

1.0 Introduction

Davies Homes Limited have secured planning permission under application number P/23/0053 for a residential development of 200 units and associated works at the Dragon Park Site, Abercanaid.

To support the application of the discharge of planning conditions 22 & 23 for the works to construct the proposed development, this document outlines how the work will be undertaken in areas where buried services and existing apparatus have been identified, in particular the DCWW 24" strategic water main and combined sewer.

The following drawings should be referred to alongside this document:

- Appendix 1 - Proposed Site Layout.
- Appendix 2 & 2A - DCWW Water Main & Public Sewer Maps.
- Appendix 3- DCWW Trial Hole Logs.
- Appendix 3A - DCWW Sewer Trace.
- Appendix 4 – Drawing 21566- SK-907O – Easement & Construction n Crossing Points.
- Appendix 5 – Drawing 21566-SK-906B – Easement & Cross Sections.
- Appendix 6 – Drawing 21566-SK-909 DCWW Easement Layout - A

This method statement details the steps to be taken when undertaking excavation activities either by mechanical means or by hand, in accordance with HS(G)47 and HS(G)185, including the excavation in the vicinity of buried plant.

Note: *All services MUST be treated as live.*

Any personal injury or damage to utilities underground plant or any other property on site must be reported immediately to the Asset Owner, Line Manager and Site Agent/Manager

Any personal injury or damage to utilities underground plant or any other property in the public highway/private street must be reported immediately to the Asset Owner and Line Manager

2.0 Safety & Environment

Only undertake the work detailed in this method statement if you are trained, competent and authorised to do so.

Specific risks have been identified and highlighted, and the control measures put in place to ensure these are mitigated during the works are outlined below. The Risk Assessment will be shared with site operatives prior to the start of works and the works area will be continually monitored should site conditions change throughout the duration of the works.

Measures are to be put in place to ensure that any materials, fluids, or fuels will be used and handled in a manner to ensure that contamination of the work area and site does not take place.

COSHH data and assessment sheets are available for all materials used on site.

All waste materials, off-cuts and rubbish will be collected and placed into the skip provided and removed from site and taken to an appointed disposal site and disposed of in accordance with the Environmental Protection Act.

3.0 Tools, Equipment & PPE**3.1 Tools & Equipment**

- Signing, lighting, and guarding
- Handheld digging equipment
- Mechanical digging equipment
- Cable Avoidance Tool (CAT) and generator

Equipment that may be required

- Trench supports / shoring / shuttering
- Means of access and egress e.g., ladders
- Dewatering equipment
- Traffic management equipment

3.2 PPE

- Hard Hat
- High Visibility vest
- Safety Boots
- Overalls
- Hand Protection
- Eye Protection

3.3 Task Specific PPE

Additional items that may be worn where there is a further risk of injury:

- Wet weather Trouser/Bib & Brace and Jacket.
- Ear Defenders

4.0 Scope & Method of Work

Underground services, particularly water, electricity & gas, can be extremely dangerous. Damage can result from excavation or penetration of the ground (e.g., by a road pin). Underground services are frequently found under roads, footpaths and across open land.

The works at the Dragon Parc site to deliver the proposed residential development and associated works will involve the remediation of the site, followed by general construction activities during the construction of the site infrastructure and residential dwellings. Drawing number PL-01 Rev 12 show details of the proposed development, included as Appendix 1.

A review of site services information has been completed, and as noted above there is DCWW apparatus present as shown in Appendix 2 and 2A. Additional detailed information from the water main trial hole exercise and sewer trace, undertaken by DCWW, is also available, included as Appendix 3 and 3A.

This information confirms there will always be significant cover to protect against any accidental damage of the asset and there is also adequate space for heavy machinery to operate outside the immediate vicinity/easement zone of the apparatus.

However, as part of the development proposals works will be undertaken in the easement areas as shown on Plan 21566 – SK-907-0 included in Appendix 4, for both the combined sewer and water main. Further details of the proposed works and the relationship with the strategic water main are also shown on drawing 21566-SK-906-B included in Appendix 5.

