

Utilities Search Report



Wednesday, 07 Jul 2021
Lidl Property Office
P2568
Lidl GB
Stoneham Lane

91 Market Street Hoylake Wirral CH47 5AA
Tel. 0151 632 5142
enquiries@cornerstoneprojects.co.uk
www.cornerstoneprojects.co.uk
VAT Reg. No. 851 4941 19
Company No. 5132353

Table of contents:

Utility / Service	Included	Utility / Service	Included
Basic Search		Independent Utilities	
Gas	Yes	GTC	Yes
Water	Not Affected	Last Mile	Not Affected
Sewers	Yes	SSE	Not Affected
BT	Yes	Harlaxton	Not Requested
Electricity	Yes	Utility Assets	Not Affected
3rd Party Searches*	Yes	UK Power Distribution	Yes
		Albion Water	Not Affected
Cable Search		ESP	Not Affected
Vodafone	Yes	Fulcrum Pipelines	Yes
Virgin Media	Yes	Energy Assets	Yes
BSkyB	Yes	ENGIE	Yes
GTT	Not Affected	Leep Utilities	Yes
Colt	Yes		
Sota	Not Affected		
CGI Logica	Not Affected	Others	
Neos Networks	Not Affected	CAD Pack	To Follow
City Fibre	Yes	Smart pdf	Yes
Telia Sonera	Not Affected	Coal Authority Report	Yes
Instalcom**	Yes		
KCom	Not Affected		
Verizon	Yes		
Trafficmaster	Not Affected		
Zayo Group	Not Affected		
Tata Communications	Not Affected		
Gamma	Not Affected		
Gigaclear Plc	Not Affected		

*Includes Utilibilly and LineSearch

**Includes Level3, GC(UK) Ltd, GC PEC, Fibrenet UK and Fibrespan

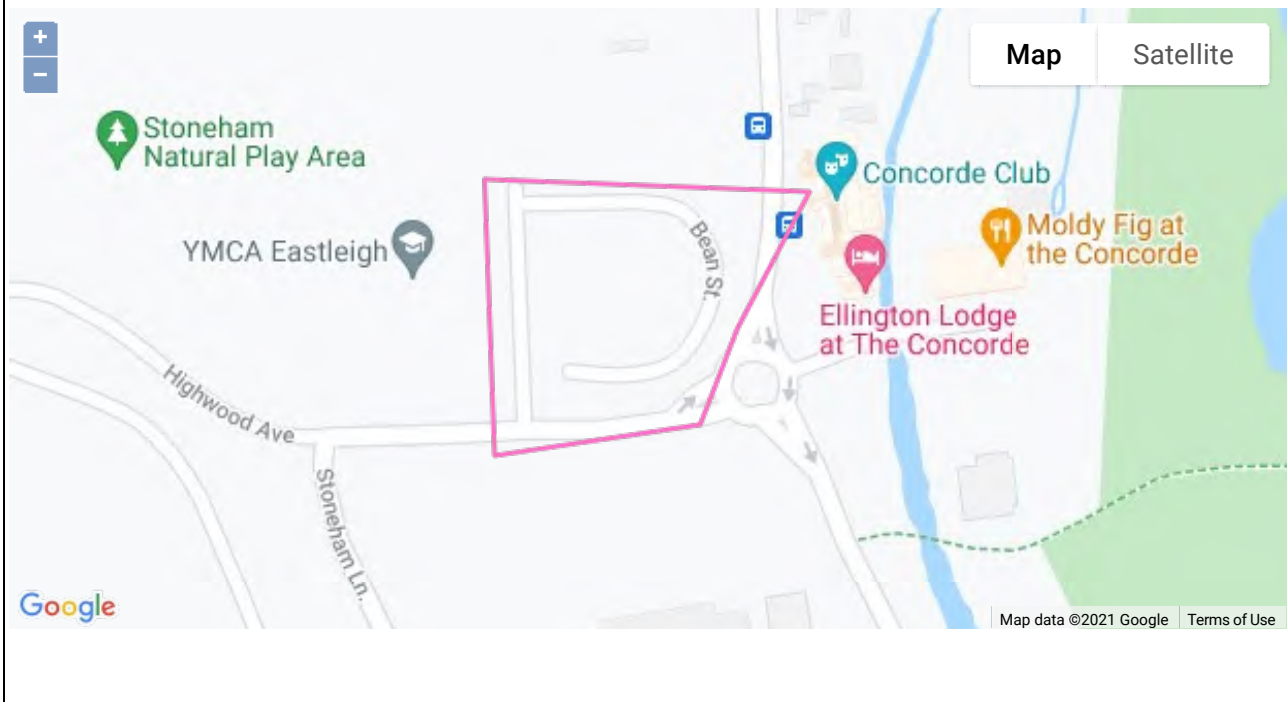
NB: All plans / responses are valid for a maximum of three months unless noted otherwise

Order Summary

Summary of your utility search details:

Site Name	Stoneham Lane	
Site Ref	P2568	
Address	Bean Street, , Eastleigh, Southampton, SO50	
Postcode	SO50	
Grid Ref	E 444174	N 117565

Area Covered



Options Selected		Options Selected	
Gas	✓	Independent utilities search - inc non-chargeable searches	✓
Water	✓	Harlaxton	X
Sewer	✓	UK Power Distribution	✓
Electric	✓		
BT	✓	Coal Authority search	✓
3rd Party searches	✓		
		Other Options	
Cable / Fibre searches inc non-chargeable searches	✓	Plans by post	X
Virgin Media	✓	CAD Pack	✓
Vodafone	✓	CAD OS mapping	✓
		Smart pdf	✓
		Instant Access Plans	X

GAS



Our Ref: 22479691 Your Ref: P2568

Wednesday, 23 June 2021

Duncan Phillips
91 Market Street
Hoylake
Merseyside
CH47 5AA

Dear Duncan Phillips

Thank you for your enquiry dated Wednesday, 23 June 2021

Please find an extract from our mains records for your proposed work area, any SGN assets are described in the map legend.

There are high pressure pipelines in the vicinity of your proposed works. We have sent a copy of your correspondence to our local engineer who will be in contact within the next ten working days. For your safety, it is essential that no work or crossing of this high pressure pipeline is carried out until a detailed consultation has taken place.

This mains record only shows the pipes owned by SGN in our role as a Licensed Gas Transporter (GT). Please note that privately owned gas pipes or ones owned by other GTs may be present in this area and information regarding those pipes needs to be requested from the owners. If we know of any other pipes in the area we will note them on the plans as a shaded area and/or a series of x's.

The information shown on this plan is given without obligation or warranty and the accuracy cannot be guaranteed. Service pipes, valves, siphons, stub connections etc. are not shown but their presence should be anticipated. Your attention is drawn to the information and disclaimer on these plans. The information included on the plan is only valid for 28 days.

Please note there may be additional gas pipes (low pressure, medium pressure, etc.) shown on the mains record. There should be no mechanical excavations taking place above or near the gas main. You should confirm the exact position of the main using hand dug trial holes.

A colour copy of these plans and the gas safety advice booklet enclosed should be passed to the senior person on site in order to prevent damage to our plant and potential direct or consequential costs to your organisation.

Safe digging practices in accordance with HSE publication HSG47 "Avoiding Danger from Underground Services" must be used to verify and establish the actual position of the mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all relevant people (direct labour or contractors) working for you on or near gas pipes.

It must be stressed that both direct and consequential damage to gas plant can be dangerous for your employees and the general public and repairs to any such damage will incur a charge. Your works should be carried out in such a manner that we are able to gain access to our apparatus throughout the duration of your operations.



For Planning applications – There are high pressure pipelines in the vicinity of your proposed work area. SGN formally object to this planning application until such time as a detail consultation has taken place.

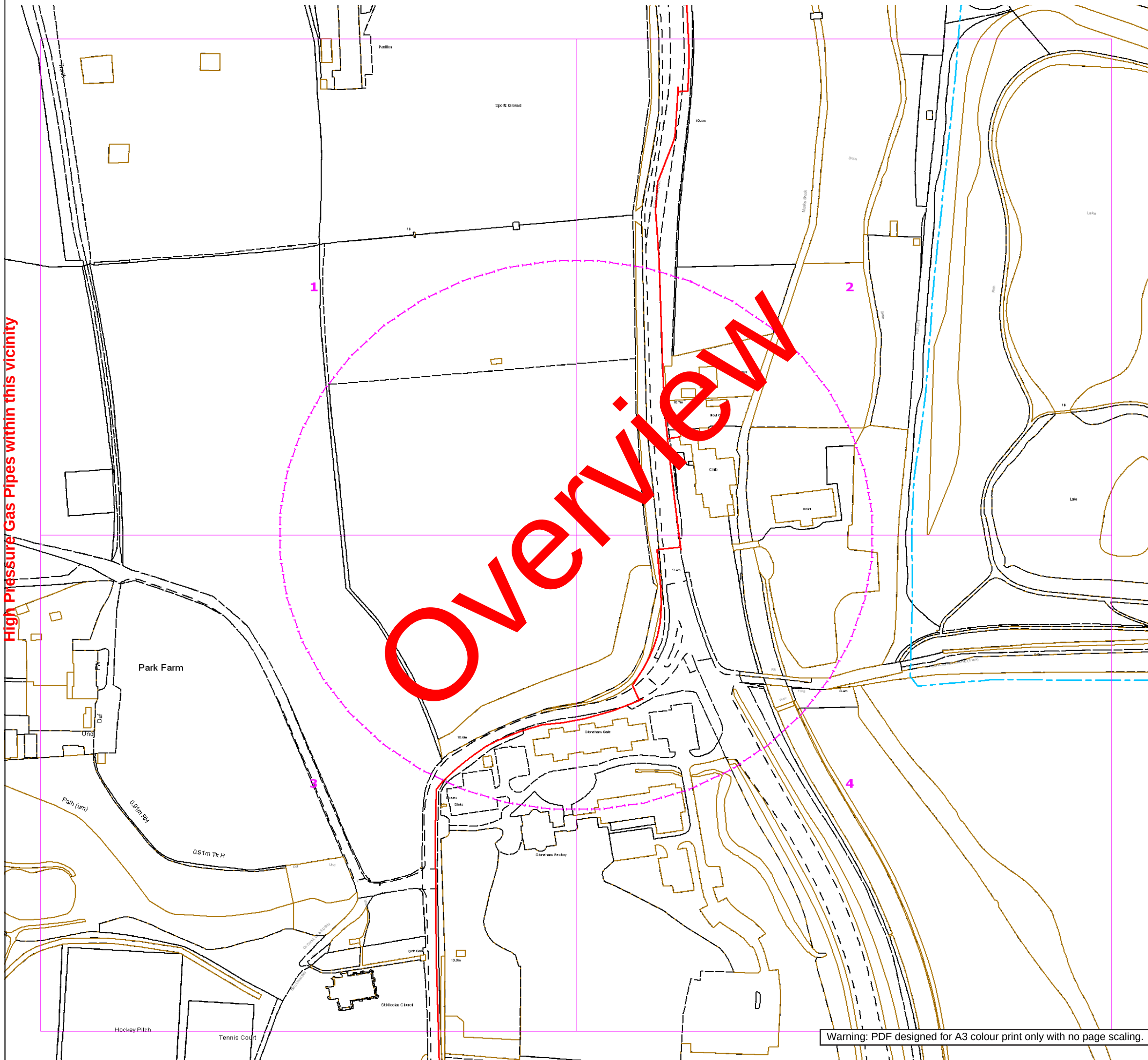
If you require any further information please do not hesitate to contact us.

Yours sincerely,

The Safety Admin Team

For more information, visit our Dig Safely pages on sgn.co.uk

Tel: 0800 912 1722



High Pressure Gas Pipes within this vicinity



SGN
Your gas. Our network.

Contact Us

Mapping Enquiries:
All areas

General Enquiries:
All areas

Date Requested: 23/06/2021
Job Reference: 22479691
Site Location: 444174 117566
Requested by:
Mr Duncan Phillips
Your Scheme/Reference:
P2568

This plan shows the location of those pipes owned by Scotia Gas Networks (SGN) by virtue of being a licensed Gas Transporter (GT). Gas pipes owned by other GTs or third parties may also be present in this area but are not shown on this plan. Information with regard to such pipes should be obtained from the relevant owners. No warranties are given with regard to the accuracy of the information shown on this plan. Service pipes, valves, siphons, sub-connections etc. are not shown but their presence should be anticipated. You should be aware that a small percentage of our pipes/assets may be undergoing review and will temporarily be highlighted in yellow. If your proposed works are close to one of these pipes, you should contact the SGN Safety Admin Team on 0800 912 1722 for advice. No liability of any kind whatsoever is accepted by SGN or its agents, servants or sub-contractors for any error or omission contained herein. Safe digging practices, in accordance with HS (G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that plant location information is provided to all persons (whether direct labour or sub-contractors) working for you on or near gas apparatus. Information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 111 999

Low Pressure Mains

Medium Pressure Mains

Intermediate Pressure Mains

High Pressure Mains

LAs

GTs



SSSIs



Some Examples Of Plant Items

Valve



Syphon



Depth of Cover



Diameter Change



Material Change



Digsite:

Line:

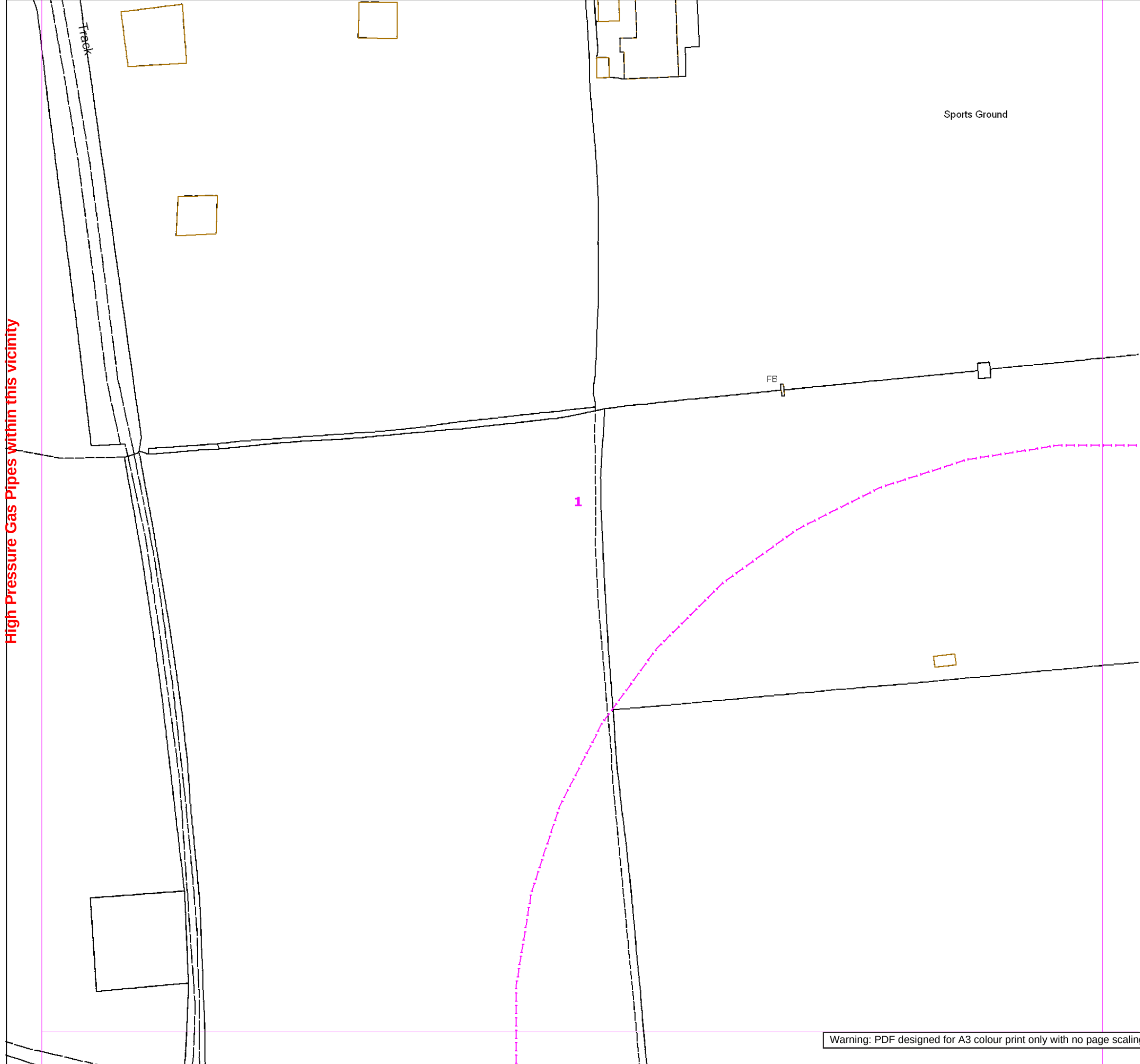


Area:



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Warning: PDF designed for A3 colour print only with no page scaling.



Contact Us
Mapping Enquiries: All areas
General Enquiries: All areas

Date Requested: 23/06/2021
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1:1000 Area or Circle dig site
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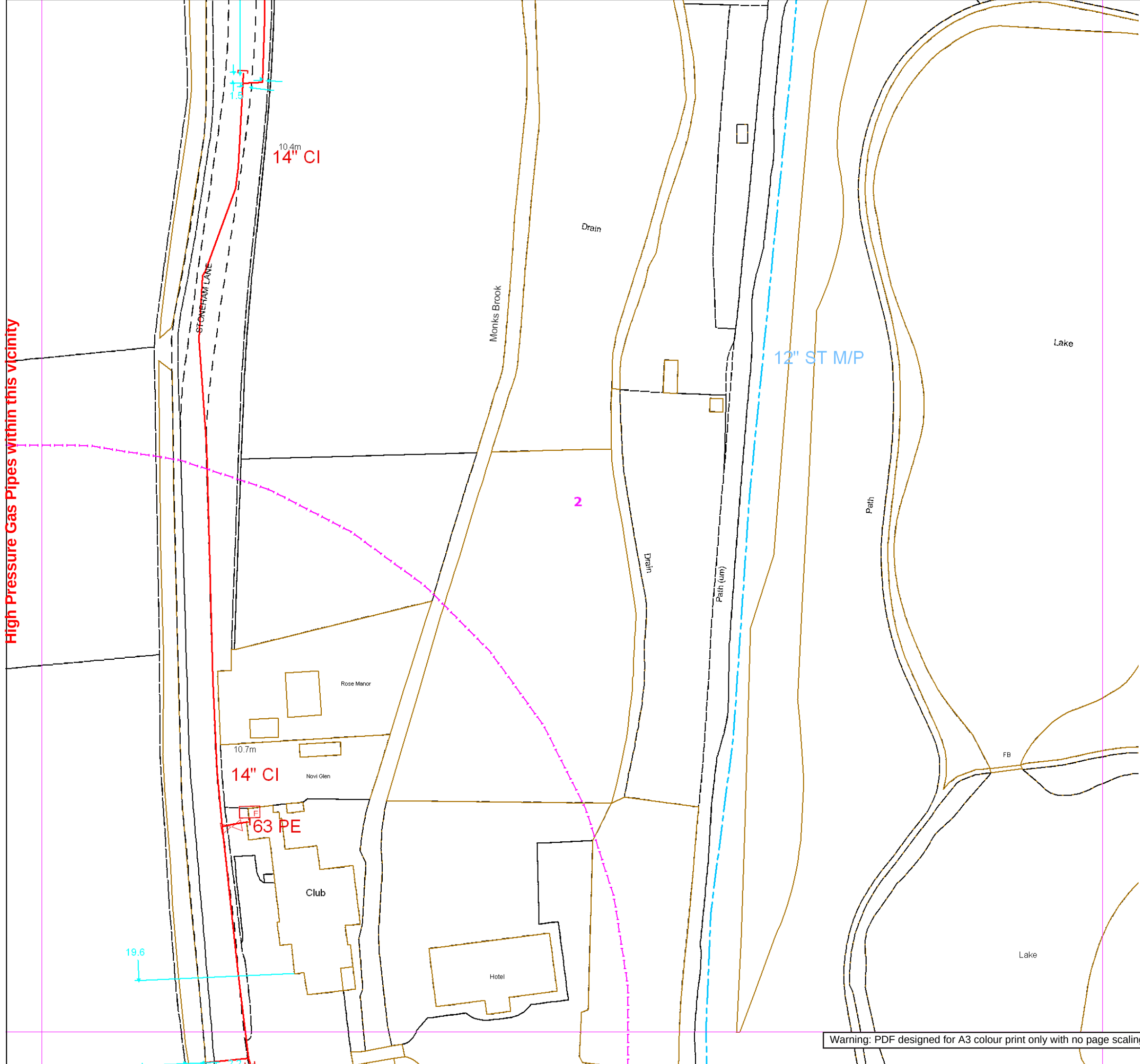
- Low Pressure Mains
- Medium Pressure Mains
- Intermediate Pressure Mains
- High Pressure Mains
- LAs
- GTs
- SSSIs

Some Examples Of Plant Items
Valve Syphon Depth of Cover Diameter Change Material Change

Digsite: Line: Area:



