.

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Registered Office: No. 1 Forbury Place,
43 Forbury Road, Reading, RG1 3JH

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Scottish & Southern Electricity Networks

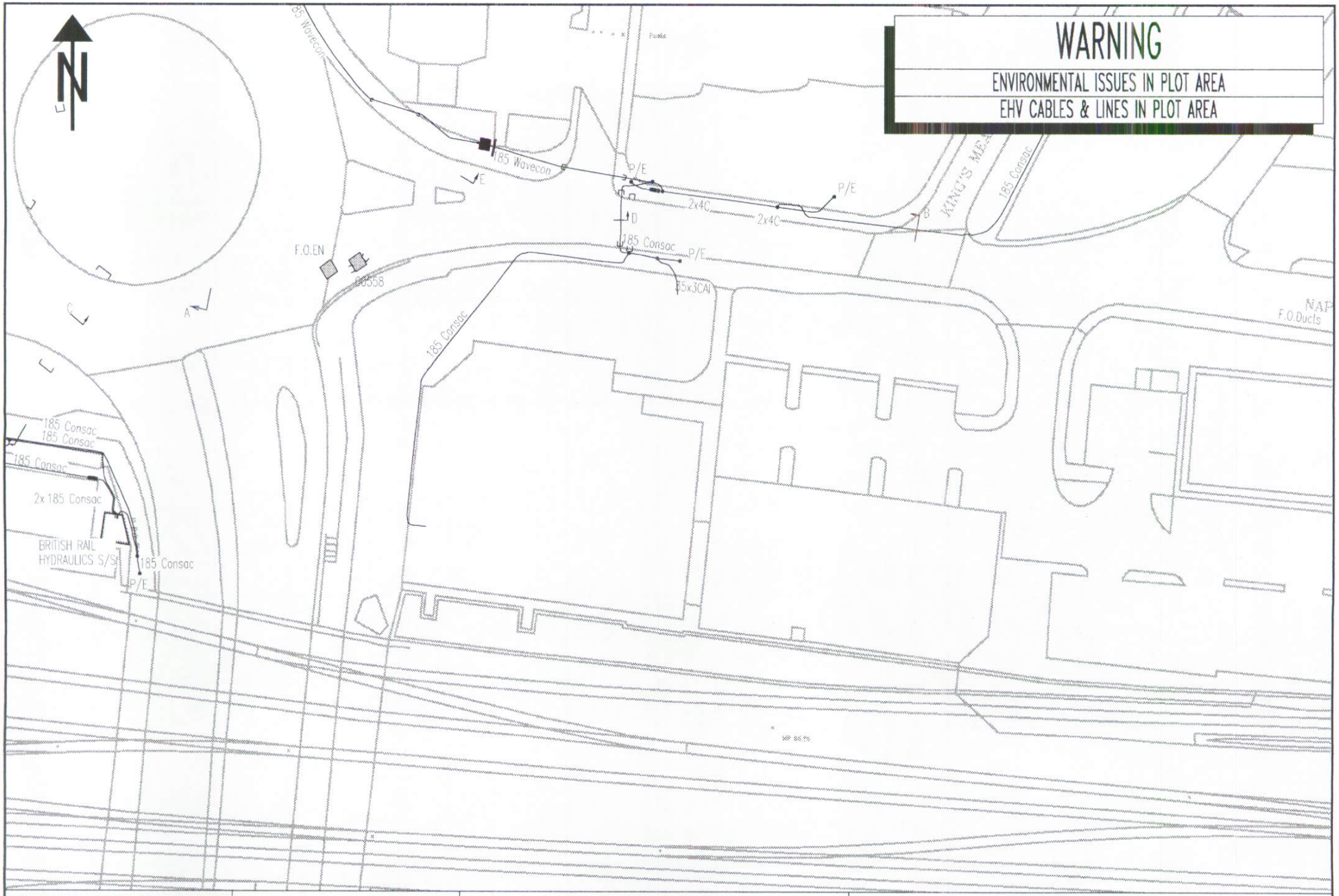
H.V. MAINS RECORD

READING
01189–126500

Grid Ref: SU71837386

Scale: 1:500

Date: 30/01/2018




# WARNING

ENVIRONMENTAL ISSUES IN PLOT AREA

EHV CABLES & LINES IN PLOT AREA

NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID

| | services | l.v. | h.v. | e.h.v. |
|---|---|---|---|---|
| FOOTPATH | | 0.40m | 0.45m | 0.60m | 0.75m |
| ROAD CROSSING | | 0.60m | 0.60m | 0.75m | 0.90m |

l.v./services – up to 1000V.
h.v. – over 1000V. to 11,000V.
e.h.v. – 22,000V. to 132,000V.

## WARNING

There may have been subsequent alterations to the surface levels. Trial holes must be taken to determine positions and depth of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work. (available from the HSE)

WHEN WORKING IN THE VICINITY OF OVERHEAD LINES THE HEALTH AND SAFETY GUIDANCE NOTE G26 SHOULD BE CONSULTED. (AVAILABLE FROM THE HSE)

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L.V. MAINS RECORD

READING
01189-126500

Grid Ref: SU71837386

Scale: 1:500

Date: 30/01/2018

Form 11.

# THE SOUTHERN ELECTRICITY BOARD.

TM109886

## Wayleave Consent.

ELECTRICITY (SUPPLY) ACTS, 1882-1936.
ELECTRICITY ACTS, 1947 AND 1957.

I/We, NATIONAL CARRIERS LIMITED,

of THE MERTON CENTRE, 45, ST. PETER'S STREET, BEDFORD, MK40 2UB.

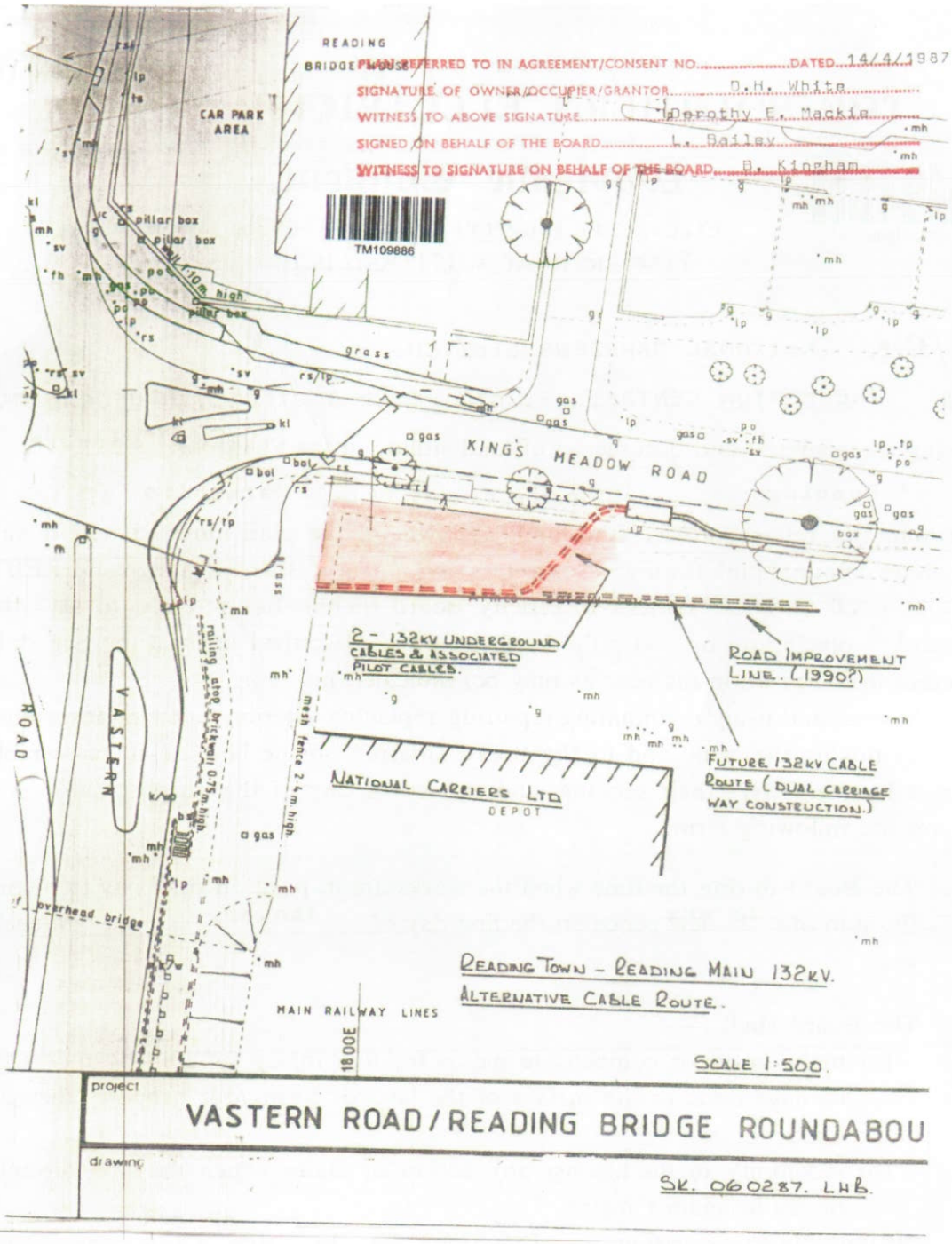
being the owner(s) and occupier(s) of land situate in the ~~Parish of~~ Borough of Reading in the County of Berkshire (hereinafter referred to as "the land") shown on the plan annexed hereto and thereon coloured pink for myself/ourselves my/our successors and assigns HEREBY CONSENT to The Southern Electricity Board (hereinafter referred to as " the Board ") placing on or under the land the works described in the First Schedule hereto in the position (as near as may be) indicated in red on the plan and using maintaining repairing replacing altering renewing inspecting and removing the same and to the Board entering on the land at all reasonable times by themselves their servants and agents for any of the purposes aforesaid upon the following terms :—

1. The Board during the time when the works are in position shall pay to me/us the sum of 30 ~~xxx~~ new pence on the first day of January in each year.

2. The Board shall :—
   (a) make good or compensate me/us for any injury suffered by me/us or damage done to the surface of the land or to my/our property thereon and
   (b) indemnify me/us against any action or claim which may be brought or made against me/us

   attributable to or arising out of anything done by virtue of this consent and not occasioned by my/our negligence or the negligence of my/our servants or agents PROVIDED THAT I/we shall as soon as practicable give notice of any such injury or damage suffered by me/us or any such action or claim brought made or threatened against me/us and shall not settle adjust compromise or defend such action or claim without the consent of the Board PROVIDED FURTHER that the Board may take over the conduct of any such action or claim in my/our name and I/we shall give such information and assistance as the Board may reasonably require.

3. This Consent shall remain in force until determined by either party giving to the other party at any time twelve months' previous notice in writing in that behalf subject to the rights of the Board under section 11 of the Electricity (Supply) Act, 1922.