Details of these activities and the measures to be undertaken to mitigate any risk to the apparatus is outlined below, in summary these will include: -

- Construction Traffic movement and Remediation/Excavations & Infrastructure Construction.

4.1	Works Activities & Mitigation Measures
4.1.1	Activity 1 – Construction Traffic Movement Every effort will be made to minimise any traffic movements within and around the easement areas, however a dedicated crossing point will be created for construction traffic where timber bog mats or equivalent will be installed on firm ground over the extent of the easement spreading the traffic load. Easements will be clearly marked out on site.
4.1.2	Activity 2 – Remediation/Excavation & Infrastructure Construction Pre Excavation Activity Mitigation Measure - Undertake a site walk over to identify any hazards and implement any control measures to reduce the hazard to an acceptable level. - Ensure all site operatives are fully briefed on the buried apparatus and associated risks. - Liaise with other utility companies if required. - Make sure plans for underground services in the area are available. - Mark out the proposed position of the excavation and mark the positions of all known WWDC apparatus using paint or other waterproof marking on the ground immediately outside the excavation - short wooden pegs and marker tape can be used in soft ground. Note: <i>If marker posts are used to identify the line of any apparatus, they should be sufficiently large enough, robust, securely installed and should clearly identify the specific hazard e.g., danger gas</i> - Hand dig trial holes (if necessary) to confirm the exact position of services near the area of your work. Although in this case this has already been completed water main in question. Note: <i>When determined necessary by the company, a Line Manager shall attend site and supervise the placing of marker posts and/or the digging of trial holes as appropriate, prior to the commencement of site operations. This task may be undertaken, alternatively, by a representative of the Plant Owner. Relevant plans must also be assessed before excavation, etc. commences</i> During Excavation Activity Mitigation Measures - Sign and safeguard working area. Establish the presence and route of all other utility underground plant using the available plans/drawings and CAT and generator

EXCAVATION & CONSTRUCTION WORK IN THE
VICINITY OF BURIED APPARATUS

- Position large machinery outside of the easement from the identified apparatus and undertake any works from outside of this zone to avoid putting any additional weight on the apparatus.
- Any mechanical excavations in the easement zone will be undertaken by a 3T machine and bog mats will be used if required.
- Always hand dig near to the line of services (or where services are anticipated), use spades and shovels rather than picks, pins or forks.
- Services are sometimes protected by concrete polythene or earthenware tiles, or a marker tape may be laid above the service - this is a useful indication of the presence of the service, you should avoid disturbing any tile or tape to expose the service if possible. There are, however, many services in existence that have no tiles, tapes, or other physical indication of their presence on site.
- Under no circumstances excavate in mass concrete. If concrete is encountered, stop work, and contact your supervisor for guidance
- Ensure that a competent qualified banksman is used for all mechanical excavator work
- Mechanically excavate to within 0.5 of a metre from any identified utilities underground plant. If utilities are present, then hand dig to expose the plant and carry-on hand digging a further 0.5 of a metre past it before reverting to mechanical means. Greater safety distances may be advised by the GT or Utility operator, dependant on the operating criteria

Note: *This also includes handheld power tools*

- Ensure excavated materials are separated and stored outside of the easement zone.
- Ensure trench proprietary support systems and dewatering equipment is available and used if required.
- Remove any unsuitable or contaminated excavated material from site and dispose of in accordance with waste management and environmental regulations
- Securely fence/guard the excavation at all times and provide a safe means of access and egress

Note: *Excavations must be inspected by a competent person at the start of every shift, before work commences and after any adverse conditions that may affect the stability of it e.g., bad weather or trench collapse*

4.2 Post
Construction/Occupation
Phase

Further to the completion of works on site property purchasers directly adjacent to the WWDC apparatus will be made aware during the sale and legal conveyance process.