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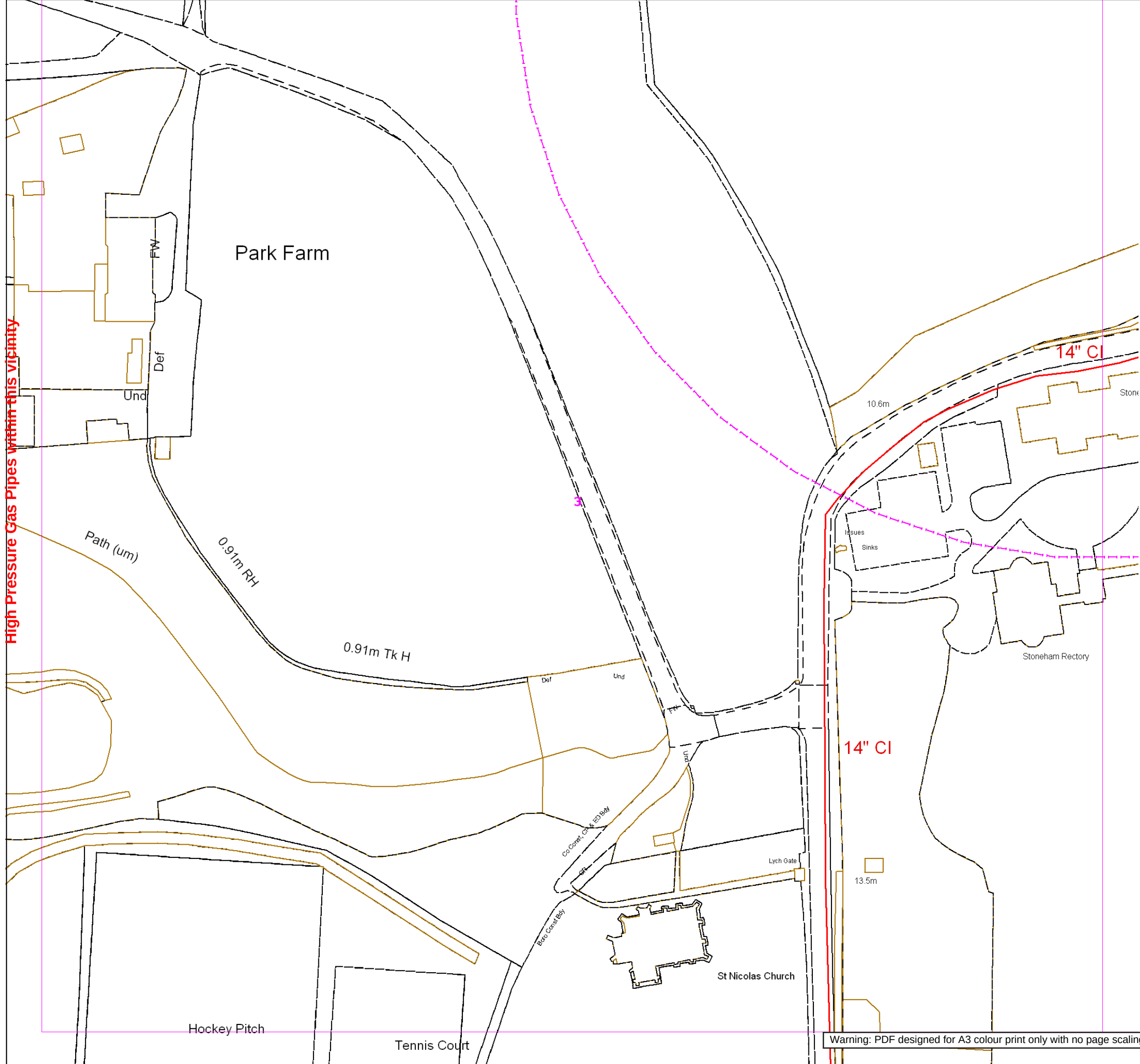
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High Pressure Gas Pipes within this vicinity

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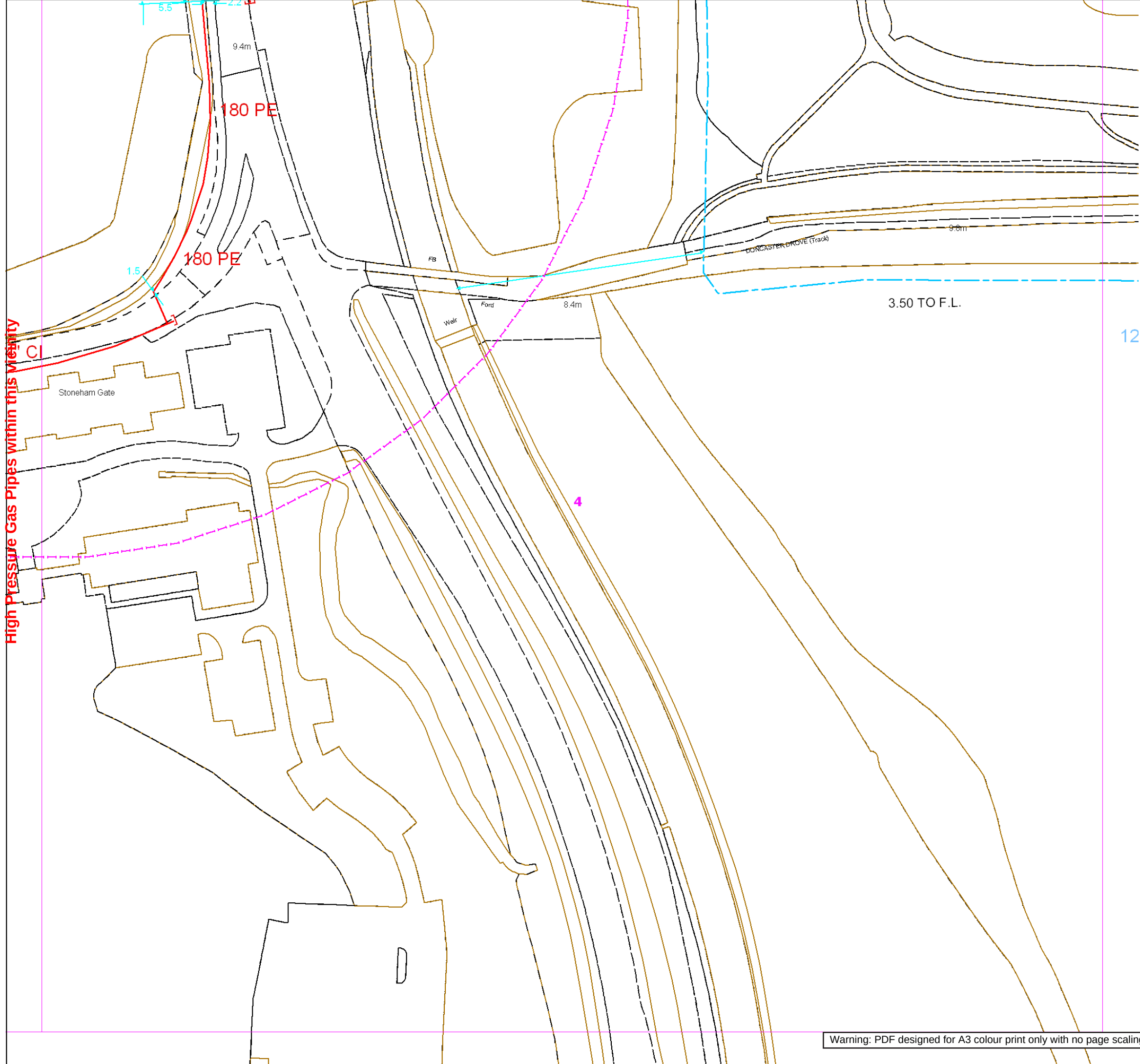
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Searches - Cornerstone Projects Ltd

From: Godwin, Tony <tony.godwin@sgn.co.uk>
Sent: 23 June 2021 10:16
To: searches@cornerstoneprojects.co.uk
Subject: LSBUD Enquiry - High Pressure Gas - Request for Further Information 22479691 (TPES-SO-38886)
Attachments: wkiSW2.pdf
Flag Status: Flagged

Your ref: P2568

LSBUD ref: 22479691

SGN ref: TPES-38886

Dear Mr Duncan Phillips,

We have received your enquiry via LSBUD. SGN have a high pressure pipeline in the vicinity of these proposed works. If this enquiry is an information only based search and no physical works are to be carried out, please refer to the plan and safety information received via the LSBUD website. If your works are planned please can you provide further details including;

Detailed Drawings/plans

Address of the works location

Designs

Overview of the Activity being carried out

A confirmed on-site start date

Please submit this information to Maintenance.Land.Owner.Enquiries@sgn.co.uk

Please note that until we receive this information and have replied back to you, no works should occur within the vicinity of the pipeline. If we do not receive a response within 30 days, you will be required to resubmit your enquiry via www.linesearchbeforeudig.co.uk. The pipeline is of prime importance to the gas supplies of this area. It is essential that you comply with the restrictions detailed below and in the document SGN/WI/SW/2 in order to protect our plant and equipment and for the safety of your own operatives. Please note that this response does not give permission to carry out any works within the vicinity of the gas pipeline.

No mechanical excavation is allowed within 3 metres either side of pipeline.

Please note that further restrictions on activities may need to be imposed as a result of a site inspection.

Should your works be due to start imminently please contact (01202 784932) who will be able to provide you with a contact for a local representative to attend site.

Kind Regards,

Maintenance Admin Team

SGN

T: 01202 784932

E: Maintenance.Land.Owner.Enquiries@sgn.co.uk

A: SGN, Bourne Valley Road, Poole, Dorset, BH12 1YT

Smell Gas? Call 0800 111 999

Tony Godwin
Pipeline administrator
Tony.godwin@sgn.co.uk
07583044846

Classified as Internal

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SGN/WI/SW/2

**Safety Management Framework
Work Instruction for Safe Working in the Vicinity of Pipelines & Associated Installations
with maximum operating pressure >7barg**

June 2018



Work Instruction for Safe Working & Development in the Vicinity of Pipelines & Associated Installations with maximum operating pressure >7barg

SGN/WI/SW/2

Document Owner: David Wylie

Context

Who is this Work Instruction for?

This instruction is for all persons involved with works carried out in the vicinity of SGN's high pressure pipelines and associated installations with maximum operating pressures >7barg.

What does this Work Instruction do?

This instruction sets out the safe working practices to be employed when carrying out excavation works in proximity to pipelines and associated installations with maximum operating pressures >7barg.

Scope

This instruction is to be used for all works requiring excavation near to, or to expose a high-pressure gas pipeline and associated installations with maximum operating pressure >7barg. This includes trenchless technologies.

Pipelines with a maximum operating pressure >7barg include any that temporarily operate above 7barg even if only for maintenance and pipeline inspections.

Why do we need this Work Instruction?

To ensure safe working practices for works in the vicinity of pipelines and associated installations with maximum operating pressures >7barg, and to prevent damage to high pressure pipelines, fittings and associated installations.

Note. SCO as used in this document means Safe Control of Operations as described by SGNs procedure GDN/PM/SCO/1



Preliminary Requirements		Excavation Related Works		Additional Requirements	
1	Nature of Works	12	Construction Traffic	27	Cathodic Protection
2	Undertaker of the works	13	Hazard and Danger Zones	28	New Services Crossings
3	Safe Control of Operations [SCO]	14	Fittings and Standpipes	29	Trenchless Techniques
4	Agricultural Activities	15	Powered Hand Tools	30	Backfilling
5	Competency	16	Mechanical Excavation	31	Damage to the Pipeline
6	Records	17	Mechanical Assistance	32	Document Control
7	Pipeline Locating	18	Top soil stripping	33	Encroachment Reporting
8	Trial Holes	19	Highway Surface Maintenance	A	Site Document Control Form
9	Mechanical Assistance during Trial Holes	20	Mechanical Excavation – Additional Control Measures	B	Encroachment Reporting Form
10	Risk Assessment	21	Deep Excavation Safety	C	Mechanical Assistance Request Form – Trial Holes Requiring Deep Excavation
11	Method Statement	22	Use of Vacuum Excavators	D	SW/2 Technician – Competency Requirements
		23	Chain Trenchers	E	PTW Requirement Matrix
		24	Slabbing & Protective Measures		
		25	Exposed Pipelines		
		26	Lifting Operations		



Roles and responsibilities

The responsibilities listed below are a summary and must be read in conjunction with the instructions contained within this procedure.

Roles	Responsibilities
• Competent Person • Registered as a Competent Person under SCO • Team Leader or Supervisor for the works • On site at all times while work is carried out • In direct control of the works undertaken on site	• Responsible for ensuring compliance with the approved Method Statement, Risk Assessment, Permit to Work and all relevant procedures • Responsible for confirming appropriate Permits to Work are in place at all times
• Nominated Responsible Person – 3rd party • Must be identified as competent in the specific works being undertaken • Temporarily registered under SCO as a Nominated Responsible Person to hold SGN PTW	• Responsible for all 3rd party works on site • Holder of the SGN Permit to Work for the works as required, following temporary registration with SGN's SCO control desk • Must remain on site at all times when an SGN Permit to Work has been issued
• Controller of the Works • The person with the authority for managing the works to be undertaken within the vicinity of a HP pipeline or associated installation • The [CDM] Principal Contractor or main contractor for the works with overall responsibility to ensure the work is undertaken safely	• Responsible for providing suitable risk assessments and Method Statements • Responsible for accepting the Site Document Control Form before work begins • Responsible for ensuring the works are undertaken in compliance with the accepted Method Statement • Responsible for ensuring workers and machine operators are suitably competent and have been briefed, and understand the Method Statements, relevant procedures and risk assessments • Responsible for ensuring suitable arrangements are in place for supervision and monitoring of the works [in addition to the role of the SGN SW/2 technician], including works undertaken by sub-contractors • Nominate a suitable competent person for the role of SCO Competent Person for works requiring a Permit to Work



Roles	Responsibilities
• SW/2 Technician • Meets all competency requirements identified in Appendix D <u>Cannot</u> be the Competent Person for the works	• See Appendix D • Responsible for liaising with those undertaking the works • Responsible for locating and suitably marking the pipeline • Responsible for establishing the 'Hazard Zone' 'Danger Zone' and depth of the pipeline • Responsible for monitoring excavation activities on site as required, including trial holes • Reviewing and accepting a satisfactory Risk Assessment and Method Statement provided by the undertaker of the works prior to any works commencing for works not requiring a Permit to Work • Cannot authorise the use of mechanical excavators within the 3m 'Hazard Zone' but must be on site to monitor all mechanical excavation within the Hazard Zone following approval by the Authorising Engineer • Responsible for stopping works if he/she identifies any deviation from the approved Method Statement and/or Permit to Work, and escalating any non-conformance to the SW/2 AE
• SW/2 Authorising Engineer • Registered under SCO as an SW/2 Authorising Engineer • In direct communication with the Project Manager or controller of the works	• Reviewing and accepting a satisfactory Risk Assessment and Method Statement for any works using mechanical excavators within the 3.0m hazard zone of a HP pipeline • Confirms the Competent Person/Nominated Responsible Person for the proposed works • If required, issues a Permit to work in accordance with GDN/PM/SCO/2 • Can authorise the use of Mechanical Excavators within the 'Hazard Zone' in accordance with Mechanical Excavation • CANNOT authorise Mechanical Excavation within the Danger Zone • Responsible for briefing the Competent Person and the SW/2 Technician on the accepted Method Statement and the Permit to work requirements
• SGN Asset Manager • Custodian of relevant pipeline records • Reports to Head of Network Management (Transmission)	• Provide all relevant Pipeline information and records when requested by the SW/2 Technician, Authorising Engineer, or Controller of the Works



Roles	Responsibilities
• Network Controller • As described by SGNs Safe Control of Operations procedures	• Responsible for verifying the AE & CP are registered on the SCO database for the relevant activities (e.g. deep excavation, working in the vicinity of HP pipelines etc.) • Responsible for checking for conflict between SCO projects
Safe Control of Operations	PPE
See the Safe Control of Operations [SCO] section of this procedure	Appropriate PPE must be worn at all times by all persons on site including but not limited to: • Fire retardant overalls • High Visibility Jacket • Safety Boots • Hard Hat • Eye Protection • Gloves • Hearing Protection when required • Personal Atmosphere Monitor (PAM) capable of detecting Natural Gas

Note. SCO means Safe Control of Operations as described by SGNs procedure GDN/PM/SCO/1



1. Nature of Works

All works in the vicinity of SGN's high pressure pipelines require appropriate control measures to be identified and implemented to prevent any damage to the pipeline. These works are all subject to SGN's Safe Control of Operations procedures (SCO).

Works directly on High Pressure Pipelines are carried out by SGN directly or by an appointed contractor, these are referred to as 1st and 2nd party works. Works in the vicinity, but unrelated to the pipeline can be carried out by a landowner, occupiers' farmers or an appointed contractor, these are referred to as 3rd party works. 3rd parties may not be familiar with the requirements for safe working near high pressure pipelines, therefore, it is necessary to communicate the requirements and to provide contact details for any enquiries. The SW/2 Technician will liaise with 3rd parties to determine the nature of the works and to provide the information on safe working practices to protect both the pipeline and those working near it.

The following activities are not covered in this procedure and the SGN Asset Manager must be consulted in advance of any of the following;

- Piling within 15m of the pipeline
- Demolition within 150m
- Blasting within 250m
- Quarrying or landfilling within 100m
- Deep mining within 1km
- Pressure testing within 8m
- Siting of Wind Turbines
- Siting of Solar Panel Arrays

Additional advice can be found in SGN/WI/DP/1 & SGN/SP/GM/4.

2. Undertaker of the works

Before any work begins the undertaker of the works and all persons responsible for managing and supervising the works must be identified. This is to allow confirmation that they are competent, and to ensure that Method Statements are provided by an appropriate person who is also responsible for ensuring that they are complied with.

The SW/2 Technician must determine the relationships between the undertaker of the works, the main contractor and any sub-contractors involved and identify the Controller of the Works (see Roles and responsibilities on Page 4).

The Controller of the Works is usually the [CDM] Principal Contractor or main contractor for the works with overall responsibility to ensure the work is undertaken safely.

For all works in the vicinity of high pressure pipelines and associated installations SCO procedures will apply. Principal or main contractors appointed to carry out work for SGN should be fully SCO registered. It is the responsibility of the SW/2 Technician to identify who the undertaker of works has appointed as their Competent Person to liaise with, regarding Permit's to Work (PTW). The SW/2 Authorising Engineer is then required to verify this person is an appropriate person for works requiring an excavation PTW.

The principle or main contractor is responsible for providing the Risk Assessment and Method Statement, and to assess the competency of the Competent Person where SGN SCO procedures apply. They are also responsible for ensuring all workers and machine operators involved in the works are suitably competent, are fully briefed, and understand the Method



Statements, relevant procedures and where applicable, the requirements of the PTW.

The Controller of the Works must sign the [Site Document Control Form](#) referencing relevant Method Statement, procedures, and instruction that apply to the works.

The Controller of the Works must provide a suitably competent team leader or supervisor for the works who must remain on site whenever work is being carried out within the hazard zone ([Hazard and Danger Zones](#)).



3. Safe Control of Operations [SCO]

Works on and around High-Pressure pipelines are subject to the controls in GDN/PM/SCO/1 and GDN/PM/SCO/2. For excavation, backfill and HDD works an SCO registered SW/2 AE must issue the PTW to an appropriate CP or for 3rd party works to a Nominated Responsible Person. The SW/2 Technician cannot also be the SCO Competent Person for the works.

For works being undertaken by third parties, the Controller of the Works must nominate a suitable candidate to be temporarily registered under SCO as a 'Nominated Responsible Person' for the duration of the planned works.

For this process to be carried out the prospective candidate must be able to provide demonstrable evidence of suitable experience, training and high levels of vocational competence in the activity they wish to carry out. They must be briefed on the safe working practices detailed in this procedure and receive the SCO/2 briefing on the PTW system and roles and responsibilities. It is the responsibility of the SW/2 AE to ensure these briefings take place.

Evidence of these briefs, in addition to evidence of sufficient training and experience must then be presented to the Responsible Engineer to allow him to be satisfied that the person can be temporarily registered under SCO for the duration of the works. The Nominated Responsible Person **must** be on site at all times when work is being undertaken that is subject to a PTW.

For excavation works being carried out by third parties or contractors [including SGN contractors] that require a PTW, the SW/2 Technician must also be on site to monitor the works and ensure the Method Statement and PTW is being adhered to at all times. If the SW/2 Technician observes any deviation they must stop the works immediately and escalate to the SW/2 AE. Any PTW issued must reference the Method Statement produced for the

planned works. The SW/2 AE must attend site to assess the risks and the suitability of the proposed Method Statement.

The SW/2 AE must be satisfied that the Method Statement adequately describes a safe method of working to prevent damage to the pipeline and any fittings, standpipes, and connections.

For works being carried out near to, but not within the hazard zones, the undertaker of works does not require a PTW. In this situation, the pipeline must still be located and marked with the hazard zones established. The undertaker of works must be provided with all the relevant safety information regarding the pipeline, and be briefed on permissible working methods by the SW/2 Technician. This interaction must be captured using the [Site Document Control Form](#) & the Safe working near high pressure pipelines booklet.

Any Permit issued for excavation works, trenchless technologies and backfilling **must** be issued by an SW/2 AE. For other works requiring a permit an AE that has the required competencies under SCO for that activity may issue the PTW.

Activities where an SW/2 AE must authorise a PTW

- Use of Mechanical excavators inside the hazard zones including during backfilling
- Use of powered hand tools for excavation inside the inner hazard zone and danger zone, including vibro-tampers/plates for backfilling
- Use of vacuum excavators in the danger and hazard zones
- Any 'trenchless techniques', through or under the hazard zones



Permits to Work for activities not listed above can be issued by an AE competent to do so.

- Any lifting operations within the danger and hazard zones
- Any 'Hot Works' i.e. welding, cutting, burning within the easement
 - o Hot Works near pipelines are controlled by T/SP/P9 welding procedures and NRO's in accordance with SCO.

A PTW is not necessarily required for hand digging, unless it is deemed appropriate by the SW/2 AE.



4. Agricultural Activities

Pipelines are designed to operate safely beneath routine agricultural conditions including ploughing to a depth of 500mm without monitoring by SGN.

An SW/2 Technician must attend site and assess the risk of damaging the pipeline for deep cultivation works such as mole or chisel ploughing exceeding 500mm or the installation of land drainage or other services at depths greater than 500mm. A PTW is required if mechanical excavators or other mechanical equipment is to be used for agricultural works within the hazard zones to depths greater than 500mm. The position of fittings and standpipes must be confirmed by hand excavated trial holes and mechanical excavators or other mechanical equipment must not be used within 1.5m of fittings and standpipes.