READING
BRIDGE PLANS REFERRED TO IN AGREEMENT/CONSENT NO. DATED 14/4/1987
SIGNATURE OF OWNER/OCCUPIER/GRANTOR D.H. White
WITNESS TO ABOVE SIGNATURE Dorothy E. Mackie
SIGNED ON BEHALF OF THE BOARD L. Bailey
WITNESS TO SIGNATURE ON BEHALF OF THE BOARD B. Kingham
TM109886
CAR PARK AREA
pillar box
pillar box
wall 1.10m high
pillar box
grass
KING'S MEADOW ROAD
2 - 132kV UNDERGROUND CABLES & ASSOCIATED PILOT CABLES.
ROAD IMPROVEMENT LINE. (1990?)
FUTURE 132kV CABLE ROUTE (DUAL CARRIAGE WAY CONSTRUCTION.)
NATIONAL CARRIERS LTD
DEPOT
VASTERN ROAD
railing, shop brickwall 0.75m high
mesh fence 2.4m high
overhead bridge
MAIN RAILWAY LINES
1800E
READING TOWN - READING MAIN 132kV.
ALTERNATIVE CABLE ROUTE.
SCALE 1:500.
project
VASTERN ROAD/READING BRIDGE ROUNDABOU
drawing
SK. 060287. LHB.

Reading Town - Reading Main 132kV Cables.

SCHEDULE.

DESCRIPTION OF WORKS.

Two 132kV underground cables with associated pilot cables laid on route shown on the attached plan.

Approximately 35 metres of route length at 15p per 25 metres or part thereof.

Annual Payment 30 pence.

DATED this 14th day of April 1987

SIGNED by the said David Harry White on behalf of National Carriers Limited. D.H. White.

in the presence of—

Name of Witness Dorothy E. Mackie,

Address 8, The Richyard,

Ashwell, Herts.

Occupation Private Secretary.

All communications concerning this consent should be addressed to :—

~~The District~~ Manager,

The Southern Electricity Board,

Kennet Division

7 Oxford Road,

Newbury,

Berks.

RG13 1PE.

(REV 6/71)00721

Southern Electricity Board. Sites & Wayleaves (North), Newbury Group.

Reading Town - Reading Main ..... 132kV ~~xxxx~~ Cable

ACCEPTANCE NOTE.

Grantors Reference No. W/N/036/245

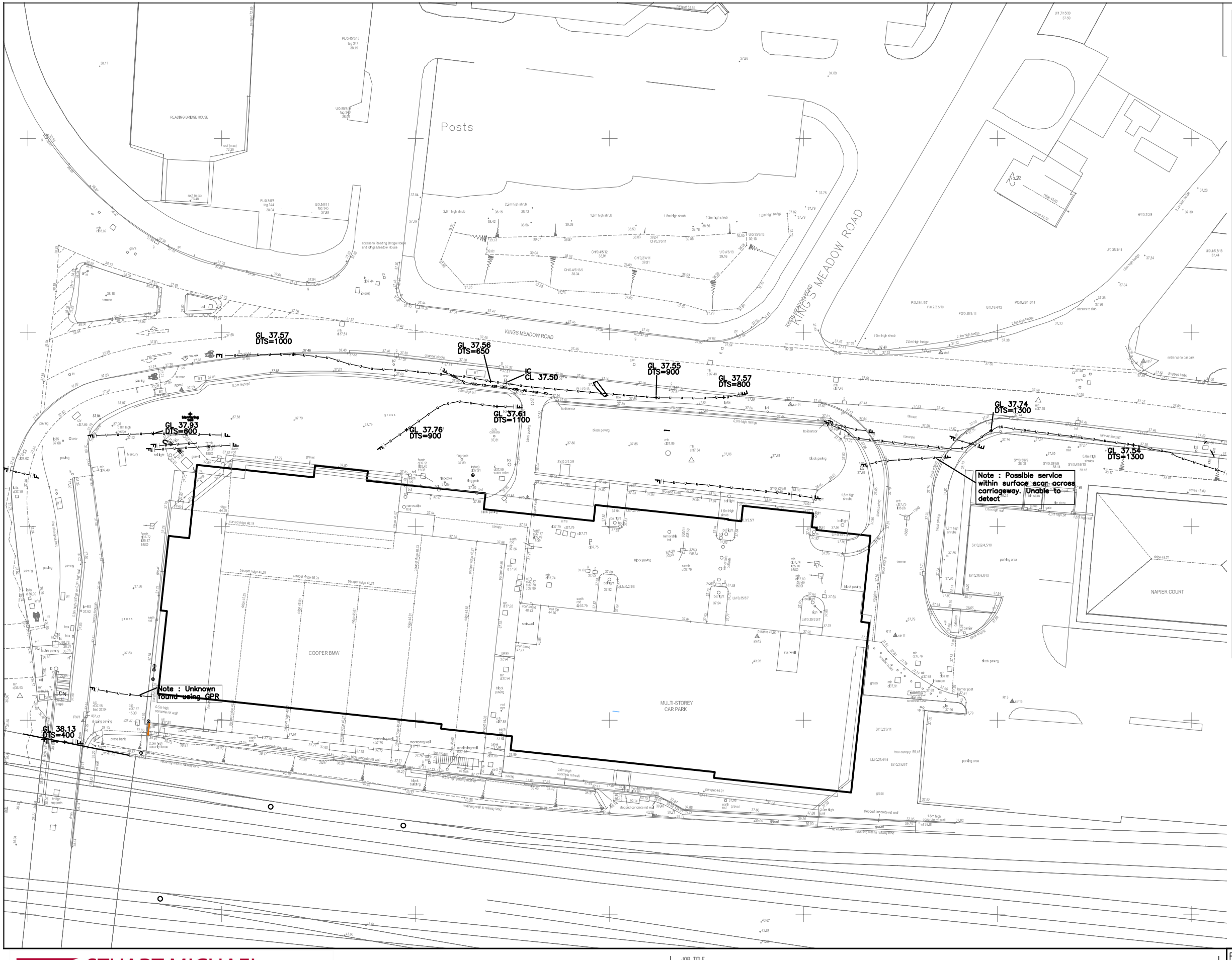
Approx. 35 metres cable.
Wayleave Annual Payment

We ~~I~~ agree to accept the sum equivalent to twenty times the annual payment in full satisfaction of any claim we ~~I~~ may have for such payment during the currency of the consent/agreement.

Name ...NATIONAL CARRIERS LTD. Signed .....

Address THE MERTON CENTRE, Date 15th July 1987
45 ST. PETERS STREET,
BEDFORD,
MK40 2UB.

Location of Works. NATIONAL CARRIERS LTD., SITE KINGS MEADOW ROAD, READING, BERKS.




## SUMO SERVICES LEGEND

### UTILITY LINETYPES

| | | | |
|---|---|---|---|
| British Telecom | BT BT BT | Gas | G G G |
| Cable Television | CATV CATV | Heating Pipes | HP HP HP |
| Closed Circuit Television | CCTV CCTV | HV Cables | HV HV HV |
| Communications | C C C | Multiple Services Route | MSR MSR |
| Drainage | DR DR DR | Oil | OIL OIL OIL |
| Drainage – Combined Water | CW CW CW | Oxygen | OXY OXY |
| Drainage – Foul Water | FW FW FW | Street Lighting | SL SL SL |
| Drainage – Storm Water | SW SW SW | Traffic Signal Loop | TSL TSL TSL |
| Empty Duct | ED ED ED | Unknown | U U U |
| Electric | E E E | Underground Cable | UC UC UC |
| Fire Hydrant Main | FH FH FH | Underground Pipeline | UPL UPL UPL |
| Fibre Optic | FO FO FO | Water | W W W |
| Fuel | FUEL FUEL | High Voltage Cables | HV HV HV |

Assumed Service Route – See Utility Survey Notes (Using abbreviation of service and colour as above)

### UTILITY SURVEY INFORMATION

| | | | |
|---|---|---|---|
| Area of Concern | ACC ACC ACC | Unable to Survey | UTS |
| Contracted Survey Area | SVY AREA | Unable to Lift (cover) | UTL |
| Depth to Top of Service | (mm) DTS=400 | Unable to Trace | UT |
| End of Trace | EOT | Unable to Trace (due to blockage) | UTB |
| Previous Survey Area | PREVIOUS | Unable to Trace Further | UTF |

### TOPOGRAPHIC & UTILITY DETAILS

| | | | |
|---|---|---|---|
| Barrier (symbol – sized) | | Post (symbol) | PO |
| Belisha Beacon (symbol) | | Rain Water Pipe (symbol) | RWP |
| Bollard (symbol) | B | Road Sign (symbol) | RS |
| Borehole (symbol) | | Rodding Eye (symbol) | RE |
| British Telecoms IC | BTMH | Sapling (symbol) | |
| Building (incomplete detail) | | Sign Post (symbol) | SP |
| Cable into Ground (symbol) | | Soak Away | SA |
| Cable TV Box (symbol) | | Spot Light (symbol) | SL |
| CCTV Camera | | Spot Height | 50.00 |
| Cover Level in metres | CL 50.00 | Stop Cock (symbol) | |
| Direction of Flow (Drainage) | | Stop Valve (symbol) | SV |
| Distribution Board (symbol) | DB | Survey Station (symbol) | |
| Earth Rod (symbol) | ER | Telephone Pole (symbol) | TP |
| Electric Cabinet | EC | Telephone Box (symbol) | |
| Electric Pole (symbol) | EP | Traffic Bollard (symbol) | |
| Electric Sign (symbol) | | | |
| Embankment | | Tree (dimensions in metres – e.g.) | |
| Feeder Pillar | FP | Diameter at 1mh: (bole) | Dia: 0.3 |
| Fire Hydrant | FH | Height: | Ht: 7.5 |
| Flag Pole (symbol) | FP | Spread: | Hs: 10.2 |
| Flat Roof Level in metres | FRL 50.00 | Species: | Maple |
| Flood Light (symbol) | FL | Traffic Light (symbol) | |
| Gas Valve (symbol) | GV | Unknown Valve (symbol) | UV |
| Gate | Single Double | Vent Pipe (symbol) | VP |
| Ground Level in metres | GL 50.00 | Wall | |
| Gulley | GU | Waste Pipe (symbol) | WP |
| Inspection Cover | IC | Water Meter (symbol) | WM |
| Invert Level in metres | IL 50.00 | Water Valve (symbol) | WV |
| Junction Box – BT | JB BT | Building Canopy | |
| Junction Box – Comms | JB COM | Crash Barrier | |
| Junction Box – Elec | JB | Drainage Channel | DC DC DC |
| Lamp Post (symbol – sized) | LP | Drop Kerb (level in metres) | 50.00 |
| Light Bollard (symbol) | LB | Edge Detail (level in metres) | 50.00 |
| Light in ground (symbol) | | Footpath (level in metres) | 50.00 |
| Manhole | MH | Fence | |
| Manhole Capped Port | | Heras Fence | HERAS |
| Parapet Level in metres | PL 50.00 | Kerb channel (level in metres) | 50.00 |
| Pipe Diameter in millimetres | ø100 | Kerb top (level in metres) | 50.00 |
| | | Overhead Service Line | OHS |
| | | Pedestrian Railing | |