Figure 1. Chisel Plough

Ditch maintenance is a common agricultural activity and, whilst the objective of this work is not to expose the pipeline, there is a risk of damage to the pipeline. SGN must be notified about ditch maintenance using mechanical excavators and a SW/2 Technician must attend site to locate the pipeline and to discuss the work to be carried out and to ascertain the depth of material to be removed from the ditch. If it is reasonably practicable to do so the ditch should be maintained by hand excavation across the inner hazard zone.

For all ditch clearing works using mechanical excavators or similar, the SW/2 Technician must check pipeline records to confirm the position and indicated depth of the pipeline at the time it was constructed to determine if the ditch existed at the time of construction and if the pipeline depth of cover was increased for the ditch crossing. The SW/2 Technician must also check

pipeline records for the presence of stabbings or fittings. The SW/2 Technician must use an approved pipeline locator to establish the position and indicated depth of cover of the pipeline. If the pipeline cover at the ditch crossing was increased during construction enabling safe maintenance of the ditch it is not necessary to locate the pipeline by hand excavated trial holes provided that:

- There are not any fittings or standpipes near the planned works
- There is evidence to show that the ditch existed at the time of the pipeline construction
- The ground levels have not been reduced
- At least 750mm can be maintained between the new invert level [bottom of the cleared ditch] and the indicated top of the pipeline
- The bottom of the ditch is probed to at least 500mm below the new invert level by the SW/2 Technician to confirm the pipeline is not within 500mm of the new invert level before work with a mechanical excavator starts
- The machine operator is experienced and has good visibility of the bucket and bottom of the ditch
- An SW/2 Technician must be on site when the excavator is used in the hazard zones [even if a PTW is not issued].

A PTW is not required if all of the above conditions are met, otherwise a PTW is required and a SW/2 Technician must be on site when the mechanical excavator is used in the hazard zones



Figure 2. Ditch Maintenance

5. Competency

All persons carrying out work in proximity to SGN's high pressure pipelines and associated installations must be suitably trained and competent.

If an SW/2 AE allows the use of a mechanical excavator in the Hazard Zone ([Hazard and Danger Zones](#)), he/she must satisfy himself that the CP or Nominated Responsible Person is suitably competent, and can demonstrate clear understanding of the requirements for safe working and the potential danger of damaging the pipeline or any associated fittings.

6. Records

Prior to any work commencing all available records must be sought for the assets in the area. This must include, where available, In-Line Inspection (ILI) data, which can provide valuable information regarding the presence of fittings on the pipeline. Records must also be consulted regarding the potential for defective welds on the pipeline (T/PR/P/18).

7. Pipeline Locating

Prior to any work commencing the SW/2 Technician is responsible for locating and marking the pipeline. All available mapping and pipeline records must be consulted to establish information on the depth of cover and any fittings or attachments on the pipeline. Where available the ILI data for the pipeline must be checked. Pipeline locating must be carried out using a suitably approved and calibrated locator with a pipe depth measurement accuracy of $\pm 5\%$ of depth for cover up to 5 metres. **It should be recognised that radio detection pipeline locators will detect the centreline of the pipeline and not the crown, hence the radius of the pipeline must be considered when interpreting the indicated depth of the pipeline.**

In all circumstances, even if a third party locates and marks out a pipeline, the SGN SW/2 Technician will locate the position of the pipeline as described below.

Once located the pipeline must be pegged out at a minimum of **3m** intervals. In addition to the 3m intervals a peg must be positioned at the point of every change of direction and at every change in depth of cover, there must be no bends between pegs. Marking out of the pipeline must also extend for 15m laterally along the pipeline from either side of the planned works.

Proposed work areas must be marked out, clearly showing the hazard zones and pipeline centreline. Safe entry and exit points should be established to avoid crossing the pipeline where possible.

A check for any overhead services must also be carried out.



Figure 3. Example Pipeline Locator

8. Trial Holes

Trial holes are required in advance of most works near pipelines to confirm the route and depth of the pipeline. All available pipeline records, information, site conditions, recorded and indicated depth of cover must be considered prior to any excavation works. The excavation of **all** trial holes must be supervised by the SGN SW/2 Technician.

Trial holes will normally be carried out by hand excavation, however vacuum excavators may be used to assist hand excavation by removing spoil from the excavation. They should not be used as the primary ground engaging tool (in accordance with the approved code of practice for the safe use of vacuum excavators). The use of any vacuum excavators in the Hazard Zones must be authorised with a PTW and be monitored by an SW/2 Technician.

Vacuum excavators must not be used within 1.5m of any fittings or stabbing, if it is inconclusive whether there are fittings or stabbings present a vacuum excavator should not be used until demonstrated as safe to use.

For works outside of the hazard zones it is the SW/2 Technician's responsibility to determine if there is a need for trial holes. This will depend on the nature of the work being undertaken and the plant and equipment being used and the proximity to the assumed position of the pipeline.

If mechanical excavators, trenchless technologies, auger boring equipment or any other powered plant [other than routine agricultural cultivation to a depth of 500mm] are being used close to the hazard zone, it is recommended that at least one hand excavated trial hole is undertaken to prove the reliability of the assumed pipeline position and depth; this is essential if there are fittings and/or standpipes on the pipeline.

Trial holes **may** not be required for [Highway Surface Maintenance](#) (see this section for further information).

If necessary [Powered Hand Tools](#) may be used for excavating trial holes, depending on proximities a PTW may be required.

A PTW is not mandatory for **hand excavation only** of trial holes.



Figure 4. Hand Excavated Trial Hole

Trial holes **may** not be required for [Highway Surface Maintenance](#) (see this section for further information).

9. Mechanical Assistance during Trial Holes

If it is not practicable, or it is not safe to use a vacuum excavator to assist with deep trial holes, a mechanical excavator can be used to provide mechanical assistance in the hazard zone ([Mechanical Assistance](#)); this must be authorised by the Head of Network Management (Transmission) in accordance with the following:

- Under **no circumstances** is a mechanical excavator permitted to be used in the danger zone (0.6m) or within a 1.5m radius of fittings and standpipes, even after exposing the pipe or fittings.
- A site specific [Risk Assessment](#) and [Method Statement](#) must be prepared, in accordance with this procedure.
- Consideration must be given to ground stability, taking into account the laden weight of any plant to be used.
- The Method Statement must detail the arrangements for trench support, access and egress, and permitted proximity of heavy plant to the excavation.
- The form in Appendix C of this procedure must be completed with all relevant information, as indicated on the form and submitted to the Head of Network Management (Transmission) for consideration. The request is only approved when the Head of Network Management (Transmission) has returned a signed copy of the Appendix C approval form.
- Following authorisation by the Head of Network Management (Transmission) a PTW must be issued for the trial holes **only** (see [Safe Control of Operations \[SCO\]](#)). Additional PTW's will be required for further mechanical excavation inside the Hazard Zone following confirmation of the pipeline location and depth.

- An SW/2 Technician must remain on site whilst work is being undertaken to excavate the deep trial hole.
- The PTW must specify all proximity restrictions and reference the Method Statement and Risk Assessment.
- All workers and machine operators involved in the operation must be briefed and a briefing register signed by all persons must be kept.

This level of authorisation is required as a mechanical excavator is being introduced without yet confirming the depth and route of the pipeline.



10. Risk Assessment

The inherent risk arising from damaging a high-pressure gas pipeline is severe. A detailed site-specific risk assessment must be completed for each activity to be carried out to ensure the pipeline is not damaged. The risk assessment should consider:

- The operating pressure of the pipeline
- Pipeline diameter and wall thickness
- The depth of cover of the pipeline
- The presence of fittings, standpipes and connections and where available in line inspection (ILI) data must be used as part of a risk assessment to identify if and connections, fittings or standpipes are present.
- The proximity of the planned work to the pipeline
- The complexity of the pipeline configuration
- The activity to be undertaken in close proximity to the pipeline, in particular, the use of plant and equipment that is hazardous to pipelines [e.g. mechanical excavators]
- Any existing pipe protection
- Condition of the girth welds on the pipeline (T/PR/P/18)
- The competency and experience of workers and machine operators
- The level of supervision and monitoring
- Environment conditions such as adverse weather and low visibility [e.g. snow conditions] that could lead to errors of judgement
- The presence and proximity of any other hazardous utility apparatus
- **The controls to manage the risk to a level as to prevent any damage to the pipeline.**



11. Method Statement

All works in the vicinity of high pressure pipelines and associated installations require a Method Statement to be produced. For excavation works requiring a PTW the Method Statement must be provided to and accepted by the SW/2 AE. For works not requiring a PTW the SW/2 Technician must check and if satisfactory accept the Method Statement.

For works requiring a PTW, the Method Statement and [Risk Assessment](#) must be site specific. The Method Statement will describe the planned work program in detail, and will include all findings from trial hole excavations and the interrogation of all available records including, where available, ILI data. Special consideration must be given to the presence of fittings, standpipes and connections, which are more vulnerable to damage. It may be necessary to have a separate Method Statement for the preliminary phase of undertaking trial holes and the Method Statement for the main work phase may have to be modified or amended following trial holes.

The Method Statement must also include a detailed description of what safety precautions and control measures are to be employed to prevent damage to the pipeline. The Method Statement must also include:

- Suitably dimensioned drawings where appropriate
- Details of the plant to be used (excavators/bucket sizes/vibration compactors etc.)
- Detail what site supervision will be in place
- List of personnel involved in works
- The sequence of works from planning and excavation to completed reinstatement
- Emergency response plans (in the event damage is caused to a pipeline)

If works requiring a PTW are authorised, any additional safety precautions required by the Permit must be described in the Method Statement. The Permit must also reference the accepted Method Statement.

Deviation from the accepted Method Statement is not permitted. It may be necessary to review and amend the Method Statement as work progresses to ensure that the work plans take into account any unanticipated change. The respective SW/2 AE must be advised of any changes and if agreed amend the PTW accordingly.

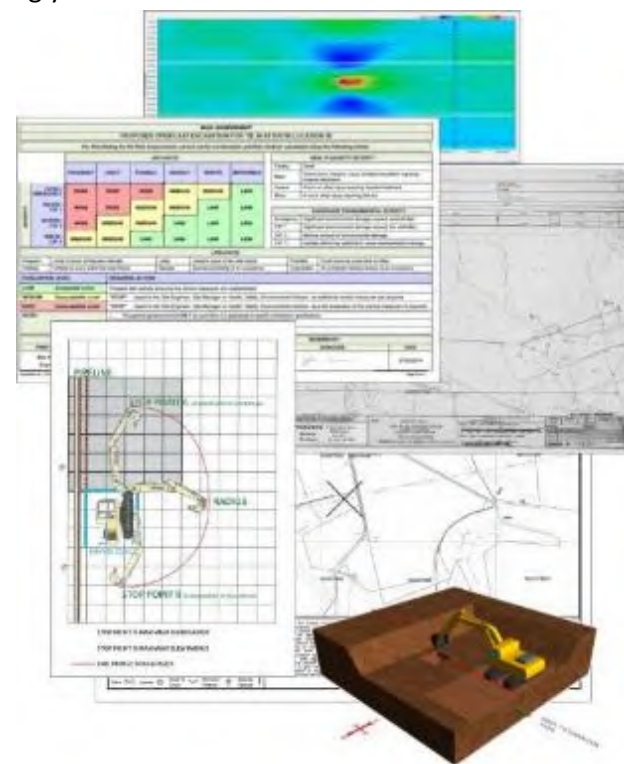


Figure 5. Example Information included in Method Statement

12. Construction Traffic

Where existing roads cannot be used, heavy construction traffic must only cross the pipeline at previously agreed locations. All crossing points over a pipeline must be fenced on both sides with a post and wire fence and with the fence returned along the easement for 6 metres. A minimum distance of 3 metres must be maintained between a crossing point and any fittings, valves or branches, where possible a distance of 10 metres is preferred.

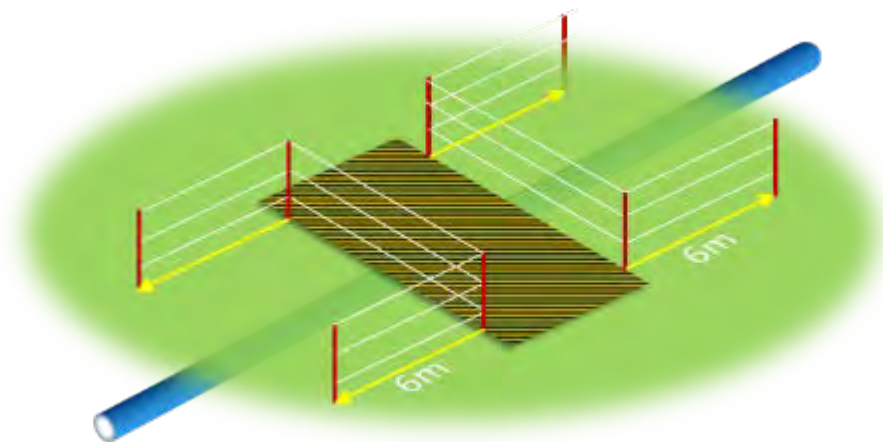


Figure 6. Example Crossing Layout

These crossing points must have suitable temporary surfaces to prevent ground penetration. This can include heavy duty timber, roadway plates, or reinforced concrete construction, constructed at ground level.

The SW/2 AE must review ground conditions, vehicle types and crossing frequency to determine the type and construction of the raft required. For sites with high levels of heavy industrial plant and vehicles crossing the pipeline, the SW/2 AE should consult the Asset Manager.

Notices directing traffic to the crossing points must be erected.



Figure 7. Example Temporary Rafts

13. Hazard and Danger Zones

These zones dictate what activity is allowed and what is not allowed. When excavation work requiring a PTW in these zones is being carried out, the SW/2 Technician **must** be on site to monitor and ensure safe working.

The following diagrams illustrate the inner and outer hazard zones and the danger zone in relation to a high-pressure gas pipeline. Different restrictions and requirements for PTW apply depending on the activity being carried out. These are described further in the relevant sections of this procedure.

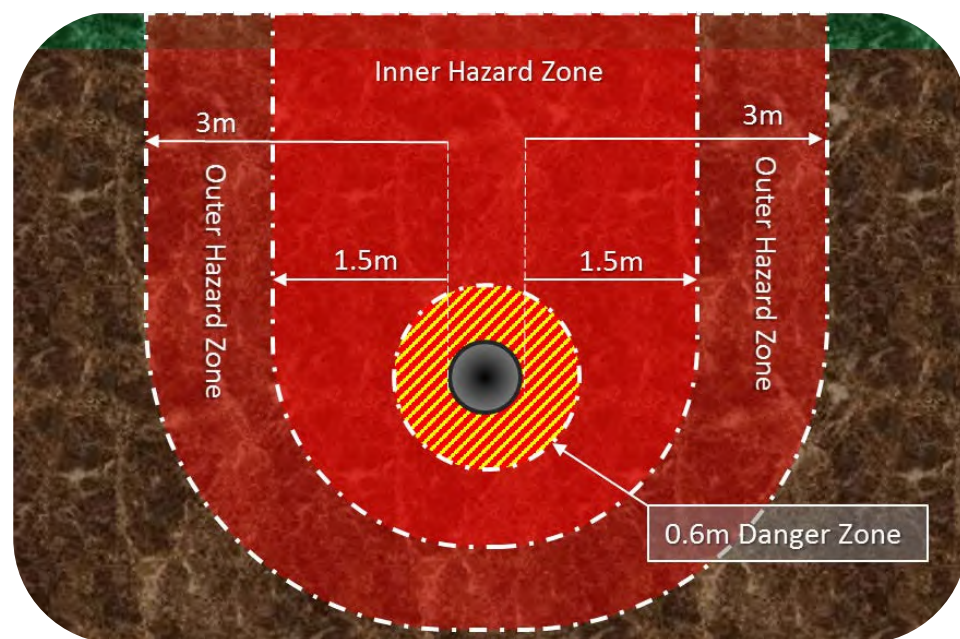


Figure 8. Hazard and Danger Zones

The Danger Zone is applied radially from the pipeline, at a distance of 0.6m. This distance is a **minimum**, the SW/2 AE can mandate a greater distance if required based on a site-specific risk assessment.

The Inner Hazard Zone extends from the Danger Zone to 1.5m from the pipeline, rising to ground level and 1.5m below the pipeline.

The Outer Hazard Zone extends from the Inner Hazard Zone to 3.0m from the pipeline, rising to ground level and 3.0m below the pipeline.

The SW/2 Technician must explain these markings and zones to the Controller of the Works [on site] to ensure they are understood prior to planning the works and confirm them to the CP/team leader on site before work starts.

The proximity zones must be marked on site and maintained by the SW/2 Technician, to avoid confusion with pipeline markers.

For further information on restrictions applying to different activities see the following sections of this procedure:

- [Mechanical Excavation](#)
- [Mechanical Assistance](#)
- [Use of Vacuum Excavators](#)
- [Lifting Operations](#)
- [Trenchless Techniques](#)
- [Backfilling](#)
- [Powered Hand Tools](#)
- [Top soil stripping](#)
- [Highway Surface Maintenance](#)

14. Fittings and Standpipes

Fittings and standpipes on a high-pressure gas pipeline are particularly vulnerable to damage. Additional safety margins should be applied when these are in proximity to works.

Mechanical excavators (see [Mechanical Excavation](#)) **must not be used** within a 1.5m radius of fittings and standpipes.

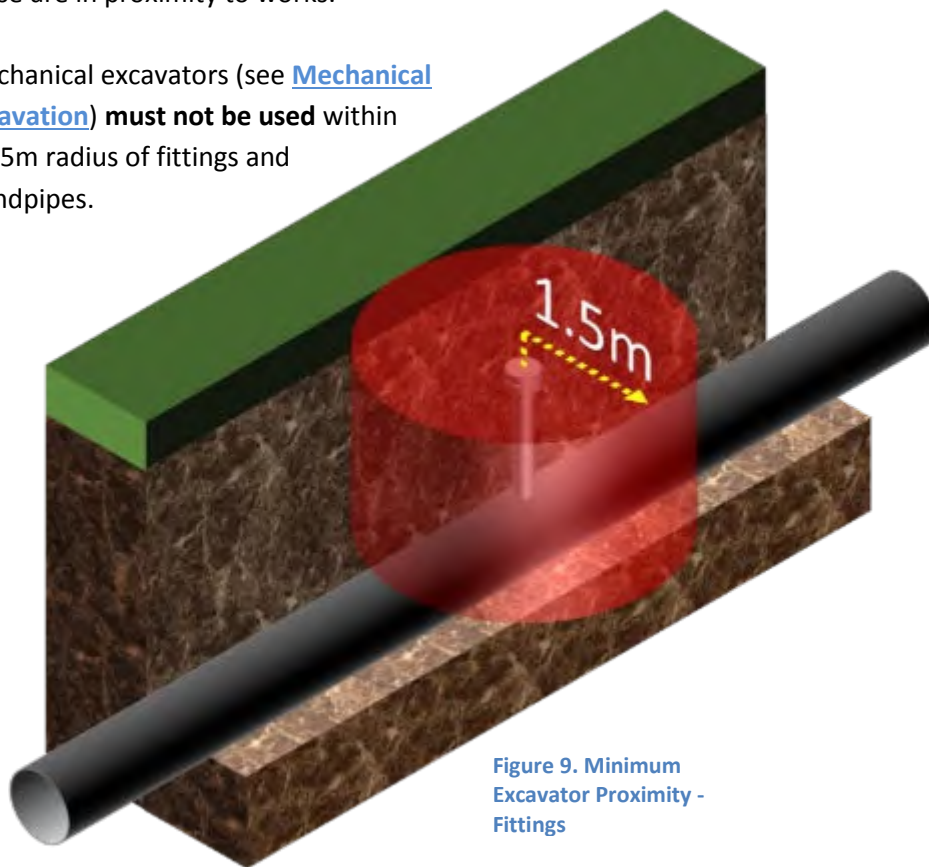


Figure 9. Minimum Excavator Proximity - Fittings

[Records](#) must be checked by the SW/2 Technician to identify if fittings and standpipes, including those not extended to ground level, are present on the pipeline in the vicinity of works, and at proposed traffic crossing points.

Fittings and standpipes **must** be hand excavated. A PTW is required if [Powered Hand Tools](#) need to be used. Trial holes must be undertaken to locate and confirm the position of fittings and standpipes if a mechanical excavator is to be used within the hazard zones.

15. Powered Hand Tools for Excavation

The use of Powered Hand Tools in the Inner Hazard Zone & Danger Zone requires a PTW, and the SW/2 Technician must be on site at all times when these tools are being used in these zones. Powered hand tools should only be used in the danger zone if it is necessary and the SW/2 AE must specify the permitted depth and proximity to the pipe that they can be used to on the PTW.

A PTW is not required for using powered hand tools in the outer hazard zone.

16. Mechanical Excavation

In relation to this section of this procedure a mechanical excavator is a powered tracked or wheeled machine with an extending arm and bucket or attachments for assisting excavation such as 'peckers' or concrete breakers. It includes mini-excavators and large excavators. Mechanical excavation is using these machines to excavate or assist excavation (see [Mechanical Assistance](#)). Mechanical excavators have been the cause of the most serious pipeline damage incidents. They are the most likely cause of damage to a pipeline.

Mechanical excavators must not be used in the Danger Zone or within a 1.5m radius of fittings and standpipes on the pipeline.

Mechanical excavators must always be positioned far enough away from the excavations/trenches to prevent trench wall collapse, considering the laden weight and the ground conditions on site.

Mechanical excavators must **not** dig on one side of the pipeline with the cab of the excavator positioned on the other side. This is to prevent the digging arm pulling towards the pipe or any fittings increasing the risk of damaging the pipe, or, causing damage to the pipe by lifting over the pipe. Under no circumstances is this permitted.

The digging bucket must be toothless when used in the hazard zone and when excavating, a narrow bucket [up to 0.6m width] should be used when excavating unless specifically otherwise authorised on the PTW.

A banksman must be used to assist the mechanical excavator operator as it is likely that the operator will have restricted visibility in deep excavations. Measures must be in place to ensure workers are not at risk of being injured

by the mechanical excavator. Machine operators should not work for longer than 2 hours in the hazard zone without a break.

A PTW is required for:

- Using a mechanical excavator to excavate within the outer and inner hazard zones
- Using a mechanical excavator to assist hand digging within the outer and inner hazard zones
- Using a mechanical excavator to assist with any lifting operations within the hazard and danger zones ([Lifting Operations](#)).

A mechanical excavator is not permitted to excavate **within the 0.6m danger zone.**

Particular attention must be given to the presence of [Fittings and Standpipes](#) in the vicinity of the works and additional precautions are described within this procedure in ([Mechanical Excavation – Additional Control Measures](#)).

Where available in line inspection (ILI) data must be used as part of risk assessment to identify connections, fittings and or standpipes in the vicinity of the works. A mechanical excavator is **not** permitted to excavate or to provide



Figure 10. Excavator Positioning

Mechanical Assistance within the Danger Zone or within a 1.5m radius of any fittings or standpipes.

A SW/2 Technician is not authorised to permit the use of a mechanical excavator within the hazard zones or amend any requirements detailed in a PTW or to a Method Statement associated with the PTW. Only the SW/2 AE can permit the use of a mechanical excavator inside the hazard zones.

Mechanical excavators cannot be used to excavate within the 3.0m inner and outer hazard zones of a high-pressure gas pipeline, unless authorised by an SCO registered SW/2 AE. The use of mechanical excavators within the hazard zones can only be authorised subject to the following requirements:

- A detailed site specific [Risk Assessment](#) has been carried out
- The pipeline location and depth has been confirmed by trial holes and all indicated fittings and stabblings have been located
- A site specific [Method Statement](#) has been submitted to and accepted by the SW/2 AE, who must attend site before authorising the use of a mechanical excavator within 3.0m hazard zone of the pipeline.
- A PTW has been issued as described in [Safe Control of Operations \[SCO\]](#).
- The SW/2 AE is satisfied that those undertaking the work are suitably competent and experienced and that a team leader or supervisor who understands his/her role and responsibilities will be on site at all times [in addition to the SW/2 Technician]
- If approved, the proximity should not default to the minimum, appropriate distances greater than 1m should be considered to minimise the risk of damage to the pipeline
- Every effort must be made when introducing a mechanical excavator into the hazard zone to make the risk of damage as low as reasonably practical.

The SW/2 Technician must consider the **environmental conditions** in which the works are taking place, for example adverse weather conditions such as snow or low natural light conditions. Work must be stopped in the hazard zone if the visibility of excavator operators is affected such that there is an increased risk of causing damage. These considerations should form part of the [Risk Assessment](#).



17. Mechanical Assistance

A PTW is required for mechanical assistance in the outer and inner hazard zones. It is not permitted in the danger zone.

Mechanical assistance is, for example, using a mechanical tracked digger to assist with removing already excavated/loosened ground material or to assist with lifting operations. For example, if a mechanical excavator is prohibited from being used to excavate within the danger zone, it might be acceptable for it to assist manual hand digging by operating outside of the danger zone where hand dug material can be shovelled to a safe distance enabling the mechanical excavator to safely remove the loosened soil.

Powered Hand Tools including hand held air lances can be used to loosen soil and ground material and displace it to a safe distance outside of the 0.6m danger zone.

If connections, fittings or standpipes are present there is a significant risk of accidental damage through unauthorised or unintended movement of the machine bucket. In such circumstances, **mechanical assistance is not permitted within the 1.5m inner hazard zone** and damage prevention measures must be applied to protect them from accidental damage by the bucket. Preventative measures include a protective barrier and slew locks/chains that restrict the movement of the excavator arm and bucket. See [Mechanical Excavation – Additional Control Measures](#).

A mechanical excavator can also be used to lift/lower trench support materials etc. Lifting is a good example of a hazard to a standpipe, even though the machine is not being used to dig, as the standpipe could accidentally be knocked by the bucket/arm or load being lifted if the lift is close to an exposed unprotected standpipe. Refer to the [Lifting Operations](#) section of this procedure for lifting operations.



Figure 11. Example of Mechanical Assistance

18. Top soil stripping

Top soil stripping is the removal of top soil over a large area for a temporary works or construction site; it does not mean the removal of the first 250mm depth of ground for discrete excavations. Top soil stripping within pipeline easements and across the hazard zones using mechanical excavators can be permitted by the SW/2 Technician up to a depth of 250mm providing hand excavated trial holes have confirmed it is safe to do so.

Standpipes and fittings are vulnerable to damage during topsoil stripping so they must be located by hand excavated trial holes before top soil stripping starts. Top soil stripping using a mechanical excavator is not permitted within 3.0m of standpipes and fittings and the SW/2 Technician must ensure that the restricted area is clearly marked and that barriers are erected to demarcate the position of the standpipes and fittings.

A PTW ([Safe Control of Operations \[SCO\]](#)) is not required for top soil stripping. If top soil stripping has been undertaken, no further excavation by mechanical excavator is permitted within the Hazard Zone, unless approved by the SW/2 AE (see [Mechanical Excavation](#)).

An SW/2 Technician must be on site to monitor all top soil stripping, and the pipeline route and hazard zones should be remarked following top soil stripping.



Figure 12. Top Soil Stripping

19. Highway Surface Maintenance

This section relates only to highway surface maintenance work. It does not apply to, or as part of, works below the road surface structure.

High pressure gas pipelines are designed to operate safely beneath roadway structures, and provided there are not any standpipes or fittings present on the pipe, the pipeline should be safe from surface activity. Surface maintenance includes the use of surface planes to mechanically remove the wearing courses of roadways [not to exceed 300mm] and this is allowed within the hazard zones subject to the requirements described below. Powered hand tools and mechanical excavators must be used within the hazard zones for excavations deeper than 300mm, as described in the [Mechanical Excavation](#) and [Powered Hand Tools](#) sections of this procedure of this procedure.



Figure 13. Road Planer

For depths of cover up to 1.5m trial holes must be hand excavated to confirm the position and depth of high pressure pipelines prior to surface removal. If a concrete protective slab has been installed, it is only necessary to locate and confirm the depth of the concrete slab. If pipeline records and pipeline locators indicate the pipeline is deeper than 1.5m cover and the highway surface removal will not exceed 300mm, it is not mandatory to locate the pipe by trial hole, subject to approval by the SW/2 AE. Consideration must be given as to whether there has been development that has altered ground levels since the pipeline was constructed.

For road surface maintenance/removal that does not remove more than 150mm of road surface a PTW is not mandatory. All parties must still be made aware of the presence of the pipeline. If the works are planned to remove more than 150mm of road surface within 3m of a pipeline a PTW is required and it must be issued to a Nominate Responsible Person within the contractor's organisation.

If a PTW is issued then the SW/2 Technician must remain on site to take regular measurements and ensure the maximum depth of 300mm is not exceeded.

A road surface plane must not be used within 3m of standpipes and fittings, even if these are not at surface level. If there are any standpipes or fittings on the pipe they must be located and the position must be confirmed and marked clearly. Mechanical excavators and hand powered tools can be used as described in the [Mechanical Excavation](#) and [Powered Hand Tools](#) sections of this procedure.

Where surface maintenance or removal is to be carried out across the hazard zones or along the route of a pipeline, an SW/2 Technician must make contact with the undertaker of the works and establish who the Controller of the Works is. To then to discuss the scope of the works and equipment to be used, and most importantly the depth of surface removal and how this will be controlled.

The SW/2 Technician must check pipeline records including In-Line Inspection (ILI) data, where available, which can provide valuable information regarding the presence of fittings on the pipeline that may not be shown on drawings.

In some circumstances records might confirm or indicate that additional protection has been provided to the pipeline such as a protective sleeve or a protective slab. A protective slab must not be removed as part of highway surface renewal.

In all circumstances, the SW/2 Technician must inform the Controller of the Works of the pipeline route and areas where restrictions apply.



20. Mechanical Excavation – Additional Control Measures

It is understood that there will be instances in which the use of mechanical excavators is requested to operate within 3m of a pipeline, fittings or associated installations.

The risk of damage or incident greatly increases with plant operating in such close proximity to pipelines. Fittings such as branches and small diameter stabblings are particularly vulnerable and where these are present, a mechanical excavator is **not** permitted to excavate or to assist hand digging within 1.5m of the fittings and standpipes [i.e. in the inner hazard zone]. Slew locks and/or chains must also be used to control movement of the machine.

If pipelines are exposed or fittings/standpipes are within 3.0m of where mechanical excavators are operating, control measures as described in this section must be applied to protect against/prevent damage from improper or unintended movement of machines. It is not necessary to apply all of the described control measures, but it is necessary to apply those that are most suitable to **prevent** damage to the pipeline and any fittings or standpipes. Applicable control measures must be detailed within the Method Statement.

Examples of additional Control Measures to reduce the risk of damage to pipelines or to limit unintended movement of mechanical excavators/buckets are listed below.

- **Physical Protective Barriers**

Temporary structures constructed around the pipeline to create a physical barrier between excavators and pipelines, preventing any direct contact and to protect the pipeline whilst work is carried out in the area. All temporary structures must be removed prior to backfilling the excavation.



Figure 14. Protective cladding applied to pipeline

- **Depressurisation**

Depressurising pipework and installations can be considered a risk reduction measure as the stored energy in the system is reduced, however the full requirements of this procedure apply to any depressurised pipework that will be repurified to pressures >7barg.

- Excavator Safety Systems / Movement Limiting Devices



Figure 15. Electronic Movement Limiter

Excavators fitted with Mechanical or Electronic Slew, Height and Reach limiters give an increased level of control and should be used inside the 3.0m hazard zone if there is a risk of damage to the pipeline or fittings and standpipes. These include slew locks and chains to restrict the movement and reach of the machines arm, and Electronic movement control devices.



Figure 16. Mechanical Slew Lock

21. Deep Excavation Safety

Deep excavations are vulnerable to trench collapse and create fall from height hazards. T/PR/SW/1 details the correct working practices for deep excavations and must be followed at all times during deep excavation works.

It is recognised that there are practical difficulties in carrying out hand excavation at depths greater than 1.5m, however a mechanical excavator must not be used within the 3m Hazard Zone until the location and depth of the pipeline and any fittings/standpipes have been confirmed by hand excavated trial holes – See [Trial Holes Requiring Deep Excavations](#).

Mechanical excavators and other plant traffic must be positioned far enough away from the excavation to prevent trench wall collapse, appropriate access and egress from excavations must be established. A PTW is required for all deep excavation works.

22. Use of Vacuum Excavators

Vacuum Excavators can be used in the [Hazard and Danger Zones](#) subject to a [Risk Assessment](#) and a PTW issued by an SW/2 AE, this includes the excavation of [Trial Holes](#). However, they cannot be used within 1.5m of any fitting or stabbing, if records are inconclusive regarding the presence of fittings in the area where the trial holes are required then excavation must be carried out by hand.



Figure 17. Large Vacuum Excavator

The weight of the excavators must be taken into account, the weight will increase as the excavator is in use. Vacuum excavators can pose a risk of causing trench collapse if used near to unsupported excavations or trenches. A suitable and sufficient risk assessment must be undertaken if the vacuum excavator is positioned within 3.0m of an unsupported excavation [for deep excavations this distance may have to be increased].

The design of trench support must take into consideration the proximity of vacuum excavators, 'stop blocks' should be used to prevent creep towards an excavation.

Damage can be caused to the pipe coating by toothed hoses that are used for loosening ground material, so preference should be given to using toothless hoses in conjunction with air lances or hand powered tools; this is particularly important in the inner hazard zone and danger zone.

The SW/2 Technician must be on site when vacuum excavators are used within the hazard and danger zones.

23. Chain Trenchers

Chain trenchers are not permitted to be used in the hazard zones or danger zone.



Figure 18. Chain Trencher

24. Slabbing & Protective Measures

The design and construction of permanent protective measures, such as installation of concrete slabs is specified in SGN/SP/CE/12 and is subject to SGN/PM/PS/5 using either standard or bespoke designs as required. The method of installation must be confirmed through the submission of a formal written Method Statement.



Figure 19. Protective Slabs

Where permanent slab protection is to be applied over the pipeline SGN must carry out a coating defect survey of the pipeline to check that there is no existing damage to the coating of the pipeline prior to the slab protection being installed. The SW/2 Technician must therefore request that the contractor contact the Asset Manager prior to the laying of any slab protection to arrange this survey.

25. Exposed Pipeline

Any exposed pipeline must be suitably supported. Where lengths of pipeline greater than 5m are to be exposed and unsupported the Asset Manager must be consulted and a stress analysis must be carried out in order to establish the necessary support requirements.



Figure 20. Pipeline Supports

The stress analysis must be carried out in accordance with IGEM/TD/12 by individuals with demonstrated expertise in this area. Any temporary pipeline supports installed **must** be removed before backfilling. The exposed pipeline must be protected by matting and suitable timber cladding where necessary. Consideration must be given to T/SP/P/18 when pipelines are exposed.

26. Lifting Operations

All lifting operations carried out over the [Hazard and Danger Zones](#) must be carried out in accordance with [Safe Control of Operations \[SCO\]](#). All lifting operations near HP plant must be fully detailed in a method statement and a PTW must be issued by an AE trained and competent in lifting operation and have the SCO site type competency for the live plant near the lift.

Lifting operations should only be permitted in the danger zone for works on the pipeline such as hot tap and stopple operations, or where it is necessary to install trench support. Consideration must be given to avoiding or minimising lifting operations in the danger zone where it is practicable. Standpipes and fittings are particularly vulnerable to damage during lifting operations, including the lifting of trench support equipment and materials and damage prevention measures must be taken [i.e. barriers to prevent damage and/or restraints on the lifted load to restrict its movement].

Lifting operations includes the lifting of pipes, fittings, valves, stopple equipment, tools and equipment, trench support materials or frames etc. whether by crane, Hiab vehicles, mechanical excavators or other.

Lifting operations must be carried out in accordance with SGN/PM/DIS/3.6. For guidance on lifting Protective Slabs refer to SGN/SP/CE/12.

Those overseeing and assisting lifting operations and operating lifting equipment must be competent and experienced.

The free movement of suspended loads must be restrained and controlled. A slinger/signaller/banksman must assist.

Lifting operations should be planned to avoid, where possible, lifting over pipelines and especially fittings and standpipes by **having the lifting equipment on the same side of the pipeline as the lift.**



Figure 21. Example Lifting Operation

27. Cathodic Protection

All pipelines are cathodically protected in accordance with SGN/PM/ECP/2. Where a new service is to be laid and similarly protected, the SW/2 Technician must arrange with the SGN Maintenance department for interference tests to be carried out to determine whether SGN's own system is adversely affected. If any cathodic protection posts or associated apparatus need to be moved to facilitate third party works SGN require reasonable notice, typically 7 days.

SGN must undertake this work and any associated costs should be borne by the third party

28. New Services Crossings

Where a new service is to cross over or under a pipeline a minimum clearance distance of 600mm must be maintained between the nearest point of the pipeline and the new service.

In special circumstances this distance may be reduced after consultation and written agreement with the SGN Asset Manager.

Ordinarily any new service crossing over a pipeline should be done by hand excavation. To limit the length of interaction between a pipeline and any new service the angle that a new service is permitted to cross a pipeline must be between $\geq 75^\circ$.

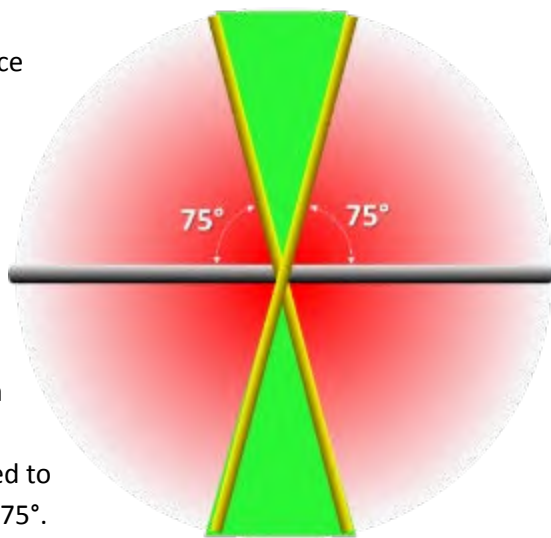


Figure 22. Crossing Angles

29. Trenchless Techniques

Trenchless techniques include moling operations; Horizontal Directional Drilling (HDD); auger boring; impact boring; pipe bursting; hand and powered tunnelling operations; etc. These activities can be highly hazardous to high pressure gas pipelines and can cause catastrophic damage to them.

Trial holes must be hand excavated to confirm the position and depth of the pipeline ([Trial Holes](#)) and any associated fittings, standpipes or connections, if any of these activities are to be carried out through or under the hazard and danger zones or in the vicinity of the hazard zones.

A **PTW** issued by an SW/2 AE is required for all trenchless techniques carried out within the hazard zones or for passing under a high pressure gas pipeline at any depth.

Any proposal to use trenchless technologies in the hazard zones or under the pipeline at any depth must be referred to the Asset Manager who will review the risk assessments and method statements and will, where necessary, seek specialist advice.

The Head of Network Management (Transmission) must be consulted and must authorise the use of trenchless techniques through or within the inner hazard zone.



Figure 23. Horizontal Directional Drill

A site-specific Method Statement must be provided by the Controller of the Works. The potential harm to the pipe or its coating from vibration must be considered.

An SW/2 Technician must observe any work within or through the pipeline easement and hazard zones to monitor compliance with the agreed method statement and PTW.

30. Backfilling

For backfilling activities in the [Hazard and Danger Zones](#) the use of any plant must have a PTW in place with an SW/2 technician monitoring works throughout. If the works are small scale, e.g. reinstatement of trial holes and does not involve the use of any plant, the works can proceed without a PTW – however an SW/2 technician must be on site to monitor the first 300mm of consolidated cover over the pipeline to ensure there is no damage to the pipeline coating. The AE can prescribe further monitoring if considered necessary.



When issuing the PTW the SW/2 AE must consider the presence of any fittings on the pipeline, particularly vulnerable small diameter fittings, and where necessary insist on appropriate proximities and the use of lower impact compaction tools, such as ergo tampers. Backfilling works must also be carried out in accordance with SGN/SP/P/10.

If backfilling works are to be carried out by a third party SGN require a minimum of 48 hours' notice prior to any works being carried out. This should be communicated to any contractors working on the pipeline by the SW/2

Technician. This is applicable for any works over, under or parallel to the pipeline, within 3m.

If the pipeline has been backfilled without the knowledge of the SW/2 Technician, then he/she **must** insist the material is re-excavated to enable the condition of the pipeline coating to be checked and to confirm suitable fine fill material has been used around the pipeline.

Any damage to the pipeline or pipeline coating, however minor, **must** be reported to the SW/2 AE prior to backfilling. The damage must then be assessed and suitably repaired by SGN. Minor damage to pipe coating and test leads may be repaired by SGN free of charge.

[Safe Control of Operations \[SCO\]](#) & [Construction Traffic](#) should be observed when manoeuvring plant near the pipeline.

When backfilling the pipeline must have 300mm of fine sand placed over and around the pipeline, packed by hand tools only. This must then be followed by 300mm of other suitable material again packed only by hand tools. If necessary, this may need to be carried out in multiple layers. These measures must be followed before any mechanical compaction plant is introduced. If there are any fittings present, then this depth requirement is measured from the top most point of the fitting.

The vibration disturbance associated with compaction plant can have a



harmful effect on the integrity of a pipelines, vibration limits are contained in IGEM SR/18 and SGN/SP/GM/4.

The extent of the imposed stresses is a function of the different characteristics of the plant, i.e. weight, centrifugal force and the amplitude of movement. Plant with a static weight of less than or equal to 500kg should be used until a depth of 900mm of consolidated backfill has been achieved. The type and weight of all compaction plant must be detailed on the PTW.

Mechanical excavators may be used to assist in depositing backfill material in the hazard and danger zones, subject to the following controls:

- PTW in place & SW/2 Technician monitoring works
- A minimum of **300mm** of suitable hand placed & packed material must first be in place over the pipeline to protect the pipeline and the pipeline coating.
- The bucket must always remain a minimum distance of 1m from the pipeline.
- Backfill material is suitably screened for large rocks

A mechanical excavator **must not** be used to compact ground in the Inner Hazard and Danger Zones.

If there are fittings present in the areas to be backfilled the SW/2 AE must evaluate the individual scenario in accordance with the requirements of section 10 of this procedure and dictate an appropriate proximity zone appropriate to the vulnerability of the fitting. The SW/2 Technician will monitor all backfilling and stop all works if any non-compliance with the agreed method of working occurs.

[Lifting Operations](#) should be considered if plant needs to be lifted into the excavation.



31. Damage to the Pipeline

If the SGN pipeline is damaged, even slightly, and even if no gas leak has occurred then the relevant SGN Gas Control Centre **must** be contacted immediately and informed that the pipeline has been damaged along with the geographical location of the damage.

The Control Room must be asked to confirm that the pressure in the pipeline will not be increased until an assessment of the damage has been carried out in line with SGN procedure SGN/PR/P/11. The Control Room must also be asked to make preparations to reduce pressure whilst the assessment of damage is being carried out.



Figure 24. Examples of Severe Damage to Pipelines

In addition, the contractor must be told to follow the advice in SGN/PM/EM/76, namely: -

- Shut down all plant and machinery immediately and extinguish any potential sources of ignition
- Evacuate all personnel from the vicinity of the pipeline and ensure no one approaches the area
- Report any emergency to using the emergency number 0800 111 999
- Notify the SW/2 AE or his office immediately using the contact telephone number provided
- Do NOT try to stop any leak
- T/SP/P/18 & T/SP/P/9 must be observed when making any repair to the pipeline
- The incident must also be reported in accordance with SGN/PM/INV/1.

32. Document Control

All documents handed to contractors or landowners on site must be recorded and signed for by the recipient on the [Site Document Control Form](#). Lack of information, and the lack of clear instruction is a major contributing factor in many pipeline damage incidents. It is the responsibility of the SW/2 Technician to ensure that all the required information is available and provided to the Controller of the Works.