STUART MICHAEL ASSOCIATES
CONSULTING ENGINEERS

**Stuart Michael Associates Ltd**
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**F:** 01635 861 715 **w:** www.stuartmichael.co.uk


JOB TITLE

# THAMES QUARTER, READING

DRAWING TITLE

# DEVELOPABLE AREA WITHIN CONSTRAINTS UNKNOWN

| Rev | Description | Drn | Chk | Date |
|---|---|---|---|---|

REVISIONS

| Preliminary | | Approval | | Tender | | Const. | |
|---|---|---|---|---|---|---|---|

DRAWING STATUS

| DATE | DRAWN | CHECKED | ISSUE CHECKBOX |
|---|---|---|---|
| AUGUST '17 | JPM | SWA | |

| DRAWING No. | REV | SCALE | |
|---|---|---|---|
| 5277.057 | . | 1:500 | @ A3 |


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# APPENDIX 5

## F10 FORMS

To be kept on file and also positioned on the Site Notice Board

HSE

Health and Safety Executive

## Notification of construction project

| | | | |
|---|---|---|---|
| **Notification No** | 141B7EDF95 | **Date Submitted** | 12/02/2018 12:43:39 |

| | |
|---|---|
| **Notification type** | **This is a NEW notification** |

### About the location of the site

| | |
|---|---|
| **Address of the construction site** | Land previously BMW Cooper Reading<br>Kings Meadow Road<br>READING<br>RG1 8BN |
| **In which local authority is the site address (Country, Geographical Area and Local Authority)?** | England, Berkshire, Reading Unitary Authority |

### About the project

| | | | |
|---|---|---|---|
| **Description of project** | Demolition/Dismantling - Other | | |
| **Time Allowed by Client (in weeks)** | 6 | | |
| **Start date** | 26/02/2018 | **Duration (in weeks)** | 6 |
| **No of people on site** | 10 | **No of contractors on site** | 1 |
| **Description of the construction work** | Demolition of existing multi storey car park and the erection of a Part 12 storey, part 23 storey building comprising 315 apartments with external amenity space and landscaping. | | |

### About those involved in the project

| | | | |
|---|---|---|---|
| **Role** | Principal Contractor | **Name** | J Mould (Reading) |
| **Email** | Richard.harris@jmouldreading.co.uk | **Phone no** | 0118 957 5555 |
| **Address** | Hydecrete Pit<br>Pingewood Road, North<br>Burghfield Bridge<br>READING<br>RG30 3XN<br>England | | |

| | | | |
|---|---|---|---|
| **Role** | Client | **Name** | Watkin Jones Homes |
| **Email** | sean.curran@watkinjones.com | **Phone no** | 01745 538200 |
| **Address** | Unit 55 Ffordd William Morgan<br>St Asaph Business Park<br>ST ASAPH<br>Denbighshire<br>LL17 0JG<br>Wales | | |

| | | | |
|---|---|---|---|
| **Role** | Designer | **Name** | Tier Consult |
| **Email** | | **Phone no** | |

| | |
|---|---|
| **Address** | Richmond House<br>Sandpiper Court<br>Chester Business Park<br>CHESTER<br>CH4 9QZ<br>England |

| | | | |
|---|---|---|---|
| **Role** | Principal Designer | **Name** | Watkin Jones Homes |
| **Email** | Miles.littlewood@watkinjones.com | **Phone no** | 01745 538200 |
| **Address** | Unit 55 Ffordd William Morgan<br>ST Asaph Business Park<br>ST ASAPH<br>Denbighshire<br>LL17 0JG<br>Wales | | |

**Declaration details**

| **Declaration** | | | |
|---|---|---|---|
| As client for this project, I hereby declare that I am either the client for this project and am aware of my duties under the Construction (Design and Management) Regulations 2015 (S.I. 2015.51), or have been asked by the client to notify on their behalf and they have confirmed they are aware of their duties. | | | |
| **Name** | Colin.Proffit-Jones | | |
| **Date** | 12/02/2018 | **Role** | Group H&S Advisor |
| **Confirmation Email** | Colin.proffit-jones@watkinjones.com | | |

---

**Client Signature** (Can be used for your own records, ONLY if required)

**Declaration (as stated above)**

**Name:**

**Declaration Signature:**

**Date:**

HSE

Health and Safety Executive

## Notification of construction project

| | | | |
|---|---|---|---|
| **Notification No** | 0089A7E6D9 | **Date Submitted** | 12/02/2018 14:01:34 |

| | |
|---|---|
| **Notification type** | **This is a NEW notification** |

### About the location of the site

| | |
|---|---|
| **Address of the construction site** | Land previously BMW Cooper Reading<br>Kings Meadow Road<br>READING<br>RG1 8BN |
| **In which local authority is the site address (Country, Geographical Area and Local Authority)?** | England, Berkshire, Reading Unitary Authority |

### About the project

| | | | |
|---|---|---|---|
| **Description of project** | New Build - Residential - Other | | |
| **Time Allowed by Client (in weeks)** | 6 | | |
| **Start date** | 10/04/2018 | **Duration (in weeks)** | 170 |
| **No of people on site** | 150 | **No of contractors on site** | 25 |
| **Description of the construction work** | The construction of a part 12 storey, part 23 storey building comprising 315 apartments with externally clad facade, external amenity space and landscaping. | | |

### About those involved in the project

| | | | |
|---|---|---|---|
| **Role** | Principal Designer | **Name** | Watkin Jones Homes |
| **Email** | Miles.littlewood@watkinjones.com | **Phone no** | 01745 538200 |
| **Address** | Unit 55 Ffordd William Morgan<br>St Asaph Business Park<br>ST ASAPH<br>Denbighshire<br>LL17 0JG<br>Wales | | |

| | | | |
|---|---|---|---|
| **Role** | Principal Contractor | **Name** | Watkin Jones Homes |
| **Email** | Sean.curran@watkinjones.com | **Phone no** | 01745 538200 |
| **Address** | Unit 55 Ffordd William Morgan<br>St Asaph Business Park<br>ST ASAPH<br>LL17 0JG<br>Wales | | |

| | | | |
|---|---|---|---|
| **Role** | Client | **Name** | Watkin Jones Homes |
| **Email** | Berwyn.evans@watkinjones.com | **Phone no** | 01745 538200 |

| | |
|---|---|
| **Address** | Unit 55 Ffordd William Morgan<br>St Asaph Business Park<br>ST ASAPH<br>LL17 0JG<br>Wales |

| | | | |
|---|---|---|---|
| **Role** | Designer | **Name** | Tier Consult |
| **Email** | | **Phone no** | 01244 684900 |
| **Address** | Richmond House<br>Sandpiper Court<br>Chester Business Park<br>CHESTER<br>CH4 9QZ<br>England | | |

| | | | |
|---|---|---|---|
| **Role** | Designer | **Name** | Stride Treglown |
| **Email** | | **Phone no** | |
| **Address** | St Georges Lodge<br>33 Oldfield Road<br>BATH<br>BA2 3NE<br>England | | |

**Declaration details**

| **Declaration** | | | |
|---|---|---|---|
| As client for this project, I hereby declare that I am either the client for this project and am aware of my duties under the Construction (Design and Management) Regulations 2015 (S.I. 2015.51), or have been asked by the client to notify on their behalf and they have confirmed they are aware of their duties. | | | |
| **Name** | Colin Proffit-Jones | | |
| **Date** | 12/02/2018 | **Role** | Group H&S Advisor |
| **Confirmation Email** | Colin.proffit-jones@watkinjones.com | | |

---

**Client Signature** (Can be used for your own records, ONLY if required)

**Declaration (as stated above)**

**Name:**

**Declaration Signature:**

**Date:**

# APPENDIX 6

## SIGNING IN REGISTER

Everybody that enters the site should sign the site signing in register irrespective of how long they wish to be on site. This includes site operatives, official visitors, the client's representatives, etc. It doesn't include delivery drivers unless they are entering onto the site. In this instance, sub-contractors are to give the Site Manager advanced notice to enable him to ensure the area is free from hazards and prepared for the delivery. The driver should also be issued with a copy of the site rules as described in the site rules section of this file.
A "Flash Induction" procedure is available on the H&S forms server for delivery drivers detailing the basic site safety requirements.

The signing in register is an important document for record purposes. Each person should sign in and out personally each day. In the short term, it allows the Site Manager to see at a glance how many people are on site. It is important that the register is correct as it is used as the roll call in the event of a fire.

The signing in register should be filed with the site archive at the completion of the project.

# APPENDIX 7

## HEALTH & SAFETY INFORMATION SHEET

The health and safety information sheet should be displayed in the office and in the mess cabin. It should be completed at the start of the project and up dated as the project develops.

**WATKIN JONES & SON LIMITED**
**HEALTH & SAFETY INFORMATION**

| TITLE | NAME/LOCATION | TELEPHONE NUMBER |
|---|---|---|
| **CDM Coordinator** | Tier Consult (Phil Barlow) | 01244 684 900 Office |
| **Principle Contractor** | Watkin Jones Group | 01745 538 200 Office |
| **Site Address** | Thames Quarter<br>Napier Road<br>Reading | NA |
| **Nearest Telephone** | TBC | TBC |
| **Construction Director** | Sean Curran | 07880 704 810 Mob<br>01745 538 200 Office |
| **Project Manager** | TBC | TBC |
| **Nearest Accident & Emergency Hospital** | Royal Berkshire NHS<br>Foundation Trust<br>London Road<br>Reading<br>RG1 5AN | 0118 322 5111 |
| **Health & Safety Executive** | Priestley House<br>Priestley Road<br>Basingstoke<br>RG24 9NW | 01256 404 000 |
| **Contracts Safety Officer** | Miles Littlewood<br>Paul Christopherson | 01745 538 200<br>07775 812720<br>07775 518200 |
| **First Aiders** | TBC | TBC |
| **First Aid Box** | In Site Office<br>Canteen | N/A |

# APPENDIX 8

## EMPLOYERS' LIABILITY INSURANCE CERTIFICATE

The company is obliged under the Employers' Liability (Compulsory Insurance) Regulations 1998 to display a copy of the current Employers' liability insurance certificate. Attached are two copies of the certificate one for the office and the other for the mess cabin.

The policy is renewed in June of each year. Copies of the new insurance certificate will be distributed from the Plant Dept. but will be included in the safety starter pack for all projects starting after that date.