33. Encroachment Reporting

Details of all third-party activities and SGN non-routine operations carried out within the easement, together with any activity outside of the easement which could have a detrimental influence on the integrity of the pipeline must be recorded on the standard encroachment form shown in Appendix C of this procedure ([SGN Encroachment Reporting Form](#)). On completion of the work the encroachment form must be signed by the AE and retained in the Pipeline File.

34. References

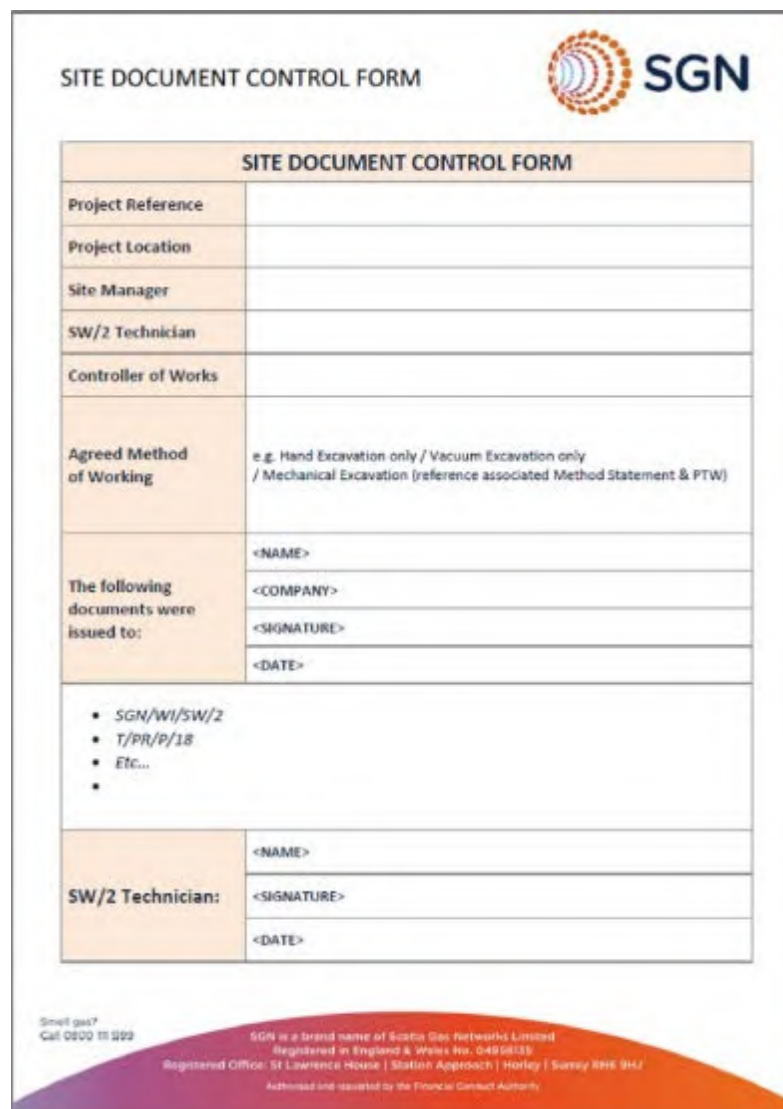
Internal Documents

SGN/PM/MAINT/5	- Management Procedure for Maintenance of Pipelines Operating Above 7 Bar
SGN/PM/SW/3	- Management Procedure For Use Of Mechanical Plant In Close Proximity To Utility Apparatus
SGN/PM/EM/76	- Management Procedure for Managing Gas Release Emergencies and Damage on the Above 7 Bar Gas Transmission System
GDN/PM/SCO/1-5	- Management Procedures for Safe Control of Operations
SGN/PM/DP/1	- Management Procedure for the Prevention of Damage to SGN's <7bar Distribution System
T/PR/SSE/8	- Work Procedure for Working on un-odorised gas installations
T/PR/P/18	- Work Procedure for Working On Pipelines Containing Defective Girth Welds Or Girth Welds Of Unknown Quality
T/PR/SW/1	- Work Procedure for Excavations
SGN/PM/ECP/2	- Management Procedure for Cathodic Protection of Buried Steel Systems
T/SP/P/2	- Specification for Welding of Land Pipelines and Installations Designed to Operate at Pressures greater than 7 bar (Supplementary to BS 4515-1)
T/SP/P/9	- Specification For The Welding Of Fittings To Pipelines Operating Under Pressure (Supplementary to BS 6990).
SGN/SP/GM/4	- Specification for the protection of steel pipelines operating at pressures above 7 bar subjected to vibrations caused by blasting, piling or demolition
T/SP/GM/1	- Specification for The Protection of Pipelines From Ground Movement and External Loading. External Loading on Steel Pipelines and Buried Piping at Installations
T/PR/P/11	- Work Procedure for Inspection and repair of damaged steel pipelines designed to operate at pressures greater than 2 bar
SGN/SP/P/10	- Specification for general pipelining designed to operate at pressures greater than 7barg
SGN/SP/CE/12	- Specification for the Design, Construction and Testing of Civil & Structural Works Part 12: Pipeline Protection Slabs
SGN/PM/DIS/3.6	- Management Procedure for Lifting Operations
SGN/PM/INV/1	- Management Procedure for Incident Reporting and Investigation

External Documents

HS(G) 47	- Avoiding Danger from Underground Services
NRSWA	- New Roads and Street Works Act 1991
GS(M)R	- Gas Safety (Management) Regulations 1996
IGE/TD/1	- Steel pipelines and associated installations for gas pressure transmission
Safe use of Suction/Vacuum Excavators – Construction Plant-Hire Association	





SITE DOCUMENT CONTROL FORM



SITE DOCUMENT CONTROL FORM	
Project Reference	
Project Location	
Site Manager	
SW/2 Technician	
Controller of Works	
Agreed Method of Working	e.g. Hand Excavation only / Vacuum Excavation only / Mechanical Excavation (reference associated Method Statement & PTW)
The following documents were issued to:	<NAME>
	<COMPANY>
	<SIGNATURE>
	<DATE>
• SGN/WI/SW/2 • T/PR/P/18 • Etc... •	
SW/2 Technician:	<NAME>
	<SIGNATURE>
	<DATE>

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Figure 25. Site Document Control Form

The Site Document Control form must be used to record all transfer of documents and instruction to the undertaker of works. This is a fundamental element of the safe working process, and provides a record of the interaction between the SW/2 Technician and the undertaker of works.

A blank version of this form can be downloaded from the following link:

<http://sgnnet/DownloadItem.axd?ID=1899970>

Figure 26. SGN Encroachment Reporting Form

A blank version of this form can be downloaded from the following link:
<http://sgnnet/DownloadItem.axd?ID=1899971>

Appendix C

Mechanical Assistance Request Form – Trial Holes Requiring Deep Excavation

Approval form for use of 'mechanical assistance' (see section 17 - SGN/WI/SW/2) for excavation of trial holes onto pipelines where the depth is greater than 1.5m

Location:
Grid co-ordinates: E _____; N _____

Asset details:

Pipeline: _____	Diameter: _____ mm
Depth of cover: _____ m	Wall thickness: _____ mm
	Max. Operating Pressure: _____ barg

Checklist of information required for assessment: Tick as appropriate ☒

- Details of activity (reason for excavation) including timescales ☐
- Key parties:
 - Client ☐
 - Principal Contractor ☐
 - Other ☐
- Details of observed ground conditions ☐
- Details of all available asset data:
 - ILI Pipe tally for section ☐
 - Construction strip map extracts ☐
 - Other pipe records ☐
- Results of initial pipeline location survey
 - Measured depth of cover ☐

Pipeline Technician undertaking survey:

Name: _____; Title: _____; Date: _____

- Risk assessments ☐
- Full method statements
 - Details of all mechanical plant ☐
 - Details of precautions to avoid entry into the 'danger zone' ☐
 - Details of other hazard mitigation measures e.g. pressure reduction ☐

Key personnel:

Authorising Engineer: _____; Title: _____

Competent Person: _____; Title: _____

SW/2 Technician: _____; Title: _____

Approval: _____

Signed: _____; Date: _____

Head of Network Management (Transmission)

The attached form must be used to support any request to utilise Mechanical Assistance whilst carrying out deep excavation trial holes. All available information, including ILI information must be sought and a detailed method statement produced before submitting to the Head of Network (Transmission) for approval.

A blank version of this form can be downloaded from the following link:

<http://sgnnet/DownloadItem.axd?ID=1899972>

Figure 27. Mechanical Assistance Request Form



Appendix D

SW/2 Pipeline Technician – Roles and Responsibilities and Competency Requirements

The SW/2 pipelines Technician described below fulfils the role set out in this procedure for safe working and development in the vicinity of high pressure pipelines and associated installation operating >7barg. The role requires the pipeline technician to:

- Interface with undertakers of works in the vicinity of high pressure pipelines to advise them on the presence and position of pipelines; restrictions on working within pipeline easements; the hazards and dangers of damaging high-pressure pipelines; and, safe working practices in the vicinity of high pressure pipelines and associated installations
- Understand and interpret gas engineering plans and maps
- Locate and mark out pipelines, bends and fittings using pipe location equipment
- Establish safe working proximities to high pressure pipelines
- Oversee hand excavation of trial holes to confirm the position and depth of high pressure pipelines
- Monitor works using mechanical excavators within 3.0m of high pressure pipelines, when such works have been authorised by an SGN AE, and intervene if agreed safe systems of work (including, but not limited to permits to work, risk assessments, Method Statements, and other written instructions) are not complied with, or there is a danger of damaging a high-pressure pipeline

This role is not an exclusive role and is usually part of an employee's wider job role for which additional training and competency will be required.

Minimum Training Requirements

D.1 Minimum Training

Evidence of suitable and sufficient training is required for the following elements:

- a. Implementing SGNs procedure SGN/PM/SW/2 for safe working and development in the vicinity of high pressure pipelines and associated installation operating >7barg. This training is [will be] a company standard training course which will include:
 - The consequences of damaging high-pressure pipelines
 - Factors that lead to an increase in risk
 - The risks associated with mechanical excavation and the use of mechanical excavators in the vicinity of high pressure pipelines
 - The procedural requirements and safety rules prescribed in the procedure
 - Safe working methods
 - The role and responsibilities of the SW/2 Technician
- b. Use of pipe locators and cable locators
- c. Understanding an interpreting maps and engineering drawings [relating to pipelines]
- d. Safe Control of Operations [SCO/1 and SCO/2]
- e. Deep excavations safety
- f. Lifting operations [relevant to typical lifting operations on pipeline activities]
- g. Legal training [easements and wayleaves]
- h. IOSH managing safely [or similar]
- i. Behavioural training [i.e. influencing safety behaviours training and dealing with conflict etc.]



D.2 On-the-job Experience

Persons undertaking the SW/2 Technician role must have on-the-job experience to complement formal training. This must be provided using a suitably competent mentor (someone who is a competent SW/2 pipeline technician). On-the-job experience shall include:

- Understanding interpreting plans, using pipe location equipment and marking out pipelines
- Overseeing hand excavated trial holes
- Monitoring the use of vacuum excavators and mechanical excavators in the vicinity of high pressure pipelines
- Monitoring works applying 'mechanical assistance' as described in this procedure
- Monitoring works under Permit to Work conditions [i.e. using mechanical excavators in the hazard zone]
- Works involving deep excavations
- Dealing with people positively and assertively



Appendix E

PTW Requirements Matrix

	Hand Excavation / Backfill	Powered Hand Tools for Excavation	Use of Vacuum Excavators	Mechanical Excavation	Road Planers Highway Surface Maintenance	Chain Trenchers	Hot Works	Trenchless Techniques	Lifting Operations	Top soil stripping	Vibro Tampers & Plates Backfilling	Vibrating Rollers Backfilling
Conditions												
	Pipeline located, proximity zones established and marked. / SW/2 Tech monitors first 300mm of consolidated cover during backfill	For use in the Danger Zone the SW/2 AE must specify in the permit what proximities are permitted.	Consideration must be given to the positioning of the excavator and the laden weight. Cannot be used within 1.5m of any fitting/stabbing	A comprehensive site-specific risk assessment must be carried out by the SW/2 AE, every effort must be made to ensure the risk posed by any mechanical excavation is ALARP	For road surface removal to a depth of 150mm a PTW is not required. Deeper than 150mm PTW is required	Not Permitted	All Hot Works in the easement are subject to a PTW	Request to cross the Hazard & Danger Zones with HDD/trenchless must be submitted to Asset Manager	Lifting over the pipeline should be avoided where at all possible. All lifting operations carried out in accordance with T/PM/DIS/3.6	250mm of large excavation area. SW/2 Tech locates and marks pipeline route and monitors all top soil stripping	For use in the Inner Hazard & Danger Zones the following requirements must be met: PTW issued, 300mm of fine sand placed over & around the pipeline. A further 300mm of suitable backfill is hand compacted	The use of any vibrating rollers is subject to site specific Risk Assessment, 900mm of hand packed/ vibrotamped material over the pipe
Trial Hole Required	No	Yes	May be used to assist excavation of Trial Holes	Yes	Only if depth of cover <1.5m	N/A	N/A	Yes	N/A	Yes	N/A	N/A
Danger Zone	PTW Not Required	SW/2 PTW	SW/2 PTW	Not Permitted	N/A	Not Permitted	PTW	Not Permitted within 600mm	PTW	PTW Not Required	SW/2 PTW	SW/2 PTW
Inner Hazard Zone	PTW Not Required	SW/2 PTW	SW/2 PTW	SW/2 PTW	SW/2 PTW (if >150mm)		PTW	SW/2 PTW	PTW	PTW Not Required	SW/2 PTW	SW/2 PTW
Outer Hazard Zone	PTW Not Required	PTW Not Required	SW/2 PTW	SW/2 PTW	SW/2 PTW (if >150mm)		PTW	SW/2 PTW	PTW	PTW Not Required	PTW Not Required	SW/2 PTW



APPROVAL

This Work Instruction was approved by David Wylie on 26/09/17 for use by managers, engineers and supervisors throughout Scotia Gas Networks (SGN).

SGN documents are revised, when necessary, by the issue of new editions. Users must ensure that they are in possession of the latest edition by referring to the SHE & Engineering Document Library available on SGNnet.

Compliance with this safety and engineering document does not confer immunity from prosecution for breach of statutory or other legal obligations.

BRIEF HISTORY

The activities covered in the scope of this procedure were previously covered by SGN/SP/SSW/2, T/PM/SSW/22 & Safety Engineering Instruction 599, following a comprehensive review, this document represents the guidance on safe working practices, the guidance previously contained in the above listed document on the management of enquires will be contained in SGN/WI/DP/1.

First Published as SGN/WI/SW/2	April 2016	
Revisions made following period of implementation, approved at the Engineering Safety Committee February 2017.	February 2017	DESC-1829-6032017
Revision made following feedback from operations regarding backfilling operations carried out by hand	September 2017	DESC-1896-1092017
Further revisions following recommendations from implementation working group meeting	June 2018	

KEY CHANGES

Section	Amendments
Section 13	Amended 'Danger Zone' proximity to be applied radially from the pipeline.
Section 19	Requirements amended to allow up to 150mm of road surface removal without mandatory PTW.
Section 22	Amended to allow the use of Vacuum Excavators to be used to assist in excavation of trial holes.
Section 30	Amended requirements around the deposition of backfill material and to allow the use of an excavator bucket below original ground level.



DISCLAIMER

This safety and engineering document is provided for use by SGN and such of its contractors as are obliged by the terms and conditions of their contracts to comply with this document. Where this document is used by any other party it is the responsibility of that party to ensure that this document is correctly applied.

MANDATORY AND NON-MANDATORY REQUIREMENTS

In this document:

Must: Indicates a mandatory requirement.

Should: Indicates best practice and is the preferred option. If an alternative method is used then a suitable and sufficient risk assessment must be completed to show that the alternative method delivers the same, or better, level of protection.

END NOTE**Comments**

Comments and queries regarding the technical content of this safety and engineering document should be directed to The SHE and Engineering Registrar at: engineering.registrar@sgn.co.uk

Buying documents

Contractors and other users external to SGN should direct their requests for further copies of SGN safety and engineering documents to the department or group responsible for the initial issue of their contract documentation.

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Map Symbols

VALVE OPEN	VALVE CLOSED	GOVERNOR	END CLOSURE	SYPHON	REDUCER	TEE
TEST POINT	CATHODIC PROTECTION	GENERAL REFERENCE	FLOW MEASURE	DIP POINT	MONO ETHYLENE GLYCOL	OILING POINT
FLOW STOP	PRESSURE MEASUREMENT	STAND PIPE	OFFICIAL MINISTRY RECORD	PURGE POINT	GAS CONDITIONER	DRAIN POINT
					LP MAINS	
SKETCH BUBBLE	DEPTH OF COVER	METER	MATERIAL CHANGE		MP MAINS	
					IP MAINS	
					LHP MAINS	
					HISTORY DATA	
					SSSI	
PIG TRAP	CROSSOVER CONNECTION	CHANGE OF DIAMETER	PIPE JOINT		CONTACT ZONE	
						LTS



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Are you planning on carrying out any home improvements such as building a conservatory, an extension, a new pond, decking, concreting, landscaping, fencing or planting trees in your garden? You must make sure you have drawings/maps showing any pipes or cables around your home. To obtain copies of our gas drawings/maps please visit our **Dig safely** pages on sgn.co.uk and follow the link to our online system.

This service is free of charge.

Our Dig safely page is also where you'll find advice on any protective measures you may need to take before you start work, whether you're planning on doing it yourself or hiring a professional.

Damaging gas pipes is dangerous and could lead to a fire or an explosion. It could also cause large-scale loss of gas supply to the local community and is potentially very expensive.



Responsibilities

It's the responsibility of whoever is doing the work to make sure they've complied with the relevant legislation and Health and Safety Executive (HSE) guidance.

In practice, this means anyone carrying out work must obtain a copy of any available colour drawings showing the position of buried utilities for reference before and during the project.

Non-recording of service pipes >

Individual service pipes are not normally recorded on gas network drawings. This is accepted practice and reinforced by guidance given in Design, construction and installation of service pipes – approved code of practice, published by the HSE, and IGE/TD/4 – Gas Services, published by the Institute of Gas Engineers and Managers.

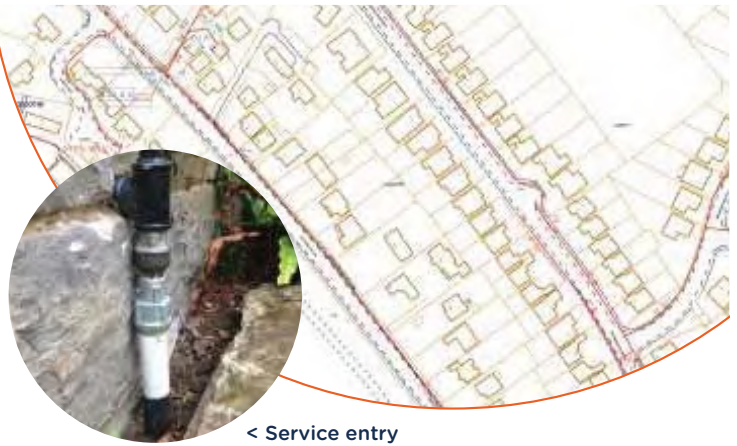
What you need to do when planning a conservatory or house extension, landscaping, fencing or any other groundworks

It's the responsibility of whoever is undertaking the work to check with utility companies before the work starts.

If you're planning any building or digging work remember that gas pipes, power cables, water pipes and sewers all run underground and could be right beneath your feet. Construction or excavation work can damage underground services or prevent further maintenance.

Remember that obtaining planning permission or a building warrant from your local authority doesn't normally involve consultation with utility companies so you should get in touch with them when you start planning your project. This will help keep everyone safe.

Please visit our **Dig safely** pages on sgn.co.uk for more information and our online mapping system.



< Service entry

Gas services/work in gardens

If you're going to be carrying out work around your home, or a third party is carrying out work on your behalf and you have requested a map from us, **your own gas service may not be marked**. The simplest way to understand the location of your gas service is to know where it enters your house, as pictured.

Your gas service pipe usually takes the shortest route to the gas main, as shown on the sample network map/drawing above.

If you're unsure and need further help, please contact us and we'll arrange for a Plant Protection officer to contact you.



Any damage, however minor, must be reported to the National Gas Emergency Service

Planting a tree or landscaping your garden

Tree roots can damage utilities.

If you're planting trees or shrubs, make sure you consider the type of plant, root type and their location in relation to buried gas pipes to avoid any damage. We may need access to repair and maintain our pipes and equipment in the future, and we reserve the right to remove any tree or bush if we need to.

What happens if you damage a pipe?

If you damage a gas pipe:

- Call the National Gas Emergency Service on **0800 111 999** immediately
- **DON'T** attempt to make repairs yourself
- **DON'T** handle or attempt to alter the position of the exposed pipe

Damaging a gas pipe can result in:

- Major fire/explosion leading to death or serious injury
- Asphyxiation due to gas exposure leading to death or serious injury
- Loss of gas supply to individuals or communities
- Financial costs to you for repair and remedial work
- Enforcement action by the HSE

We will recover all reasonable costs incurred in repairing damaged gas pipes.

Delivering gas safely, reliably and efficiently

Your safety is our top priority

We manage the network that distributes natural and green gas to over 5.9 million customers in Scotland and the south of England.

We own and operate 74,000km of gas mains, and associated plant and equipment. We're committed to delivering gas safely, reliably and efficiently to every one of our customers.



All our engineers and contractors carry a photo ID card with our company logo on it. Don't be afraid to check with our Security team on **0800 015 5170** that the person on your property is supposed to be there.



Service entry



Meter box

Accidental damage to our pipes could put you or members of the public at risk.