# Certificate of Employers' Liability Insurance (a)

*(Where required by regulation 5 of the Employers' Liability (Compulsory Insurance) Regulations 1998 (the Regulations), one or more copies of this certificate must be displayed at each place of business at which the policy holder employs persons covered by this policy)*

1. Policy number 40/CS/24877147/09

2. Name of policy holder
   WATKIN JONES PLC AND SUBSIDIARY COMPANIES

3. Date of commencement of insurance policy 30th September 2017

4. Date of expiry of insurance policy 30th September 2018

We hereby certify that subject to paragraph 2:-

1. the policy to which this certificate relates satisfies the requirements of the relevant law applicable in Great Britain, Northern Ireland, the Isle of Man, the Island of Jersey, the Island of Guernsey and the Island of Alderney (b); and

2. (a) the minimum amount of cover provided by this policy is no less than £5 million (c);

   (b) the cover provided under this policy relates to claims in excess of £XXX but not exceeding £XXX

Signed on behalf of **Allianz Insurance plc**

Authorised insurers

Jonathan Dye
Chief Executive

*Notes*

(a) *Where the employer is a company to which Regulation 3(2) of the regulations applies, the certificate shall state in a prominent place, either that the policy covers the holding company and all its subsidiaries, or that the policy covers the holding company and all subsidiaries except any specifically excluded by name, or that the policy covers the holding company and only the named subsidiaries.*

(b) *Specify applicable law as provided for in regulation 4(6) of the Regulations.*

(c) *See regulation 3(1) of the Regulations and delete whichever of paragraphs 2(a) or 2(b) does not apply. Where 2(b) is applicable, specify the amount of cover provided by the relevant policy.*

Account number: 40/98086

Date printed: 28th September 2017

Allianz Insurance plc. Registered in England number 84638 Registered office. 57 Ladymead, Guildford, Surrey, GU1 1DB, United Kingdom.
Allianz Insurance plc is a member of the Association of British Insurers.
Allianz Insurance plc is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Financial Services Register number 121849.

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# APPENDIX 9

## GENERIC RISK ASSESSMENT SCHEDULE

The company has established seventy-seven individual generic risk assessments. A full set of the generic risk assessments can be found on the Health & Safety Forms Section of the server. Following the review of the "Programming for safety" the Site Manager will order the appropriate amount of generic risk assessments on the attached schedule via their Contracts Manager.

The generic risk assessments are made site specific by the completion of the reverse side of the assessment.

All risk assessments should be filed with the site archive.

# APPENDIX 10

## CONTRACT SPECIFIC RISK ASSESSMENTS

The Management of Health and Safety at Work Regulations place a requirement on the employer to carry out a risk assessment for all activities that create a significant risk. The company has seventy-seven generic risk assessments that cover a whole series of construction activities (covered in another section of this file). If it is considered that none of the generic assessment forms adequately cover any particular activity then a task specific risk assessment form can be completed.

The pro-forma task specific risk assessment form follows the general format suggested by HSE in their guidance with the addition of one extra column.

The hazard
The first column should identify all of the hazards that are considered to be significant for the task or operation. The hazards should be listed and be specific. It is suggested that the preventive and protective (precautions) measures, persons at risk, risk ranking and person who will control columns are completed for each hazard.

Persons at risk
This column should identify who will be at risk of injury or ill health from the activity or operation. The list can specifically name individuals or any group of people for example the steel erectors may be at risk of falling but the people below would be at risk of being struck by falling objects (incl. steel erectors).

Preventive and protective measures
The preventive and protective measures are the precautions that need to be taken to ensure that the risk is reduced to an acceptable level. The precautions may be as simple as the provision of guardrails and toe boards or as complicated as a temporary works procedure and permit to load. Obviously, the precautions should reflect the severity of the hazard and control it to a satisfactory level i.e. prevent someone falling or ensure that the structure does not collapse prematurely. It may be considered that more than one precaution is necessary for instance specialist training or competence for the operator and proof that the machine that they are to use is in good order. Therefore, the Site Manager would have to satisfy himself that the operative had attended a suitable course and attained a satisfactory grade and that the machine to be used had been inspected by a competent person.

Residual risk
The company considers that it is only necessary to record the risk ranking after all of the precautions have been put into place. This is because the duty is to record significant risks and not trivial one's. It should be the aim of the management team to reduce all risks to low or insignificant.
Person who will control
The company feels that it is important that individuals are given the specific responsibility to carry out any health and safety function or task. This prevents any ambiguity about who should do what and when. However, before delegating

any responsibility individual's competence and resources should be considered to ensure that they could actually carry out that function to a satisfactory standard.

After completing an assessment, a "Team Talk" should be arranged with the operatives who will be involved in the operation. They should be advised on the content of the assessment and encouraged to comments. If a good idea is suggested the assessment should be reviewed. On the reverse of the risk assessment form is a team talk register and comments section which should be completed prior to the activity.

The management team should then establish a suitable monitoring regime to ensure that the precautions are being applied and that the operation or task is going as planned.

The assessment should be filed in the health and safety plan until the project is completed and then filed with the site archive.

# APPENDIX 11

## RISK ASSESSMENT AND METHOD STATEMENT SCHEDULE

The company operates a procedure of "Programming for safety" at the start of a project a review is taken of activities that create a significant risk based on the main programme. These significant risk activities are highlighted on the programme with a flag. The highlighted activities should then be transferred on to the schedule. The schedule requires the Site Manager to assess all of the risk assessments and method statements.

The procedure requires all of the risk assessments and method statements to be reviewed at least a fortnight in advance of the operation where ever possible. This allows the Site Manager to comment back to the sub-contractor and to allow him to prepare any special requirements that the sub-contractor may require.

Following this procedure also makes it much easier to manage the safety documentation and for audit purposes. Upon completion of the project the schedule and all of the relevant risk assessments and method statements should be filed with the site archive.

Additional guidance can be found in the Carlton health and safety procedures manual.

## SUB CONTRACTORS SAFETY POLICY SCHEDULE

In an effort to make it easier to manage the growing health and safety plan and related documentation the company has developed a simple schedule to monitor the health and safety policies of sub-contractors.

The names of the appointed sub contract procurement schedule should be transferred onto the safety policy schedule along with their start date. Ideally a fortnight prior to their start the sub-contractor should be encouraged to forward a copy of their health and safety policy amongst other things. This allows the Site Manager to review the sub contractor's documentation with some time to query without affecting the programme.

The schedule requires the Site Manager to comment on the content and if he feels that it is adequate. Having a complete schedule also makes it easier for the Contracts Manager or the Director to audit the site.

It is suggested that all safety policies, risk assessments and method statements etc. should be filed in a separate lever arch file. The safety policy schedule should be filed in front of the file along with the risk assessment and method statement schedule.

Upon completion of the project the schedule should be filed with the site archive.

# APPENDIX 12

## HOT WORKS PERMIT & PROCEDURE

Before any operation that requires the application of heat or a naked flame the revised hot works permit should be completed. The Site Manager should make himself and the operatives carrying out the hot works aware of the "Conditions of Issue". The Conditions of Issue stipulate the controls that are needed to reduce the potential for a fire to a minimum. The Conditions of Issue should be rigorously enforced by the management team.

Upon completion of the permit a copy of it should be given to the operatives carrying out the works. It is expected that the permit will come in duplicate form in the future. The original must be held in the site office. Having followed the requirements of the Conditions of Issue it is unlikely that a fire will be started. However, the fire checks must be carried out by a responsible person whom the Site Manager must appoint. The fire checks will be carried out 30 minutes and 60 minutes following completion of the works. The fire checks can be carried out after normal work hours by security personnel but they must be given suitable and sufficient information on what to do if they find a fire or smouldering embers.

# APPENDIX 13

## CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH

The Control of Substances Hazardous to Health Regulations place an obligation on the employer to carry out an assessment of any substance used in the workplace. The assessment should identify any significant risk that the substance may create whilst being stored, used or disposed of. The company has developed a blank COSHH assessment record form, which, can be found in this section. A number of generic assessments have been completed to assist the Site Managers.

As with all assessments the most important part of completing the assessment is ensuring that the operatives using the substance are advised of the content of the assessment. On the reverse of the COSHH assessment form is a register to confirm that the operatives have been informed of the hazards associated with the substance and understand the precautions that need to be taken to ensure their health and safety.

Additional guidance in connection with COSHH can be found in section 33 of the CITB manual and in the COSHH literature contained in the site safety starter pack.

All COSHH assessments should be filed with the site archive on completion of the project.

## APPENDIX 14

## ACCIDENT REPORTING

Under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) certain types of accidents must be reported to the Health and Safety Executive (HSE). All RIDDOR accidents are to be reported to HSE on Form 2508 (F2508). Certain serious accidents have to be notified to HSE this means they should be contacted and informed of the accident by the quickest possible means, usually telephone. The company's Safety Officer or Director will notify the HSE and complete the F2508. The types of accident that are reportable are briefly tabled below. However, within Watkin Jones Group. All accidents are reported in-house to enable the company to establish accident trends and to reduce loss.

The company understands that all accidents have a cost. For the injured party there is pain and suffering and with serious accidents financial losses as well. The company suffers financial loss directly from the accident in time lost or damaged property. It could also incur losses with a poor reputation that could result in clients losing confidence and not offering the company an opportunity to tender.

More importantly accident reporting allows the company to monitor the effectiveness of the health and safety procedures and enables the company to target high-risk areas in an effort to reduce the risk.

The BI510 is the statutory accident book (the blue book). The company is required by law to record all injury accidents in the BI510. The BI510 should be located in a conspicuous position and readily available. Ideally, it should be near to the first aid box to encourage completion. On a daily basis the Site First Aider should confirm that no accidents have been entered into the book without their knowledge. Furthermore, if it is noted that an entry has been made then they should investigate the particulars of the alleged accident and check to ensure that the first aid kit is adequately stocked.

The Accident Incident Report form A/I R1 is the internal accident report form. This is a duplicate book and is to be used to record all accidents including injury accidents, plant damage only and near miss accidents that could have had the potential to cause harm.

The Site Manager should carry out an investigation of all minor accidents and report the findings.

All serious accidents are to be reported to the Contracts Manager, Director and Safety Advisor by telephone as soon as possible. The area and any items of plant that were involved in the accident should be left in position and if necessary the Site Manager should ensure that no one enters the area or tampers with any part of the scene until the accident investigation is completed. This may require the area to be fenced off or even a guard placed at the scene to prevent unauthorised access.

The completed top white copy of the accident report form is to be returned to the office with the post on Friday. The completed carbon copies should be removed

from the pad and stored with any other relevant information in the file for archive with the site files. Any unused sections of the internal report A/I R1 pad and the completed BI510 should be returned to the safety department for re-use and archiving respectively.