Help

If you're planning any work on or around your property and you need more information, you'll find everything you need on our Dig Safely pages.



sgn.co.uk



0800 912 1722

Smell gas? 0800 111 999

Follow these six steps if you smell gas:



DO open windows and doors to help ventilate the gas



DO turn off the gas supply at the meter and make sure any gas appliances are turned off



DO call the **National Gas Emergency** number on **0800 111 999**. Lines are open 24 hours a day, 365 days a year



DON'T smoke or use any naked flames



DON'T touch any electrical switches. Turning a switch on or off could ignite a gas leak



DON'T enter a cellar if you smell gas, even if your gas meter is located in the cellar



Dig safely

Measures to avoid injury
and damage to gas pipes

The following protective and precautionary measures **MUST** be taken when working in the vicinity of gas mains and services.

It is the responsibility of the property owner or company carrying out the work to make sure they've complied with the relevant legislation and Health and Safety Executive (HSE) guidance, eg HS(G)47. In practice, this means that whoever is carrying out the work **MUST** obtain gas mains location information and/or maps showing the indicative position of the gas network before any work takes place.

To avoid injury to yourself, your employees, colleagues and the general public you MUST suitably mark the position of the pipes on site.

HS(G)47 outlines best practice that should be followed to ensure you work safely:

1. Plan the work, obtain maps.
2. Detecting, identifying and marking underground services.
3. Safe excavation and safe digging practices.

In addition to the requirements under the Health and Safety At Work etc. Act 1974 to prevent injuries to employees and others (not employed), it is an offence under regulation 15 of the Pipelines Safety Regulations 1996 to cause damage to a pipeline (which includes gas mains and services as well as higher pressure pipelines) so as to give rise to a danger to persons.

You MUST make sure that current full colour copies of our maps are issued to all relevant personnel on site and they're aware of the presence and location of our gas mains and services prior to any excavation.

In a gas emergency

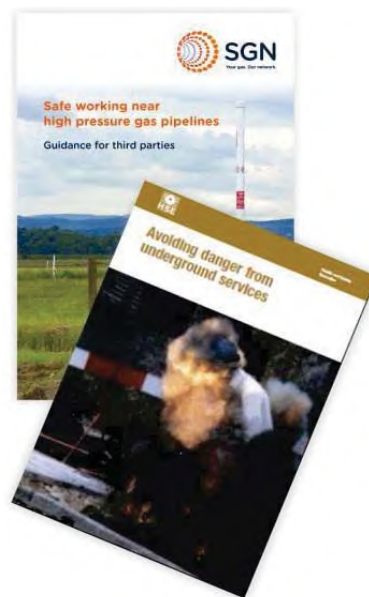
If you cause a gas leak or suspect a main or service pipe or equipment is leaking, you **MUST** take the following emergency actions immediately:

- Ask people to move away from the area of the gas escape.
- Call **0800 111 999** immediately.

1. **Don't** attempt to repair the escape or stop the leakage.
2. As gas may enter buildings, ask people in the surrounding premises to **leave** until it's safe for them to return.
3. **Stop** anyone going near the immediate vicinity of the gas escape.
4. **Prohibit** smoking and extinguish all naked flames.
5. **Don't** use mobile phones or other ignition sources.
6. **Assist** our representatives and other emergency services such as the police, ambulance, and fire service as requested.

Additional reference material

- SGN guidance for Safe Working in the Vicinity of Pipelines & Associated Installations operating >7barg. Applicable for HP only.
- HS(G)47 **Avoiding Danger from Underground Services** available from hse.gov.uk
- NJUG **Utilities Guidance on Positioning and Colour Coding of Apparatus** available from njug.org.uk



Making an enquiry for gas mains or services maps

Please visit our **Dig safely** pages on sgn.co.uk for plant protection information and links to our online mapping system and other associated information and guidance.

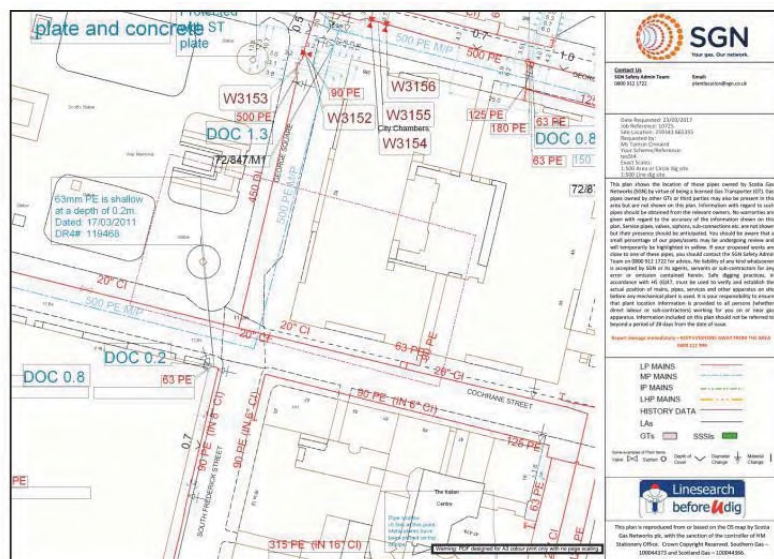
Our simple and easy to use online mapping system is available 24/7, 365 days a year.

You'll need to register/log in and provide a few details about your site location and the work you'll be carrying out. We'll respond immediately by email.

What you're likely to be sent

You'll be sent an email with a map. This will be an extract from our gas mains record, showing your site and any of our gas pipes as well as relevant safety information.

We always send out safety information, however we may forward your enquiry on to a local plant protection officer or a pipelines engineer to make direct contact with you depending on the work location.



Example of a gas map

Note: Service pipes are not shown on our maps

When working near our gas mains and services

Safe system of work

To satisfy ourselves that work in the vicinity of our gas mains is being carried out safely, we may ask for a copy of your risk assessment and/or method statement paperwork.

Where work falls under the Construction (Design and Management) Regulations 2015 reference to our gas mains and services MUST be made within your site Health and Safety file.

Financial

Every reasonable precaution MUST be taken to avoid personal injury or damage to our gas network at all times.

If we incur any costs to repair direct or consequential damage or divert any gas main or service, you'll be recharged in full.

HSE

Any damage to our gas mains or services will be subject to legislative reporting responsibilities to the Health and Safety Executive under Reporting of Injuries, Diseases & Dangerous Occurrences Regulations 2013, Gas Safety Management Regulations 1996, and the Pipelines Safety Regulations 1996.

Minimum safe working distances

Depending on the activity being undertaken and the gas mains or services you are working within the vicinity of, there are different safe distances that MUST be adhered to. SGN plant protection officers or pipeline engineers will inform you of these if required.

Surface boxes and manholes

Do not bury or move our surface boxes. Free access MUST be maintained during and after your work. No manhole cover or other structure can be built over, around or under a gas main, and no work is to be carried out that results in a reduction or increase in cover or protection without prior written agreement.

Deep excavations

Adequate protection, approved by us, MUST be applied for any deep excavations in the vicinity of our gas mains and services that may affect its security and integrity. Ground movement around gas mains MUST be prevented. We MUST be contacted if a sewer trench or any other water authority is to be constructed at greater than 1.5 metres depth near a buried gas main or service pipe. You MUST give us detailed drawings showing the line and width of the proposed sewer or other trench, together with the soil group classification of the area concerned.



Crossing our mains or services

The placing of heavy construction plant, equipment, materials or the passage of heavy vehicles over our gas mains is prohibited unless specifically agreed protective measures (ie the construction of reinforced crossing points) have been carried out. This is particularly important where reductions in side support or ground cover are planned. You **MUST NOT** carry out any work in servitudes/easements without our prior written consent.

Exposed plant

Where excavations in the vicinity of our gas mains affect its support, the plant **MUST** be adequately supported and protected in consultation with us and to our satisfaction. It **MUST** be protected from impact, restraints and thrust blocks, and supports **MUST NOT** be removed without our agreement.

Hot work

One of our representatives should be present when welding or other hot work involving naked flames is being carried out near our gas mains, as there's potential for heat damage to plastic pipeline/coatings.

Backfilling

Concrete backfill should not be placed closer than 300mm to our mains. No concrete or hard material should be placed under or adjacent to any of our gas mains. Shuttering **MUST** be constructed to maintain the stated clearances and prevent fresh concrete encasing our mains or services. Material used for backfill around our gas mains **MUST** conform to the following:

- If sand, it **MUST** be well-graded in accordance with BS EN 12620:2002.
- It **MUST NOT** contain any sharp particles (stones, bricks, lumps or corrosive materials).
- Foamed concrete **MUST NOT** be used.
- It **MUST** be laid to a minimum depth of 250mm above the crown of the gas main.

Note: Power ramming **MUST NOT** take place until a 300mm hand rammed layer has been completed over the crown of the main.

Access

Free access to our sites, mains and services, including temporary structures and spoil heaps **MUST** be available at all times.





Mechanical excavation

Mechanical excavators (including breaker attachments) **MUST NOT** be used within the following distances from the confirmed location of our gas mains and services shown on our gas maps without prior agreement:

Type of mains and services	Gas map identification	Hand excavation required inside	Pipe pressure indication shown on map
Low Pressure (LP)	0 - 75mbar	0.5 metres	—————
Medium Pressure (MP)	75mbar to 2 bar	0.5 metres	— — — — —
Intermediate Pressure (IP)	2 - 7 bar	3.0 metres	— — — — —
High Pressure (HP)	Above 7 bar	You must seek approval from us prior to any work	— — — — —

Major accident hazard pipelines

High pressure pipeline

No work is to take place near an HP pipeline until it is agreed with us. After agreement and before any work does take place, the location of our pipeline **MUST** be marked up and its position confirmed by digging trial holes with our personnel in attendance.



Pipeline markers

High pressure

We will be involved in any work taking place near high pressure pipelines. We will provide you with additional information that you **MUST** familiarise yourself with before carrying out any work.

The default method of excavating near high pressure gas pipelines MUST always be by hand.



Wind turbines

The UK Onshore Pipelines Operations Association (UKOPA) has identified the appropriate exclusion zone (distance from the base of the wind turbine mast to the edge of the pipeline) as 1.5 times the turbine height. Contact MUST be made with us during the planning stages of a wind turbine or wind farm.



Tree planting

If trees or shrubs are to be planted in the vicinity of our gas mains and services, the selection of tree or shrub type and how it's planted **MUST** be considered carefully. This is to avoid root damage to buried mains or services, and to ensure our subsequent excavations for main repair and maintenance won't damage the trees or shrubs.

Written approval from us **MUST** be obtained before any tree planting is carried out on a servitude/easement. Any approval we grant to plant trees

The following trees and those of similar size (deciduous or evergreen) **MUST NOT** be planted within 6m of the centre line of the main: ash, beech, birch, most conifers, elm, maple, lime, horse chestnut, oak, and sycamore. Apple and pear trees are also included in this category.

Dwarf apple stocks may be planted up to 3m of the centre line of the main.



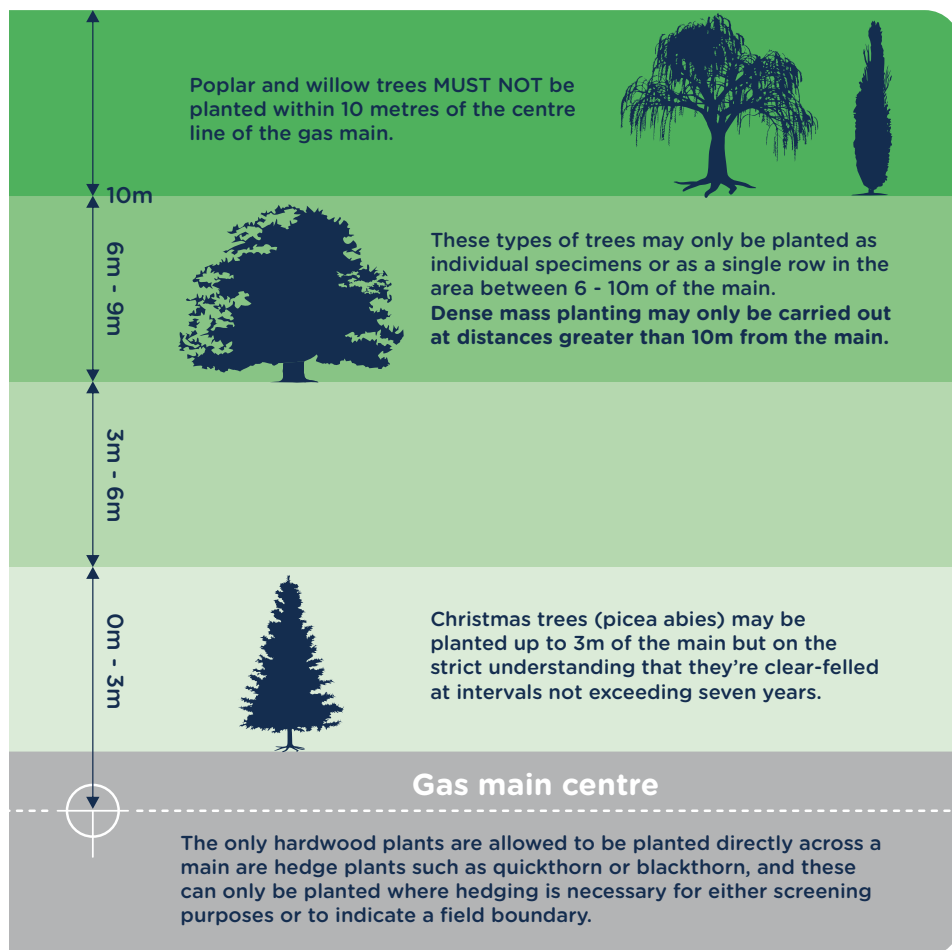
In cases where screening is required, the following are shallow rooting and may be planted close to the gas mains and services: blackthorn, broom, cotoneaster, elder, hazel, laurel, quickthorn, privet, snowberry and most ornamental shrubs.

Gas main centre

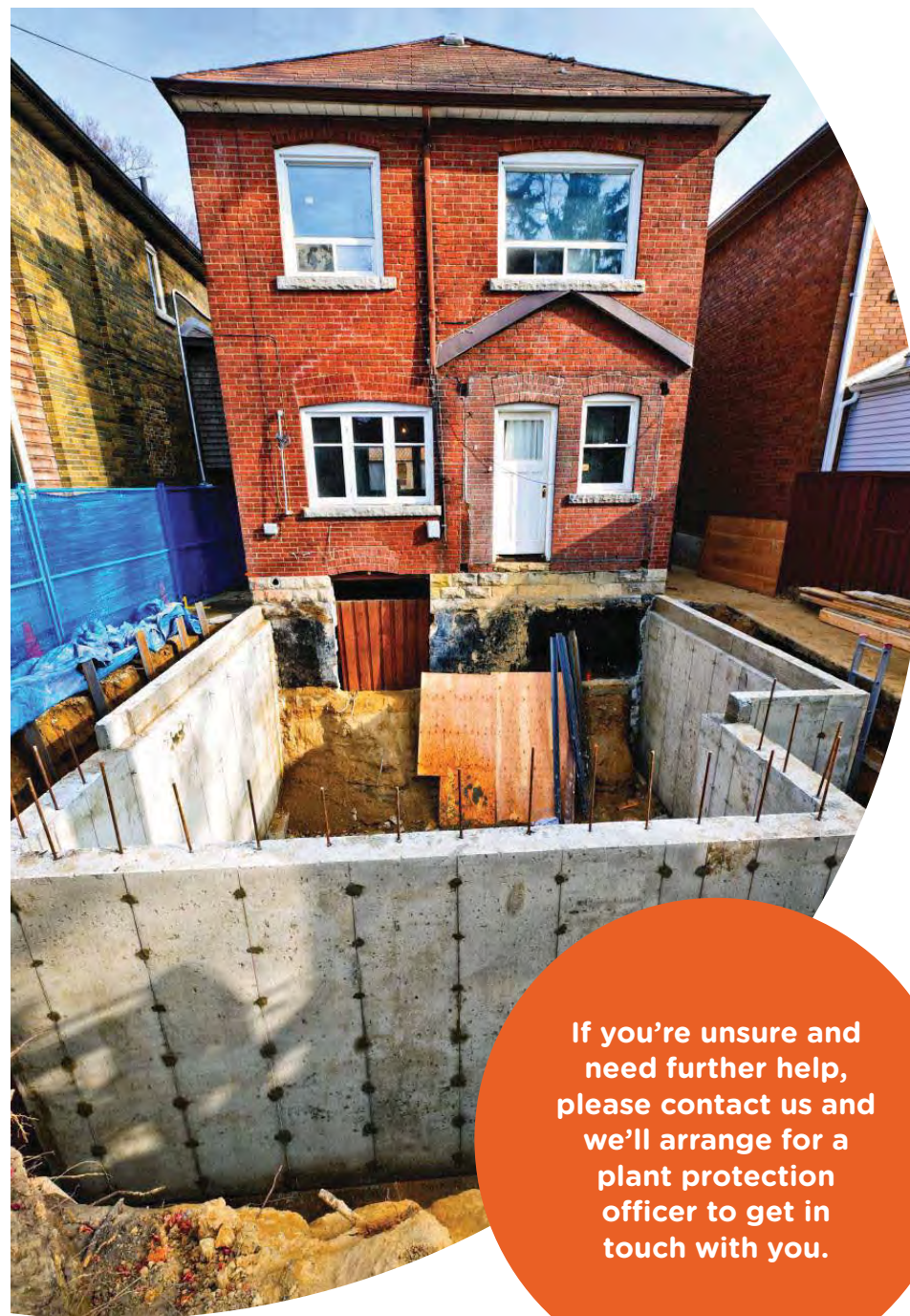
Raspberries, gooseberries and blackcurrants may be planted on the gas main, but a four metre strip, centred on the main, **MUST** be left clear at all times.

on a servitude/easement will be subject to us retaining the right to remove any tree, which in our opinion may become a danger to our mains in the future.

The written consent to plant trees will state what area may be planted and also the type of tree. The diagram details the specific species and the distances they **MUST** be planted from gas mains or services. You **MUST** contact us for further information.



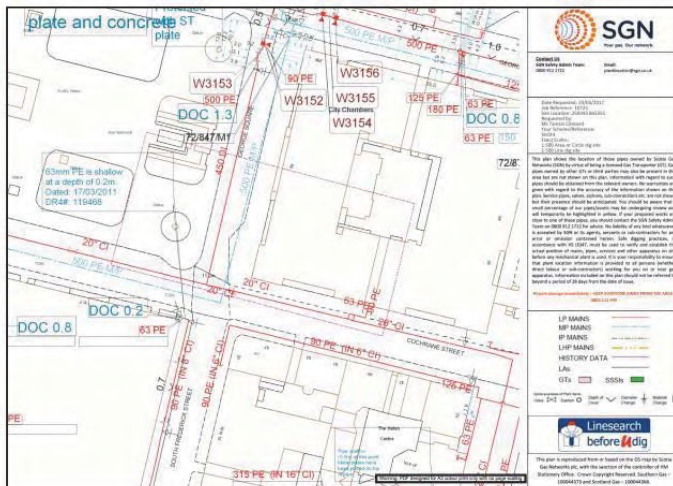
Note: For further guidance, please refer to NJUG 10.



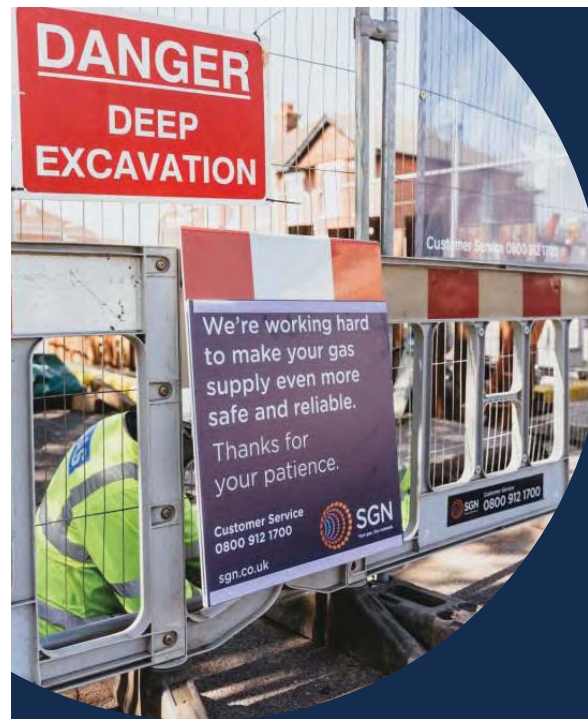
Gas services/work in gardens

If you're going to be carrying out work around your home, or a third party is carrying out work on your behalf, we may send you a site map of our gas mains and services but your own gas service won't be marked.

The simplest way to understand the location of your gas service is to know where it enters your house.



< Your gas service pipe usually takes the shortest route to the gas main, as shown on the sample network map/drawing.



We provide a free plant location enquiry service and we're always happy to help.

[www](http://www.sgn.co.uk) Visit our Dig safely pages on sgn.co.uk

 0800 912 1722 *

*All calls are recorded and may be monitored

Safety Advice - Valves



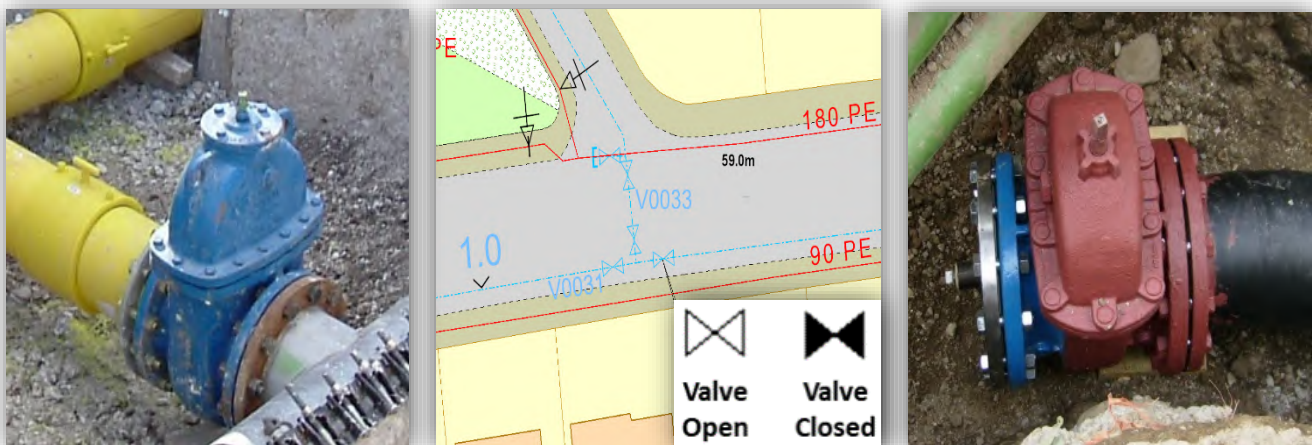
Guidance when undertaking work near gas valves in our network areas

SGN manages the network that distributes gas to 5.8 million homes and businesses across Scotland and the south of England.