**Accidents that are defined as reportable to the HSE under RIDDOR**

**Fatalities and major injuries (notifiable)**

- Any fracture of any bone, other than to the fingers, thumbs or toes
- Any amputation (through a bone).
- Dislocation of the shoulder, hip, knee or spine.
- Loss of sight (whether temporary or permanent) or any other listed eye injury.
- Electric shock or burn causing unconsciousness, or requiring resuscitation, or requiring admittance to hospital for more than 24 hours
- Any injury leading to hypothermia, heat induced illness or to unconsciousness requiring resuscitation or admittance to hospital for more than 24 hours.
- Unconsciousness due to asphyxia or by exposure to a harmful substance or biological agent.
- Acute illness or unconsciousness caused by any poisoning by any route.
- Acute illness caused by exposure to infected material or a biological agent.

**Injuries resulting in incapacity for more than seven days**

Generally known as an Over Seven Day (O7D). These are the least serious of the reportable accidents. They do not need to be notified directly to HSE only reported on a F2508.

**Dangerous occurrences**

- Collapse, overturning or failure of any load-bearing part of any lift, hoist, crane, derrick, mobile powered access platform, access cradle, window cleaning cradle, excavator, piling rig or fork-lift truck.
- Explosion, bursting or collapse of any closed vessel, boiler, etc.
- Contact with, or arcing from, any overhead electric cable caused by any plant or equipment.
- Electrical short-circuit with fire or explosion.
- Explosion or fire caused by any material resulting in stoppage of work or plant for more than 24 hours.
- Uncontrolled release of 100 kg or more of a flammable liquid, 10 kg or more of a flammable liquid above its normal boiling point or 10 kg of a flammable gas, inside a building, and 500 kg or more of such substances outside a building.
- Collapse or partial collapse of any scaffold over 5 metres in height or fall of any cradle, etc.

- Collapse of 5 tonnes or more of any building or structure, or any false work, or any wall or floor in any workplace.
- Uncontrolled release of any biological agents.
- Accidental ignition of any explosive.
- Failure of any load-bearing part of a freight container.
- Bursting, explosion or collapse, or fire involving a pipeline.
- Specific incidents involving road tankers.
- Specific incidents involving dangerous substances being conveyed by road.
- Escape of any substance in a quantity sufficient to cause death, injury or damage to health.
- Malfunction of any breathing apparatus whilst in use or when being tested before use.
- Contact with or arcing of any overhead power line.

**Specified diseases**

These are listed in the Watkin Jones Group health and safety procedures manual.

## APPENDIX 15

## PERMIT TO DIG and RISK ASSESSMENT

The permit to dig is a duplicate form, which has to be completed prior to any operation that requires breaking of ground. This includes excavation work for services and foundations, trial holes, piling, installation of signpost or fencing type operations, etc. The form is to be completed on a daily basis by either the Site Manager or the Site Engineer. The person who will control the excavation work should sign for the permit. A team talk should be issued to all operatives involved with the operation.

The company has developed a pro-forma risk assessment form for excavation work. This form should be completed for each operation (not necessarily daily as with the permit to dig).

A detailed explanation of how the procedure is to be managed is contained within the company health and safety procedures manual.

The top white copy of the permit to dig should be returned to the office with the weekly post for review at the relevant management meeting.

The completed carbon copies should be removed from the pad and stored with the relevant risk assessment in the file for archive with the site files. Any unused sections of the pad should be returned to the safety department.

# APPENDIX 16

## WEEKLY SAFETY INSPECTION

Some time ago it was recognised that although the site management teams continually monitored the health and safety aspects of their sites during their daily routine walkabouts the company and the Site Manager where vulnerable when challenged to prove that health and safety on site was being managed. Therefore the weekly safety checklist was developed as an aide memoir for the Site Manager. It also provides written proof that at least on a weekly basis the site management teams carry out a formal health and safety inspection. The form is in a duplicate pad. One copy of the completed form stays on site and the other should be sent back to the office on a weekly basis.

Over the years the form has been developed further to suit the needs of the company and to ensure that the company maintained, as a minimum, the legal standards.

It was not intended for the Site Manager to take the form out when carrying out the inspection but to be a factual record of that inspection. This enables the Site Manager to carry out corrective action prior to completing the form. The form has space for comments, which, should be used to outline the problems identified and the action taken to correct that problem.

The company uses the form to collect statistical information. On a daily basis the Site Manager should complete the bottom section with the numbers of persons on site that day. At the end of the week there is a section that requires the number of accidents and incidents reported that week. That figure should tally up with the number of internal accident report forms that have been completed and returned.

Finally on the bottom of the form is a section for brief details of any HSE visits. This is required purely for record purposes. The company monitors visit frequencies and matters raised by the HSE. This enables the company to consider companywide reviews or passing on of information to other sites.

The forms are returned to the office with the other site post, normally on a Friday. They are collated and discussed the following week at the management meetings. The company statistics are calculated using the data provided on the form. These are reported to the Directors each quarter and summarised at the end of the end in the annual health and safety report.

IMPORTANT NOTE. The form has become known as the weekly tick list. This is <u>not</u> what it was designed for. The site management teams should make every effort report meaningful and constructive comments.

# APPENDIX 17

## PPE ISSUE REGISTER

After completing a risk assessment for any work activity and it is found that Personal Protective Equipment (PPE) is required the employer is obliged to provide it to their employees free of charge. Under the Personal Protective Equipment at Work Regulations the employer is obliged to make an assessment of the PPE to ensure that it is appropriate and that it is readily available.

The safety equipment issue record is a duplicate pad and is to be completed by the Site Manger and counter signed by the employee.

The procedure for requisitioning any PPE is as follows,
Site Manager makes an assessment of risk for the activity,
NOTE; construction work is considered high risk to feet and heads. As a minimum all site operatives must be wearing suitable safety footwear and a hard hat.
Site Manager requisitions the appropriate PPE,
When requisitioning safety footwear and high visibility coats the requisition must have the operatives' name for whom the equipment is being ordered.
The Contracts Manager or the Director counter signs the requisition,
The requisition is sent to the buyer as usual for procurement,
Upon receipt the Site Manager has the operative sign for the PPE in the safety equipment issue file.

The safety equipment issue record has two functions firstly it records when the company has issued employees with appropriate PPE and secondly records when the company has issued PPE to sub-contractors employees. Obviously as the Principal Contractor it is not an option to allow anybody on site to work without the correct PPE therefore the company would issue the PPE to the sub-contractor and record it. The top copy of the duplicate pad is to be faxed to the buyer for record purposes and the original sent to the quantity surveyor for contra charging if necessary. The completed carbon copies should be removed from the pad and stored with any other relevant information in the file for archive with the site files. Any unused sections of the pad should be returned to the safety department.

# APPENDIX 18

## SITE INDUCTION REGISTER

The site induction is seen as a vital part of the management systems for the passing on of specific training and instruction. The site induction is contained within the A4 presentation easel. Generally, the induction follows the same format for most sites including the site rules, scaffold safety, plant safety, excavation safety and the safe use of electricity and chemicals. However, there will be specific information developed for each site for instance traffic routes, fire safety plan, etc. The site induction will also pass on information such as contamination, noise abatement or some other specific issues that needs addressing.

The induction folder is a two-sided document the presentation side faces the inductees and contains a picture, image or brief instructions. The presenter's side contains the information that is to be passed on. At the end of the presentation there is an opportunity for the inductee to ask questions or comment.

Upon completion of the induction the inductees are required to sign the induction register. The individual should be issued with a WJ&S induction sticker. The sticker should be placed on the helmet so that it is visible. The safety induction sticker has an acrylic adhesive that will not damage or affect the helmet's structural integrity.

For an occasional visitor such as sales rep's and visiting clients, etc. issue of the site rules is acceptable providing that a responsible person accompanies the individual around the site. If that person, for instance the manager of a sub-contractor is appointed and it becomes apparent that they will be on site for more than a couple of hours at a time, then they should attend the full induction.

The induction sticker is not to be issued to persons who have only read the site rule.

The induction folder and any excess stickers should be returned to the Safety Dept. when the project is complete. The induction register and completed copies of the site rules should be filed with the site archive.

# TEAM TALK REGISTER

Employers are obliged to consult with the work force about health and safety matters and it has long been established that involving the work force in the general management of an operation can be beneficial. More often than not the trades men and operatives have some positive thoughts to add to the procedure these can not only be safer but also quicker, cheaper or improve quality. It is also proven that due to the contribution it is often felt that that the method of work belongs to the operatives and as such they are more likely to follow that procedure.

The team talk register is to be used to record any team talks, toolbox talks or similar. The register should be attached to the notes, risk assessment or method statement that is being discussed. The workforce should be encouraged to participate and contribute. Any comments that are offered should be recorded on the register. If necessary the assessment or method of work should be reviewed.

Team talk registers should be filed with the site archived at the end of the project.

# APPENDIX19

## SCAFFOLD AND EXCAVATIONS REGISTER

Under Regulation 12 of the Work at Height Regulations 2005 all scaffolds and under Regulation 31 of the Construction (Design & Management) Regulations 2015 all excavations have to be inspected by a competent person at certain times. The purpose of the inspections is to ensure the safety of those work places. Table 1 lists the frequency that scaffolds have to be inspected and table 2 details the frequency for excavations.

## SCAFFOLDING

Table 1. Frequency of scaffold inspection

Before being taken into service for the first time.
After any event likely to affect it's stability.
After any substantial alteration, modification and prior to being dismantled.
Not less than every seven days.

During erection and prior to the scaffold being handed over it should be identified as being incomplete i.e. has a "scaffold incomplete" sign displayed prominently. Upon completion the Site Manager should accompany the scaffolder on an inspection. When satisfied with the condition of the scaffold the scaffolder should issue a scaffold hand over certificate. A record should be made in the scaffold register of the inspection and that the scaffold is in service.

**Events likely to affect the stability of a scaffold include undermining from excavation work, high winds, freezing temperatures, vehicles or similar colliding with it, etc.**

There are times in the programme when there is an increased risk of failure of the scaffold, due to unauthorised alterations these are during plastering and window installation. Internal boards are likely to be removed by bricklayers and painters. Particular attention should be paid to the inspection of these areas at these times.

The scaffold inspection should include all parts of the scaffold including the ladder access and condition of ladders, loading bays, any hoists or other similar equipment. An entry should be made in the scaffold register of the results of the inspection. It is not sufficient to only complete the Site Manager's weekly checklist.

The company has developed a scaffold inspection checklist, which has been laminated. On the reverse of the checklist is a form that can be used to note down any problems with the scaffolding during your inspection. We have laminated the to allow it to be written on in felt tip pen which can be rubbed out when the information has been transferred to the scaffold inspection register.