Due to a manufacturing issue, we are currently replacing or upgrading certain valve types that are at risk of bolt failure. In extreme cases, this can lead to gas escapes. This is a safety hazard and we have produced this guide to ensure you undertake adequate safety precautions when working near gas valves.

Identifying gas valves

The images below are an illustration of typical gas valves. Please note, valves come in various colours, shapes and sizes, and you may come across a valve that looks different to those found in the images.



What should you do?

When planning to work in our network areas, please observe the following points:

1. You must contact us before starting any work activity within **3.0m** of a gas valve identified on our maps.
2. If an unexpected gas valve is exposed you must immediately stop excavation works and report this to us.
3. To protect yourself against the risks associated with exposing a valve, we advise that you contact us when in doubt.

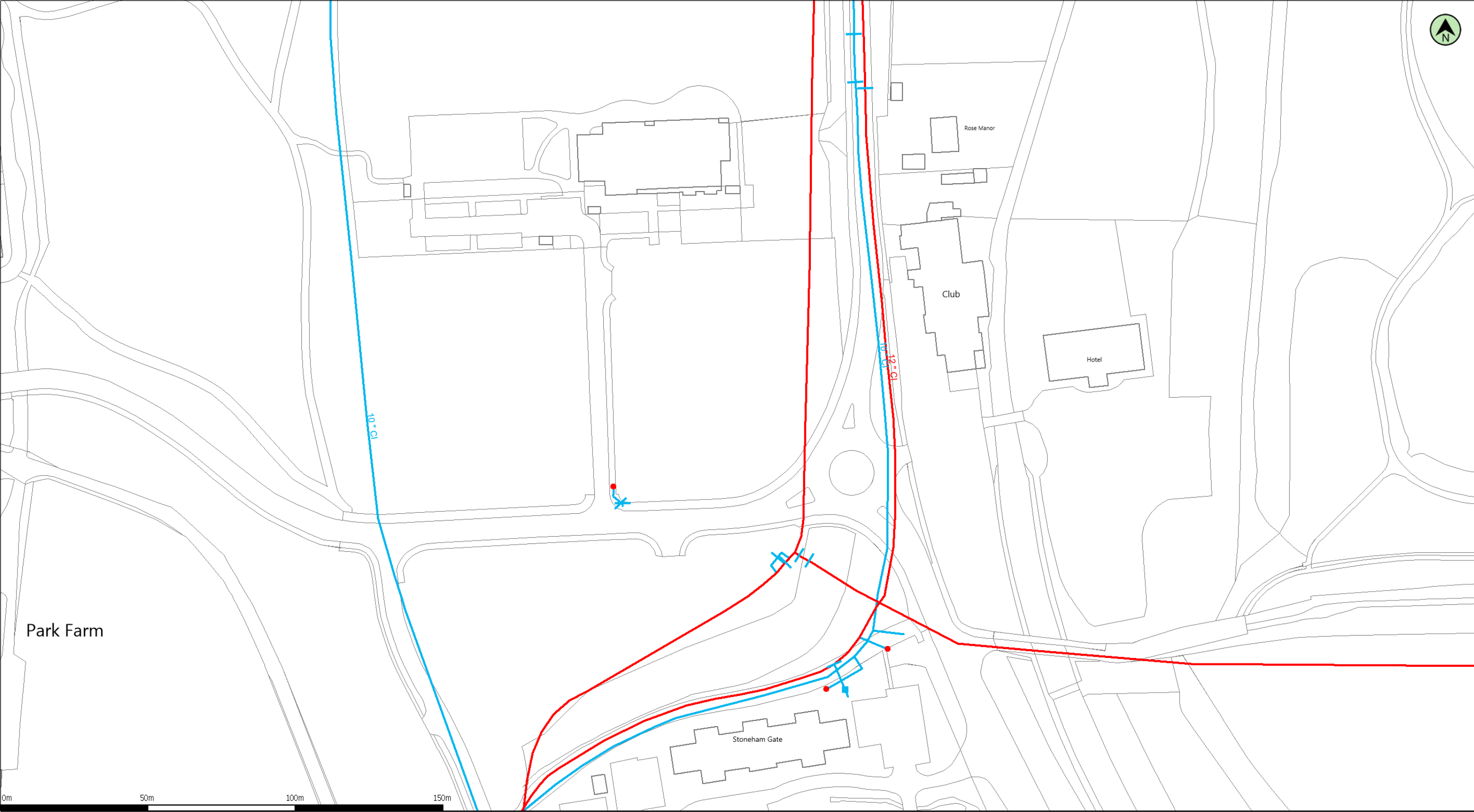
Contact details

If you require further information or need assistance please contact us:

Safety Admin Team: **0800 912 1722**
plantlocation@sgn.co.uk

Valve enquiries will be forwarded to a local engineer who will provide further safety information.

WATER



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Date: 23/06/21

Scale: 1:1250

Map Centre: 444174,117565

Data updated: 17/05/21

Our Ref: 583519 - 2

Clean Water Plan A3

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2021 Ordnance Survey 100031673 . This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.

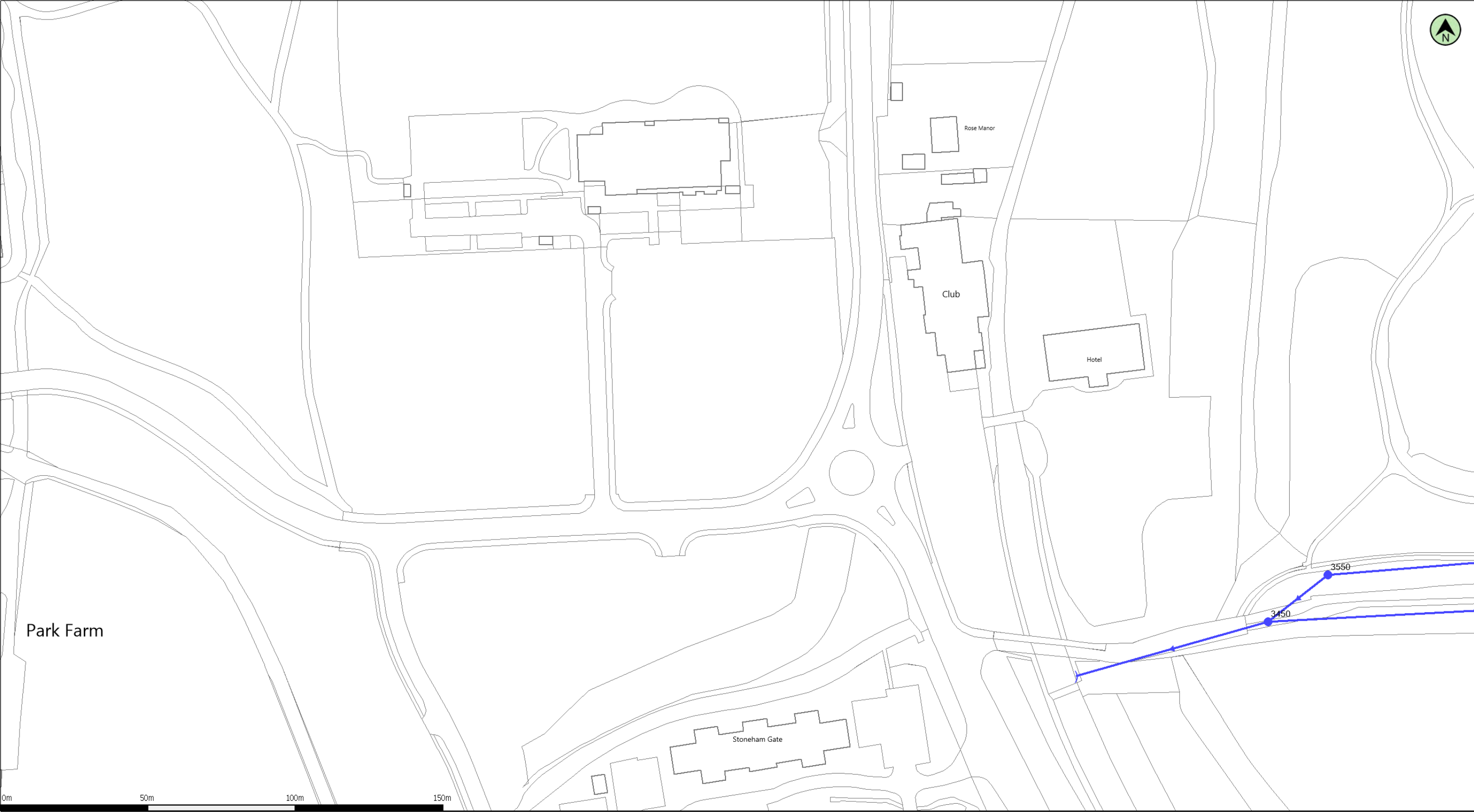


duncan@cornerstoneprojects.co.uk

P2568



SEWER



(c) Crown copyright and database rights 2021 Ordnance Survey 100031673

Date: 23/06/21

Scale: 1:1250

Map Centre: 444174,117565

Data updated: 17/05/21

Our Ref: 583519 - 3

Wastewater Plan A3

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2021 Ordnance Survey 100031673. This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.

duncan@cornerstoneprojects.co.uk

P2568



BT

Our Ref: Ref shown on map

email: nnhc@openreach.co.uk

Date of issue shown on map

Dear Customer,

NR & SW ACT 1991 – PROPOSED WORKS AT:

Prior to commencement of work: for free onsite guidance and accurate up to date location of BT plant please contact our Plant Protection Service by the following methods

Email Dial before you dig CBYD@openreach.co.uk

Visit the website www.openreach.co.uk/cbyd

Thank you for your request of describing the above proposals.

Enclosed are copies of our drawing marked up to show the approximate locations of BT apparatus which is present in the immediate vicinity of your works. It 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 made near to British Telecommunications plc apparatus which may exist at various depths and may deviate from the marked route.

To avoid damage it is recommended that mechanical excavators or borers are not used within 600mm of British Telecommunications plc plant. If scaffolding is erected, please ensure that our equipment is not enclosed, blocked, covered or otherwise obstructed by the scaffolding.

In the event of BT apparatus being in the area of works we recommend that your plant/vehicle crossing is either resited, or apply for a budget estimate by submitting detailed plans to the above address, these will be forwarded to the appropriate department for their comments.

Please ensure you quote our reference on any future correspondence.

Yours faithfully,

Openreach Plant Maps Requested

NewSite Office (addresses can be found on [the New Developments contact page](#))

Dear Sir/Madam,

You have downloaded copies of our drawings marked up to show the approximate location of Openreach apparatus, which is present in the immediate vicinity of your works. It 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 made near to Openreach apparatus, which may, exist at various depths and may deviate, from the marked route.

To avoid damage it is recommended that mechanical excavators or borers are not used within 600mm of Openreach plant. Please ensure that our equipment is not enclosed, blocked, covered or otherwise obstructed by your plant. In the event of clearance not being adequate we anticipate that your plant is either resited, or an order is placed with Openreach for rearrangements of its plant. If there are any difficulties with the Map please email cbyd@openreach.co.uk

Please contact our Network Protection Service by Email on cbyd@openreach.co.uk giving four calendar weeks notice of your commencement date. This will provide you with on-site advice and a check of location for any Openreach apparatus.

Further to this, I hope the following points will assist you at the new development: -

Openreach has a licence obligation to provide service to any end customer requiring a connection. A Developer would not normally be charged for provision of service, our standard connection charges would apply to the end user when orders are placed with the communication provider of choice. However, should a Developer insist on an underground service in an area where Openreach plant is provided overhead, charges may be incurred.

When the Developer has obtained contract and planning permission Openreach would request a 'Clean', scaled Site Layout, Location Map and a covering letter be sent to the relevant newSite Office. We would particularly request that you give details of your programmed site start date and likely first occupancy date where possible. To obtain contact details of the newSite office covering the development area click on the URL below.

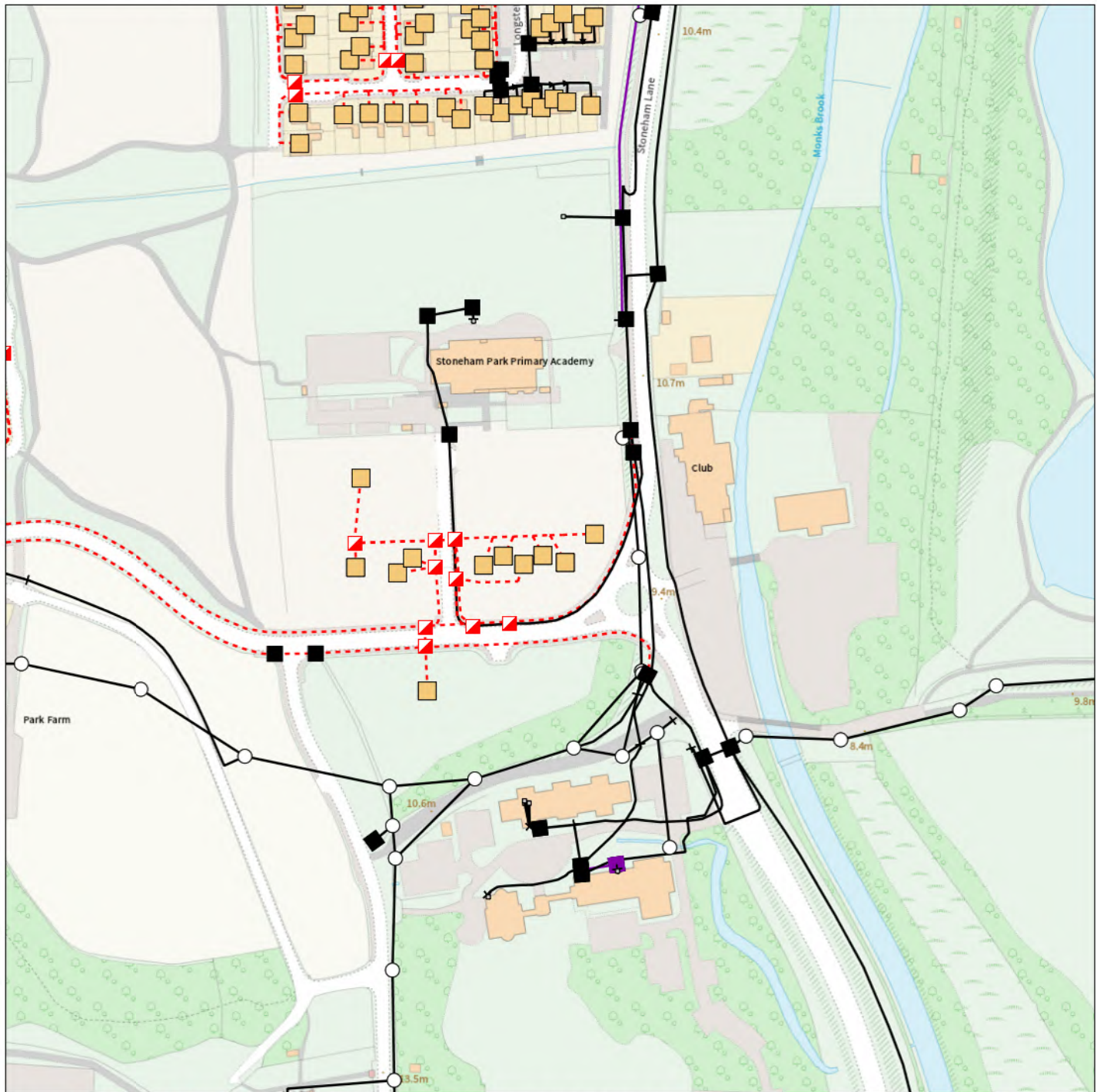
<http://www.newdevelopments-openreach.co.uk/ContactUs.aspx>

Where a development affects existing Openreach apparatus in the public highway, the cost of any necessary protection or diversionary works must be borne by the Developer. In this case where a budget estimate is required a Site Plan, Location Map and a covering letter should be forwarded to the Repayments Project Office. Please visit www.openreach.co.uk/alterationscontacts for contact details of the Repayments Office covering the development area.

Yours faithfully,

Openreach newSites

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

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email cbyd@openreach.co.uk

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

Accidents happen

If you do damage any Openreach equipment please let us know by calling 0800 023 2023 (opt 1 + opt 1) and we can get it fixed ASAP

KEY TO BT SYMBOLS

	Planned	Live	Change Of State	+	Hatchings	
PCP			Split Coupling		Built	
Pole			Duct Tee		Planned	
Box			Building		Inferred	
Manhole			Kiosk		Duct	
Cabinet			Other proposed plant is shown using dashed lines. BT Symbols not listed above may be disregarded. Existing BT Plant may not be recorded. Information valid at time of preparation. Maps are only valid for 90 days after the date of publication.			
	Pending Add	In Place	Pending Remove	Not In Use		
Power Cable						
Power Duct				N/A		

BT Ref : HFD09123V

Map Reference : (centre) SU4417417565

Easting/Northing : (centre) 444174,117565

Issued : 23/06/2021 09:12:24

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Controller of Her Majesty's Stationary Office
(C) Crown Copyright British Telecommunications plc 100028040

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

ELECTRIC

Our Ref: 22479691 Your Ref: P2568

Wednesday, 23 June 2021

Duncan Phillips
91 Market Street
Hoylake
Merseyside
CH47 5AA

Dear Duncan Phillips

SSEN Distribution - Asset Network Plans

We have sent you the plans of our network records within the area requested. You will shortly receive responses each of the following; any High Voltage Mains cables and Low Voltage Mains cables.

Attached to this email is the 'Guide to Interpreting' which includes the legends for the plans on pages 7-9.

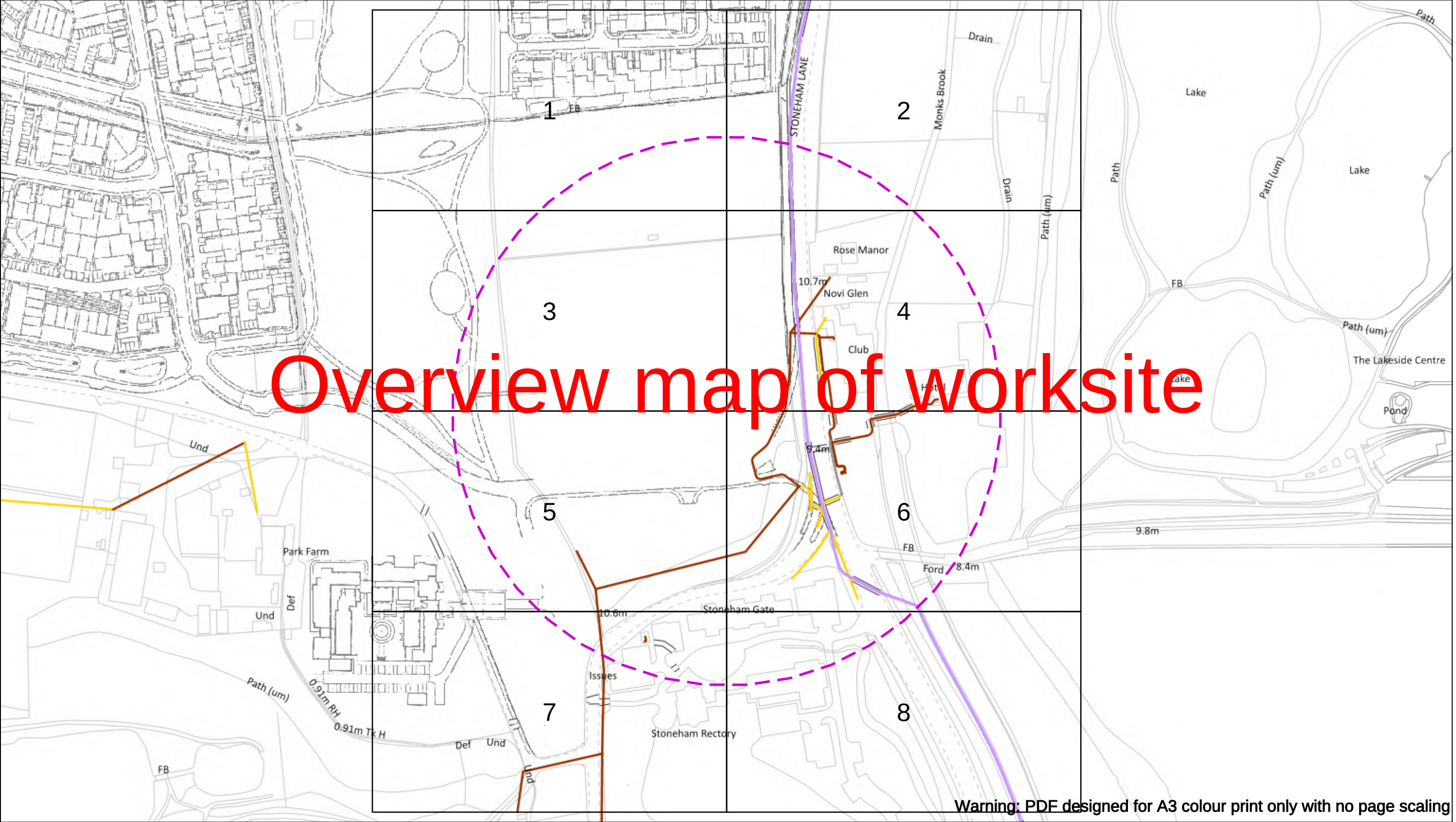
If a Service Cable is not shown on our maps sent, and you require the Cable to be Traced, please contact the General Enquiries Department on 0800 048 3516 (option 3) or via email, ge@ssen.co.uk

If you need further information on our network in this area or a quotation for any required works, please contact the Connections & Engineering Department on 0800 048 3516 or via email, connections@sse.com

Kind Regards,

Asset Data Team
01256 337 294
Asset.data@sse.com

Overview map of worksite



Warning: PDF designed for A3 colour print only with no page scaling

Date Requested: 23/06/2021
Job Reference: 22479691
Site Location: 444174 117566
Requested by:
Mr Duncan Phillips
Your Scheme/Reference:
P2568

Scale: 1:2050 (When plotted at A3)

WARNING

There may have been subsequent alteration to the surface levels. Trial holes must be undertaken to determine position and depths of cables. HS (G) 47 Booklet from the Health and Safety Executive – Avoiding Danger from Buried Cables – should be consulted before commencing excavation work.