Additional guidance on scaffolding can be found in the CITB manual
Sec. 5 part 1 Tube and fitting scaffolds,
Sec. 5 part 2 System scaffolds and mobile towers,
Sec. 6 Hoists and hoist towers,
Sec. 7 Ladders, steps and lightweight staging and
WJ&S health and safety information memos

## EXCAVATIONS

Table 2. Frequency of excavation inspection

Before any person carries out work at the start of every shift.
After any event likely to affect it's stability.
After any accidental fall of rock or earth or other material.

The regulations only require excavations that are supported to be inspected. However, it is the policy of Watkin Jones Group to inspect all excavations deeper than a metre irrespective of whether it is supported or batter back. This is to ensure that all workplaces are safe. These inspections should also be carried out for excavations with less than four sides for instance where a retaining wall is to be constructed.

The ability to batter an excavation back to the correct angle of repose is becoming more difficult due to the requirement to backfill with the correct type of materials (usually imported) and the restricted space on most contracts. In most cases excavations that are battered back cannot be safely backfilled with a dumper due to the distance from the edge of the excavation to the tipping area.

A permit to dig and a risk assessment should cover all excavation work. Copies of these forms can be found in this file along with brief guidance. The full procedure for the permit to dig can be found in the company's health and safety procedures manual.

The frequency of excavation inspections is much more stringent than scaffolding even though the register is the same.

The inspection of the excavation should include the means of access and any other safety equipment including gas detectors, service supports, ground level guardrails, etc. if they are in use. Events likely to affect an excavation's stability include freezing weather, heavy rain, very dry sunny periods, ground vibration such as heavy plant passing, vehicles falling into the excavation, etc. Accidental falls of rock, earth or other materials includes the collapse of the sides of the excavation, spoil, and materials that have been stored near to the excavation, etc.

## PLANT SAFETY

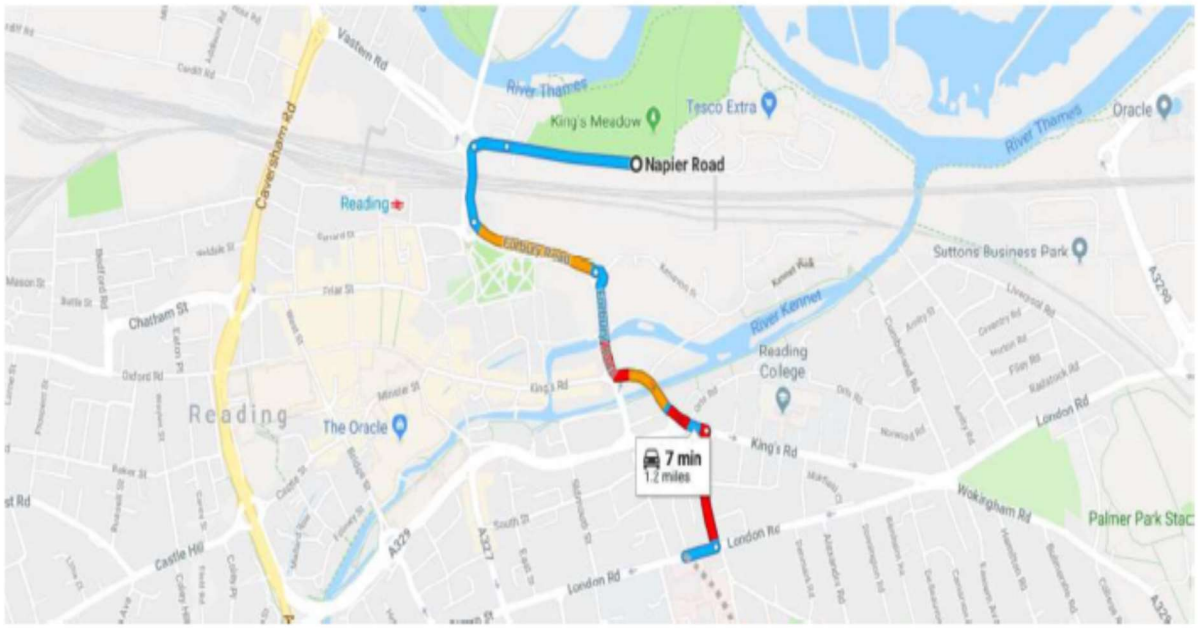
The Provision and Use of Work Equipment Regulations place a duty on employers to ensure that all equipment provided for use at work are suitable for purpose and safe to use. This duty becomes more explicit when the equipment provided can be used for lifting operations.

The company operates a number of systems that ensure that items of plant are in good working order and safe to operate. The first system is the requisition for plant this will be made directly to the Plant Dept. at Bangor using the plant requisition form. The company operates a seven day notice system which, requires the Site Manager to give the Plant Dept. seven days' notice of any plant requisition this allows the Plant Dept. sufficient time to arrange for the correct equipment to be resourced and delivered to site on time. This long run in period allows the Contracts Manager to review the plant requisition and authorise as appropriate. This becomes a second line of review ensuring that the right piece of equipment has been ordered.

The Site Manager is obliged to inspect the item of plant when it arrives at site for any obvious defects such as damage to the body or paintwork, that it appears to be working correctly, that all of the required components are delivered and to receive the maintenance record for it. All plant and equipment should be inspected by a competent person to ensure that it is good order. Therefore, prior to being delivered to site it should have been inspected by a competent person and a record of that inspection should accompany the item of plant to site.

# APPENDIX 20

## Hospital Route




**Distance from Site** = 1.2 Miles

**Travel Time (Vehicle)** = 7 Minutes

# APPENDIX 21

## External Access Plan

## (TBC)

# APPENDIX 22

## M&E Standards Guide

## (TO FOLLOW)

# APPENDIX 23

## Construction Site Guidelines (Welfare & signage)

# Construction Site Guidelines

## Site Signage

## and

## Welfare Set Up

Rev 01 - April 2017

## Introduction

This manual is to be used to provide guidance and examples as to how you should set up your welfare facilities and also list the required safety and notice signage you should display.

The guidance set out in this manual gives a basic level of signage required to set up a new project. These signs will be assigned to each new project, then depending of project size, value & specific individual signage requirements, any additional signage can be ordered by the project team through the Buying Department.

This site signage starter pack gives not only the basic signage to set up a project but also ensures a consistency from project to project. It is important that signage is displayed at the earliest opportunity giving both information for project personnel and local residents/business on safety and project contact details. This also provides a professional approach with Watkin Jones Group branded signage.

**Depending on the location of the project, bilingual signage may be required.*

When setting up the welfare facilities there are a number of factors to consider such as the location in relation to the project, the amount of facilities required and the maintenance regime to be implemented to maintain cleanliness etc.

The welfare facilities including the project office is the first point of location that a visitor or a new operative to site will attend, therefore it is important from day one to set a good example of the Watkin Jones Group.

Providing clear guidance and details of the project including traffic management plans, designated routes and the identification of responsible persons on the project is also a mandatory requirement. Watkin Jones Group has a variety of branded notices that are to be displayed in the welfare facilities and offices which holds all of this information.

*This guidance document is to be read in conjunction with the Corporate Signage Manual available on the Group HR Server.*

## Welfare Facilities/Establishment

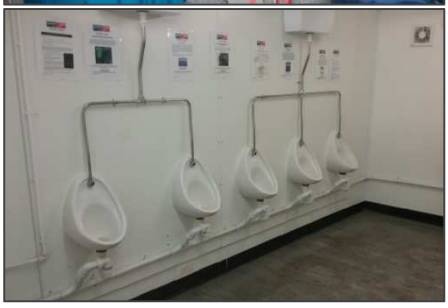
Welfare facilities are required under Schedule 2 of the Construction (Design & Management) Regs 2015. Facilities must be made available before any construction work starts and should be maintained until the end of the project.

**Things to Consider:**

- The amount of persons expected to use the facilities (present & future).
- Is there a need for a shower facility?
- Drying room & changing room space.
- Cleaning regime.
- The location of the facilities in relation to site.
- Female toilet facilities.
- Lockable storage for personal belongings and PPE.
- Washing facilities.

## Examples of Site Welfare Establishments





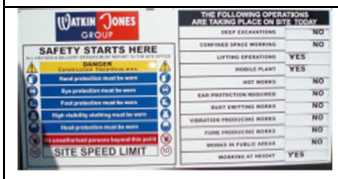



## Site Signage

Below is a list of the standard signage that must be displayed on site at specific locations. Additional site specific signage can be purchased through the Buying Department.

***Note – Should bilingual signage be required please request this with Buying at point of order.***

| | |
|---|---|
|  | **Location –** Site Entrance<br>To be positioned at the main entrances to site as it gives clear instruction and information to all on the procedures to take upon arrival to site. |
|  | **Location –** Site Entrance<br>To be positioned on the external face of the site boundary hoarding at a prominent location. Warns the public of site construction dangers. |
|  | **Location –** Site Entrance & Main Route onto Site<br>To be positioned at the site entrance and also at any designated access points onto site. |
|  | **Location –** Site Entrance<br>To be positioned at the site entrance on the external face of the hoarding. |
|  | **Location –** Signing in Point/Gateman's Hut<br>To be positioned at the designated signing in point. Ideally this will be at a controlled access point such as the gateman's hut or site office. |
|  | **Location –** Site Entrance & Designated Pedestrian Routes<br>To be positioned at the main designated pedestrian access gate to site and also at designated pedestrian routes on site. |

| | |
|---|---|
|  | **<u>Location</u> –** Site Entrance & Designated Pedestrian Access Point.<br>This sign can be displayed at the site entrance but must be displayed at the main access pedestrian point to site to provide instruction on what PPE requirements must be met prior to accessing site. |
|  | **<u>Location</u> –** Site Entrance<br>To be positioned at the site entrance on the external face of the hoarding. Ensure this notice is updated in line with site activities. |
|  | **<u>Location</u> –** Site Office/ Welfare Cabins/ Site Notice Board<br>To be positioned in the site office and at a designated point within the welfare set up. This could be either in the canteens or on a site notice board where it will be easily visible to all.<br>Ensure the information on this notice is updated in line with site activities. |
|  | **<u>Locations</u>** – Smoking signage to be positioned at the designated smoking location if provided. Assembly point signage to be prominently displayed as per site plan. |
|  | **<u>Locations</u>** – All of the signs opposite are to be positioned at the welfare cabins to identify the facilities provided. Drinking water & hot water facilities signage to be positioned within the canteen facilities at the sink locations. |
|  | **<u>Location</u>** – Site Welfare Set Up<br>To be positioned within the site welfare establishment giving detail of who the 1st aiders are and where they can be found. |

| | |
|---|---|
|  | **Location –** Site Routes & Exits<br>To be positioned at designated routes on site including at internal areas and final exits. |
|  | **Location** – Site Routes<br>To be positioned at all main designated crossing points on site where pedestrians need to cross plant movement areas etc. |
|  | **Location** – Site Routes<br>To be positioned at all main crossing points where pedestrians need to cross through plant movement areas. This sign must be displayed so it is clearly visible to all plant/vehicle operators. |
|  | **Location -** Site Routes<br>To be positioned at designated crossing points on site. Ideally fixed to the red crossing gates. |
|  | **Location** – Fire Points/Welfare Facilities<br>To be positioned at a designated fire point within the welfare facilities and at each fire point on site. This ideally will be at each staircase. |

## Site Signage Positioning

The positioning of site signage is key to ensure that information and details of the Project are available.
Signs can provide a variety of information such as:

- Information and details of the project and works taking place
- Contact details of responsible persons
- Warnings of dangers associated with the works.

As a Group there are a number of branded notice signs that you will are expected to be displayed and at certain locations to ensure they capture the attention of the correct people.

Below are examples of these signs and where they should be positioned.































## Site Entrance Set Up




*Vehicle Access Point (Above), Pedestrian Access Point (Below)*



## Considerate Constructor Signage

As the majority of our Projects are registered with the Considerate Constructor Scheme, we are required to display a variety of their signage and documentation.

This type of signage is designed to present an image of competent management, efficiency, awareness of environmental issues and above all neighbourliness.









# APPENDIX 24

## Temporary Works Procedure

# TEMPORARY WORKS PROCEDURES

REV A~04/12

SC/RM

## Temporary Works Coordinator (TWC)

The TWC is responsible for ensuring that the contractor's procedures for the control of temporary works are implemented on site. The TWC is not normally the designer, but is responsible for ensuring that a suitable temporary works design is prepared, checked and implemented on site in accordance with the relevant drawings and specification.

The principal activities of the TWC are listed in Clause 7.2.5 of BS5975:2008. On some projects, particularly smaller jobs involving lower risk temporary works, it may be appropriate for the TWC and designer roles to be carried out by the same person, provided that he/she is competent to carry out each of the roles.

The TWC for a project should be formally appointed and have adequate authority to carry out his/her tasks, including stopping the work if it is not satisfactory. It is essential that those selected to act as TWC are competent with relevant up-to-date training, and experience and qualifications appropriate to the complexity of the project. Ideally a TWC would:

- Have experience of the relevant types of temporary works.
- Have completed formal TWC training.
- Hold a Degree / HND in civil/ structural engineering.
- Be a Chartered Civil / Structural Engineer

Although a Chartered Civil or Structural Engineering qualification is desirable, the numbers with these qualifications and with experience of the co-ordination of temporary works, is unlikely to be sufficient to provide cover for all projects. The key attributes of a competent TWC are in order of priority,

1. relevant experience,
2. formal TWC training and
3. Professional qualifications.
4. TWCs should have the competence and authority to be effective.

## Temporary Works Supervisor (TWS)

On larger sites, or where a number of subcontractors are involved, it may be appropriate for one or more Temporary Works Supervisors (TWS) to be appointed. A TWS should be responsible to the TWC and assist the TWC in the supervision of temporary works.

## Temporary Works Register

It is useful for a temporary works register to be prepared for any project. It should contain a list of all identified temporary works items associated with the project. These can be set out as a table using appropriate headings, which could include: **Appendix 2**

- Design brief number (for each item) and date issued
- Short description of temporary works
- Date required
- Category of temporary works
- Designer
- Design Checker
- Date design complete
- Date design checked/approved
- Erection complete and checked or "Permit to Load" "Permit to Dismantle"

## Design brief

A design brief should be prepared for each item of temporary works to serve as the focus for subsequent decisions, design work calculations and drawings. It should include all data relevant to the design of the temporary works and should be prepared in good time to allow for all subsequent activities. The brief may be relatively simple for the smaller schemes, but for major work, more information will need to be collected and collated before design work can commence. The TWC should ensure that an adequate design brief is provided to the designer and design checker of the temporary works.

## Temporary works design

The design of the temporary works should be based on the agreed design brief. Any proposed alteration or modification of the design brief by the designer should be referred back to the TWC. The temporary works should be designed in accordance with recognised engineering principles. The preparation of design calculations, drawings and specification should be undertaken with similar rigour to the procedures applied to the design of the permanent works.

Temporary works designers include; the manufacturers and suppliers of proprietary temporary works equipment and those working in a contractor's temporary works department or office. Temporary works designs are sometimes categorised to indicate the complexity/simplicity of the specific temporary works structure and the potential risk. See below for an example:

| **Simple and/or potentially low risk temporary works** |
|---|
| Standard scaffold |
| Formwork less than 1.2m high |
| Hoarding and fencing up to 1.2m high |
| Simple propping schemes – 1 or 2 props |
| Internal hoarding systems and temporary partitions not subject to wind loading |
| Shallow excavations less than 1.2m deep/high |
| **More complex and/or potentially medium risk temporary works** |
| Falsework up to 3m high |
| Formwork for columns and walls up to 3m high |
| More complex propping schemes – multiple props at single level |
| Needling of structures up to 2 storeys high |
| Excavations up to 3m deep/high |
| Safety net systems fixed to robust primary members |
| Hoarding and fencing up to 3m high |
| Simple designed scaffold |
| Temporary roofs |

| Complex and/or potentially high risk temporary works |
|---|
| Falsework and formwork over 3m high |
| Trenchless construction, including headings, thrust bores, mini tunnels |
| Working platforms for cranes and piling rigs |
| Tower crane bases |
| Façade retention schemes |
| Flying and raking shores |
| Complex propping schemes – multiple props and multiple levels |
| Needling of structures greater than 2 storeys high |
| Ground support schemes greater than 3m deep |
| Complex designed scaffold |
| Cofferdams |
| Bridge erection schemes |
| Jacking schemes |
| Complex structural steelwork and precast concrete erection schemes |
| Hoarding and fencing over 3m high |

In practice, even relatively simple temporary works may require careful consideration in their design, construction, commissioning, inspection and loading. An apparently simple temporary works job could lead to failure and even to fatalities if it is not competently executed. The choice of the appropriate temporary works solution, including the use of "standard solutions," is discussed in Clause 9.4 of BS5975: 2008. A "standard solution" is an arrangement for which the basic design work has already been carried out and is presented in a tabular or similar form, and for which no further calculations are required.

## Design Checks

Before erection commences, the temporary works design should be checked for:

- Design concept
- Strength and structural adequacy (including foundations and lateral stability)
- Compliance with the design brief.

The design check should be carried out by an independent competent person(s) . The ability and independence of the checker should be greater where the temporary works are more complex or where new ideas are incorporated. Recommendations for various categories of design check are given in Table 1 of BS5975:2008, reproduced below:

**Categories of Design Check (taken from BS 5975:2008)**

| Category | Scope | Comment | Independence of checker |
|---|---|---|---|
| 0 | Restricted to standard solutions only, to ensure the site conditions do not conflict with the scope or limitations of the chosen standard solution. | This applies to the use of standard solutions and not the original design which will require both structural calculation and checking to category 1, 2 or 3 as appropriate. | Because this is a site issue, the check may be carried out by another member of site or design team. |
| 1 | For simple designs. These may include: formwork: false work (where top restraint is not assumed): needling and propping to brickwork openings in single storey construction. | Such designs would be undertaken using simple methods of analysis and be in accordance with the relevant standards, supplier's technical literature or other reference publications. | The check may be carried out by another member of the design team. |
| 2 | On more complex or involved designs. Designs for excavations, for foundations, for structural steelwork connections, for reinforced concrete. | Category 2 checks would include designs where a considerable degree of interpretation of loading or soils' information is required before the design of the foundations or excavation support or slope | The check should be carried out by an individual not involved in the design and not consulted by the designer. |
| 3 | For complex or innovative designs, which result in complex sequences of moving and/or construction of either the temporary works or permanent works. | These designs include unusual designs or where significant departures from standards, novel methods of analysis or considerable exercise of engineering judgement are involved. | The check should be carried out by another organization |

## Temporary works management arrangements suitable for small contractors

For smaller contractors, the principles of BS5975 should be in place if not the formal and specific procedures, in particular:

- ensuring a suitably competent temporary works designer/adviser is in place to supply an engineered solution,
- adequate information flow,
- design checking to an appropriate level,
- Suitable verification of correct erection of the temporary works and someone overseeing and co-ordinating the whole process.

Smaller contractors may not have anyone sufficiently experienced to plan effectively all but the simplest temporary works. There should be clear evidence that appropriate external expertise has been engaged. This includes obtaining the services of a suitably competent TWC and temporary works designer to ensure temporary works are effectively designed, constructed, inspected, loaded and managed. On some projects, particularly smaller jobs involving low risk temporary works, it may be appropriate for the TWC and designer roles to be carried out by the same person.

# APPENDIX 1

## HSE Safe erection, use and dismantling of falseworks information sheet

*HSE information sheet*

# Safe erection, use and dismantling of falsework

**Construction Information Sheet No 56**

## Introduction

Falsework is any temporary structure used to support a permanent structure while it is not self-supporting, either in new construction or refurbishment. Any failure of falsework may lead to the collapse of the permanent structure. This could cause injury or death to those working on or near to it, as well as loss of time and money.

The causes of many past failures were foreseeable and could have been prevented by proper consideration when planning, erecting, loading or dismantling the falsework. Investigations into falsework collapses have identified a lack of co-ordination between the various trades and suppliers of falsework as a major cause.

Failures often occur on fairly simple structures erected by smaller falsework contractors, who may not employ design staff.

## Statutory responsibilities

Contractors' responsibilities include:

- preventing the falsework collapsing under load;
- ensuring that those constructing and dismantling it can carry out their work safely, with particular regard to preventing falls from height; and
- minimising risks to the health and safety of others who may be working on, or passing by, the construction activity. Risks could arise, for example, from falling materials, wind-blown plywood or scaffold boards, noise and dust.

On sites where there is a principal contractor and a number of contractors, the principal contractor is responsible for the safe co-ordination of all activities on-site (including liaison with specialist proprietary suppliers).



**Management**

The law requires falsework to be erected and dismantled only under the supervision of a competent person (regulation 9(3) of the Construction (Health, Safety and Welfare) Regulations 1996). As early as possible, a person should be appointed for each site as a falsework co-ordinator, with responsibility for co-ordinating the various items and stages of use of the falsework.

- The falsework co-ordinator is commonly known as the **temporary works co-ordinator**.
- On a large contract, the appointed co-ordinator might be a suitably qualified engineer, whereas on a small building contract the role might be taken on by the site agent or foreman appointed by the contractor.
- Whoever it is, the appointed co-ordinator is responsible for ensuring that correct falsework procedures are followed and that operations are carried out safely.

Falsework should be constructed in accordance with BS 5975 *Code of practice for falsework* (and subsequently to BS EN 12812, when it is published).

**Planning**

All concerned should contribute towards the preparation of a design brief, which should serve as the starting point for subsequent decisions, design work, calculations and drawings. Initial planning should cover:

- what needs to be supported, and how it should be done; and
- how long the falsework will be in use.

**Design**

All falsework should be designed. This will vary from the use of simple standard solution tables and graphs, to site-specific design and supporting drawings. Designs should be checked. The designer of the temporary works and the person interpreting the standard solutions are commonly known as **temporary works designers**.

The term designer has a broad meaning and includes:

- anyone who specifies or alters a design, or who specifies the use of a particular method of work;
- contractors carrying out design work as part of their contribution to a project; and
- temporary works engineers, including those designing formwork, falsework, scaffolding and sheet piling.

Designers have duties under the Construction (Design and Management) Regulations 1994 (CDM) and must:

- identify the hazards;
- eliminate the hazards, if feasible;
- reduce the risk by design; and
- provide the information necessary to identify and manage the remaining risks.

Standard solutions for scaffolding, falsework etc that comply with recognised codes of practice are often used. Such solutions, when used with the recommended procedures, will normally meet the risk control requirements of CDM. However, where such solutions are adapted, consideration needs to be given to whether the risk is still effectively controlled.

Particular consideration should be given to the following:

- stability requirements, lateral restraint and wind uplift on untied decking components;
- designing falsework that can be erected, inspected and dismantled safely including how striking will be achieved (it may be craned into position in one piece but could have to be removed piecemeal);
- selecting adequate foundations or providing information to ensure adequate foundations are used; and
- providing the information that the **temporary works co-ordinator** will need to manage the interface between the falsework and the permanent structure safely.

**Materials**

Falsework should be constructed, or adapted, so as to be suitable for the purpose for which it is used:

- it should be strong enough and stable in use;
- damaged components should not be used; and
- different proprietary components should not be mixed, unless expressly approved by the designer.

**Erecting the falsework**

Before erection begins a risk assessment should be carried out and a safe system of work developed. A method statement which includes how all the hazards are to be managed should be prepared. This should be read and understood by those doing the work.

To ensure safety, falsework should be stable at all stages of erection and be regularly checked. Only 'Working Drawings' and not 'Preliminary Drawings' should be used. Erectors should know:

- where to start;
- whether the equipment supplied is the same as that ordered;
- at what stage checks or permits are required; and
- whether checks and permits have already been carried out or issued.

**Loading**

Once complete, all falsework should be inspected and certified as ready for use (a written permit-to-load procedure is strongly recommended). The frequency of subsequent inspections will depend on the nature of the temporary works. They should be carried out frequently enough to enable any faults to be rectified promptly.

**Striking and dismantling**

The temporary works co-ordinator should agree the time of striking for each section of the falsework (a written permit-to-strike procedure is strongly recommended.)

During dismantling, ensure that workers can work safely and cannot be injured by falling objects. A sequence for dismantling should be agreed and detailed.

**Training**

Temporary works co-ordinators, and those erecting and dismantling falsework, should be competent and trained in the safety of falsework.

**Legal requirements**

Health and Safety at Work etc Act 1974 (HSW Act)

Management of Health and Safety at Work Regulations 1999 (MHSWR)

Construction (Design and Management) Regulations 1994, as amended (CDM)

Construction (Health, Safety and Welfare) Regulations 1996 (CHSWR)

Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)

Provision and Use of Work Equipment Regulations 1998 (PUWER)

**References and further information**

*Final report of the Advisory Committee on Falsework (The Bragg report)* HMSO 1975 ISBN 0 11 880347 6 Available from British Library www.bl.uk

BS 5975: 1996 *Code of Practice for falsework* British Standards Institution

*Checklist for erecting and dismantling falsework* CS123 The Concrete Society Tel: 01344 725704

*Investigation into aspects of falsework* Contract Research Report CRR394/2001 HSE Books ISBN 0 7176 2232 0 www.hse.gov.uk/research/crr_htm/2001/crr01394.htm

*Formwork: A guide to good practice* CS030 The Concrete Society Tel: 01344 725704

*Falsework: Full circle?* SCOSS topic paper www.scoss.org.uk/publications/rtf/SCT0201_falsework.doc

While every effort has been made to ensure the accuracy of the references listed in this publication, their future availability cannot be guaranteed.

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British Standards are available from BSI Customer Services, 389 Chiswick High Road, London W4 4AL Tel: 020 8996 9001 Fax: 020 8996 7001 Website: www.bsi-global.com

For information about health and safety ring HSE's Infoline Tel: 08701 545500 Fax: 02920 859260 e-mail: hseinformationservices@natbrit.com or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice.

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Printed and published by the Health and Safety Executive 06/03 CIS56 C150

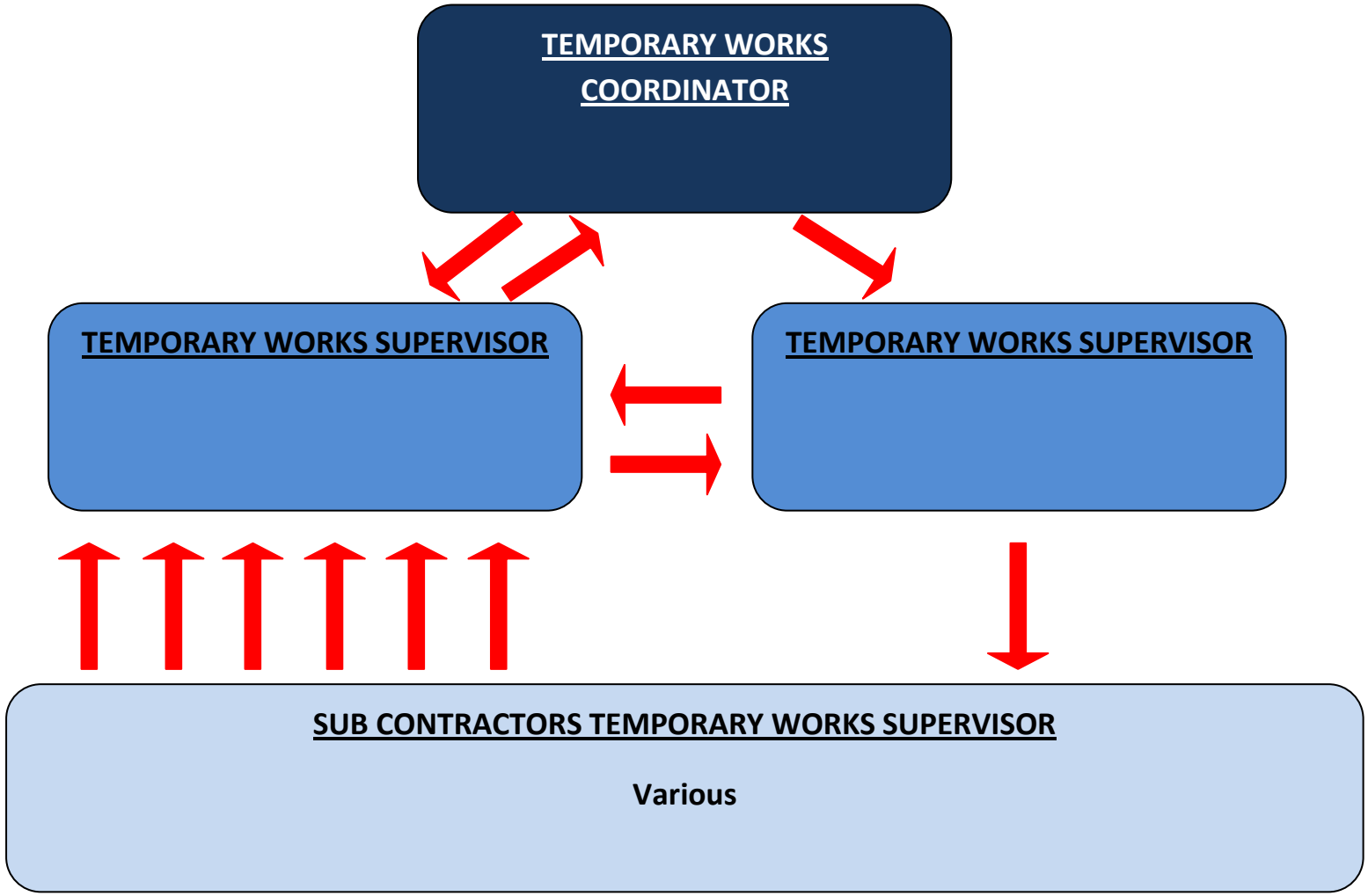
# APPENDIX 2

## Temporary works schedule sheet

# APPENDIX 3

## Site Organagram

# STOCKWELL GREEN TEMPORARY WORKS COORDINATION ORGANAGRAM



# WATKIN JONES GROUP

# TEMPORARY WORKS RISK REGISTER

| CONTRACT: | CONTRACT No: |
|---|---|

| Ref | Item | Purpose of Temporary Works | Risk Category H/M/L | Current Status | TW Designer Employed By | TW Design Brief No & Date Issued | TW Designer | Independent Reviewer | Design Received by Reviewer/WJ | Design Accepted by Reviewer (Or Not Applicable) | Permanent Works Affected | Permanent Works Checked By *(Name/Position)* | Permanent Works Effect Accepted (Or Not Applicable) | Stage/Date When Temporary Works Required On Site | Installation Completed & Checked (Or Not Applicable) | Stage At Which Temporary Works Can Be Removed | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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| ACTIONS | RISK CATEGORIES | |
|---|---|---|
| Not Required | 0 | Very Low |
| Action on Originator | 1 | Low |
| Action on Reviewer | 2 | Medium |
| Accepted/Not Accepted | 3 | High |

# APPENDIX 25

## Tower Crane Erection Procedure & Drawing

A1

3.0m EASEMENT TO 132KV CABLES (2 No.)

PROPOSED SITE SET UP TO OVERSAIL PUBLIC FOOTPATH. WALKWAY TO BE MAINTAINED WITH SUITABLE LIGHTING

Override door

Pedestrian turnstile access

CCTV

CCTV

1

2

3

4

5

P3

LEGAL TITLE BOUNDARY

PROPOSED ARCHAEOLOGICAL TRENCHES

EASEMENT OF EXISTING SEWER (SHOWN HATCHED) TBC

OUTLINE INDICATING POSITION OF THE PROPOSED NEW BUILD

173920N

173900N

173880N

173860N

173840N

173820N

DRAFT

| REV | DESC. | DATE | BY |
|---|---|---|---|
| P1 | PRELIMINARY ISSUE | 20.11.17 | GMN |

DRG STATUS: PRELIMINARY

CONTRACT: THAMES QUARTER, READING

TITLE: PROPOSED TOWER CRANES


WATKIN JONES BUILD TO RENT

55 Ffordd William Morgan
St.Asaph Business Park
St.Asaph
Denbighshire
LL17 0JG
TEL:01745 538200


| SCALE: | DATE: | DRAWN: | DRG No: | REV: |
|---|---|---|---|---|
| A/S @ A1 | 07.12.17 | GMN | WJH_SK02 | P1 |