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

Dig Sites Area: Line:

	Voltages (V)			
LV (Low Voltage) and Services	Up to 1,000V			
HV (High Voltage)	Over 1,000V to 11,000V			
EHV (Extra High Voltage)	22,000V to 132,000V			
Transmission	275,000V and 400,000V			

	NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID			
	Services	LV	HV	EHV
Footpath/Unmade	0.45m	0.45m	0.6m	0.8m
Road Crossing	0.6m	0.6m	0.75m	0.9m
Agricultural	1m	1m	1m	1.1m

Legend

- Service Cable
- LV Mains
- 2 – 3.3kV
- 6.6kV
- 13kV
- 23kV
- 33kV
- 66kV
- 132kV
- 275kV
- 400kV
- Fibre Optic
- Pilot Cable

Distribution Structures (Electric)

- Pole, Existing Location
- Pole Structure, Existing Location - Single
- Pole Structure, Existing Location - H
- Duct Route
- Cross Section Route

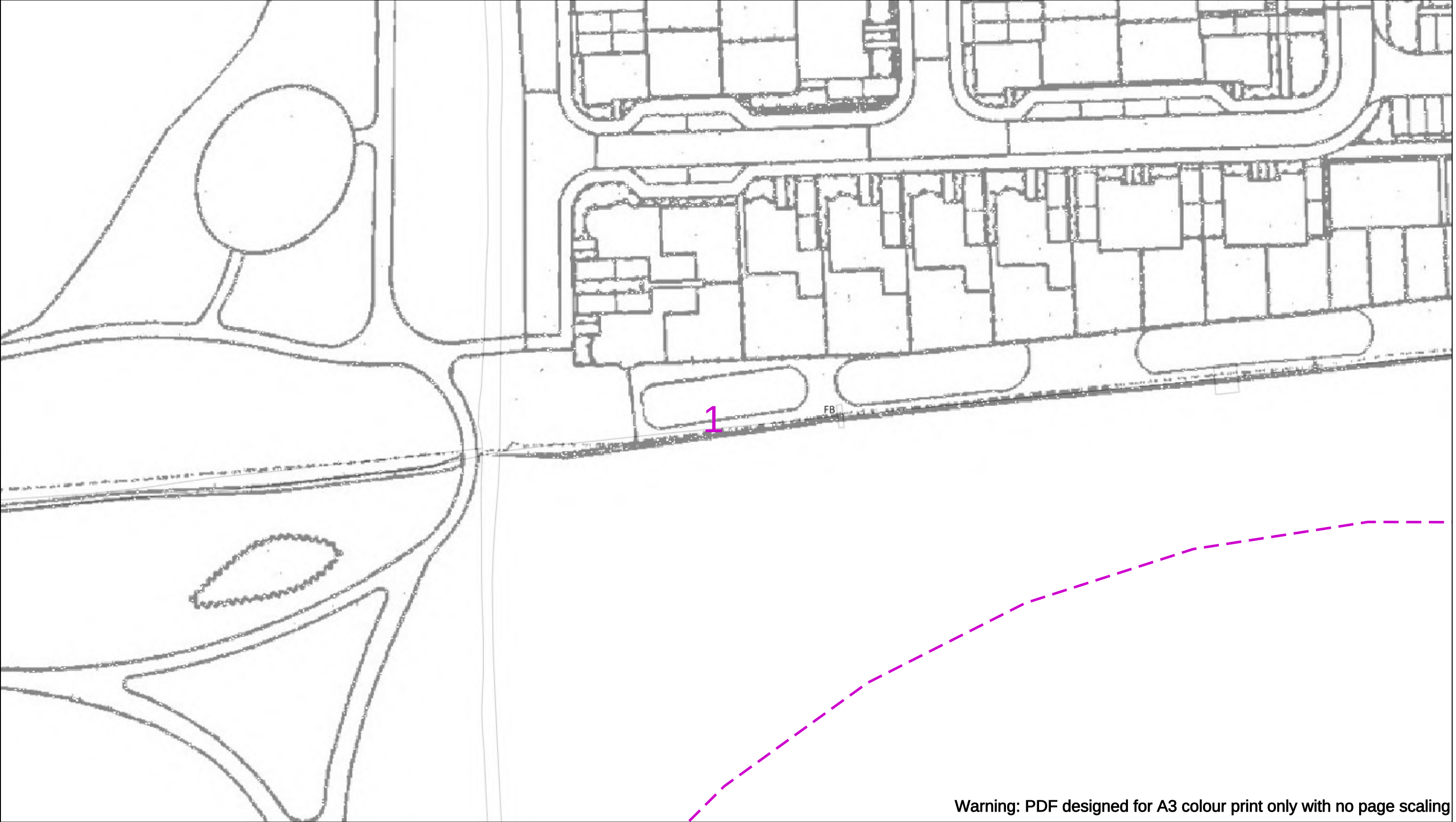
Southern Electric Power Distribution plc
Registered Office: No.1 Forbury Place
43 Forbury Road Reading RG1 3JH
Registered In England & Wales No.04094290

If you're unsure & need to seek advice before commencing excavations please contact:
General Enquiries: 0800 048 3516

Subject to revision – Master held by SSEN Asset Data Team:
Asset.Data@sse.com
01256 337 294

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

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Warning: PDF designed for A3 colour print only with no page scaling

050m

Dig Sites

Area:

Line:

Date Requested: 23/06/2021

Job Reference: 22479691

Site Location: 444174 117566

Requested by: Mr Duncan Phillips

Your Scheme/Reference: P2568

WARNING

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HV (High Voltage)	Over 1,000V to 11,000V			
EHV (Extra High Voltage)	22,000V to 132,000V			
Transmission	275,000V and 400,000V			

	NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID			
	Services	LV	HV	EHV
Footpath/Unmade	0.45m	0.45m	0.6m	0.8m
Road Crossing	0.6m	0.6m	0.75m	0.9m
Agricultural	1m	1m	1m	1.1m

Legend

Service Cable

LV Mains

2 – 3.3kV

6.6kV

13kV

20kV

30kV

66kV

132kV

275kV

400kV

Fibre Optic

Pilot Cable

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

Duct Route

Cross Section Route

Southern Electric Power Distribution plc

Registered Office: No.1 Forbury Place

43 Forbury Road Reading RG1 3JH

Registered In England & Wales No.04094290

If you're unsure & need to seek advice before commencing excavations please contact:

General Enquiries: 0800 048 3516

Subject to revision – Master held by SSEN Asset Data Team:

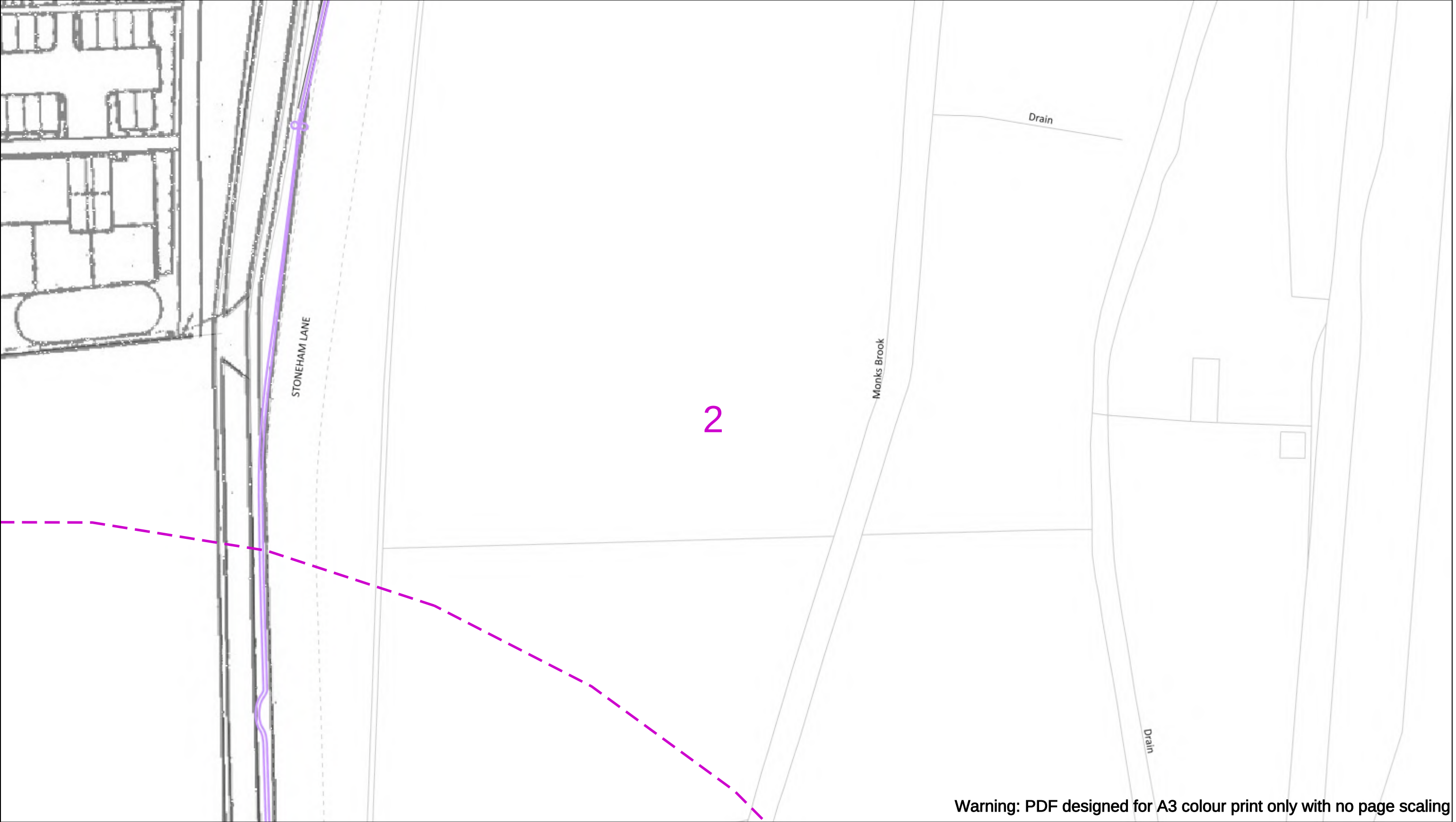
Asset.Data@sse.com

01256 337 294

Scale: 1:500 (When plotted at A3)

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050m

Dig Sites

Area:

Line:

Date Requested: 23/06/2021

Job Reference: 22479691

Site Location: 444174 117566

Requested by: Mr Duncan Phillips

Your Scheme/Reference: P2568

WARNING

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

	Voltages (V)			
LV (Low Voltage) and Services	Up to 1,000V			
HV (High Voltage)	Over 1,000V to 11,000V			
EHV (Extra High Voltage)	22,000V to 132,000V			
Transmission	275,000V and 400,000V			

	NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID			
	Services	LV	HV	EHV
Footpath/Unmade	0.45m	0.45m	0.6m	0.8m
Road Crossing	0.6m	0.6m	0.75m	0.9m
Agricultural	1m	1m	1m	1.1m

Legend

Service Cable

LV Mains

2 – 3.3kV

6.6kV

13kV

23kV

33kV

66kV

132kV

275kV

400kV

Fibre Optic

Pilot Cable

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

Duct Route

Cross Section Route

Southern Electric Power Distribution plc
Registered Office: No.1 Forbury Place
43 Forbury Road Reading RG1 3JH
Registered In England & Wales No.04094290

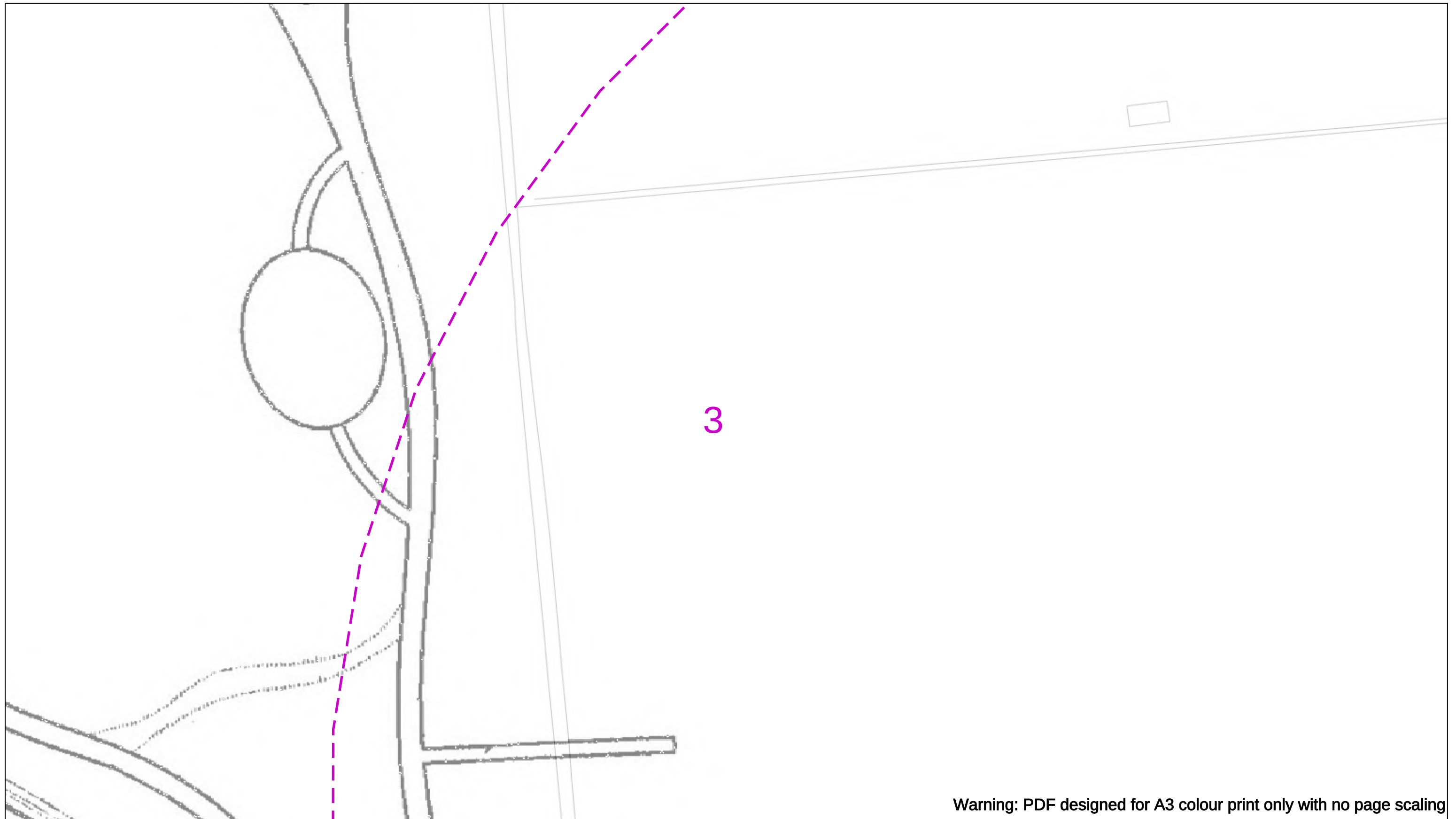
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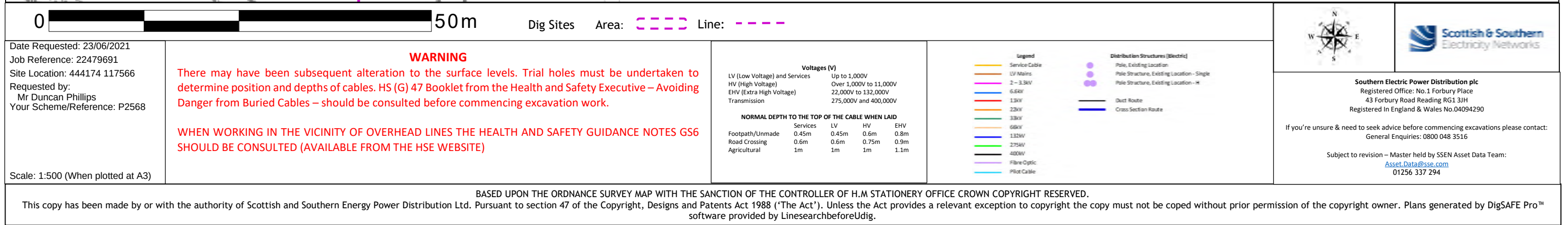
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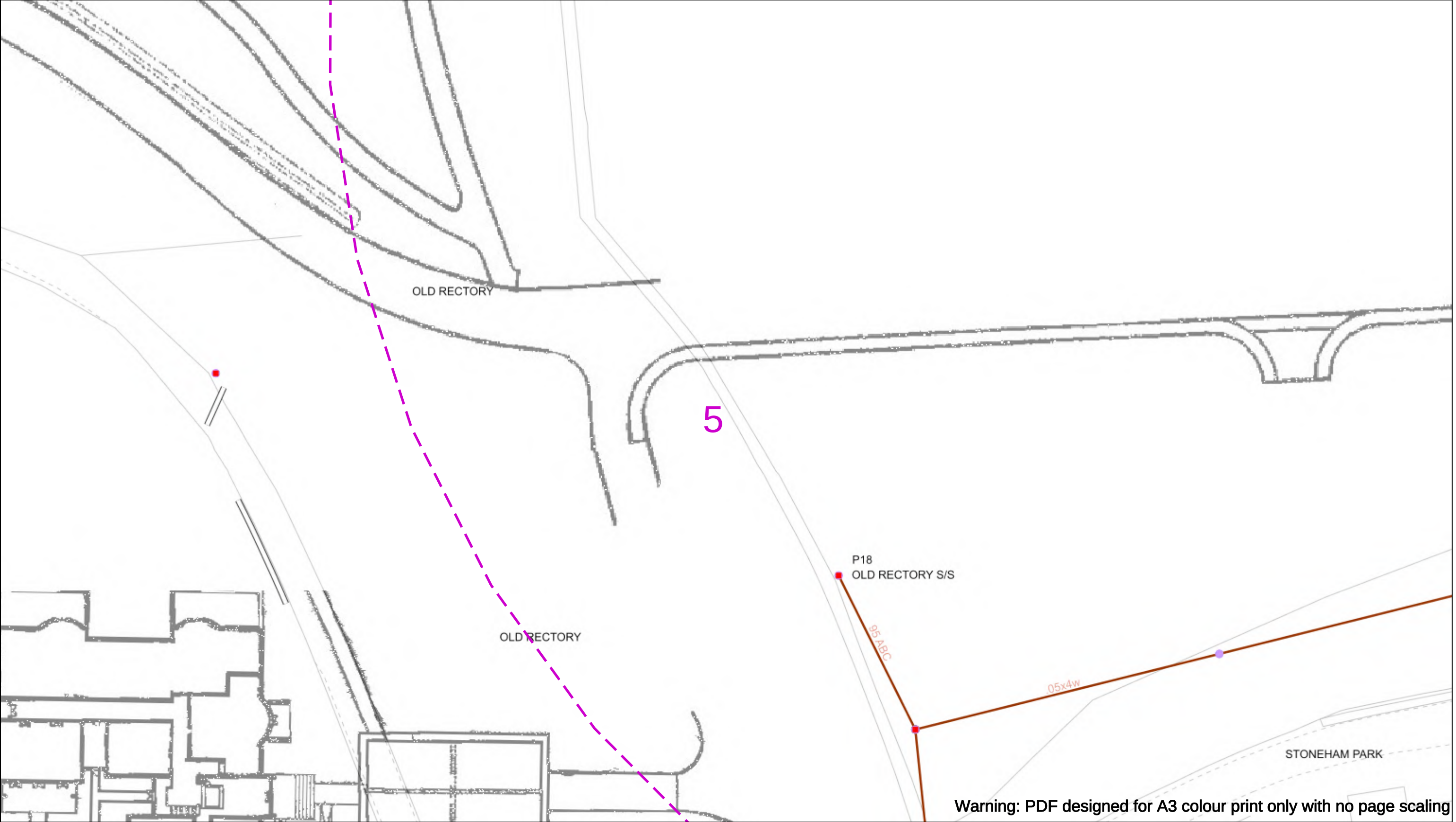
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050m

Dig Sites

Area:

Line:

Date Requested: 23/06/2021

Job Reference: 22479691

Site Location: 444174 117566

Requested by: Mr Duncan Phillips

Your Scheme/Reference: P2568

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	Voltages (V)			
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	NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID			
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Footpath/Unmade	0.45m	0.45m	0.6m	0.8m
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Agricultural	1m	1m	1m	1.1m

Legend

Service Cable

LV Mains

2 – 3.3kV

6.6kV

13kV

23kV

33kV

66kV

132kV

275kV

400kV

Fibre Optic

Pilot Cable

Distribution Structures (Electric)

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

Duct Route

Cross Section Route

Southern Electric Power Distribution plc

Registered Office: No.1 Forbury Place

43 Forbury Road Reading RG1 3JH

Registered In England & Wales No.04094290

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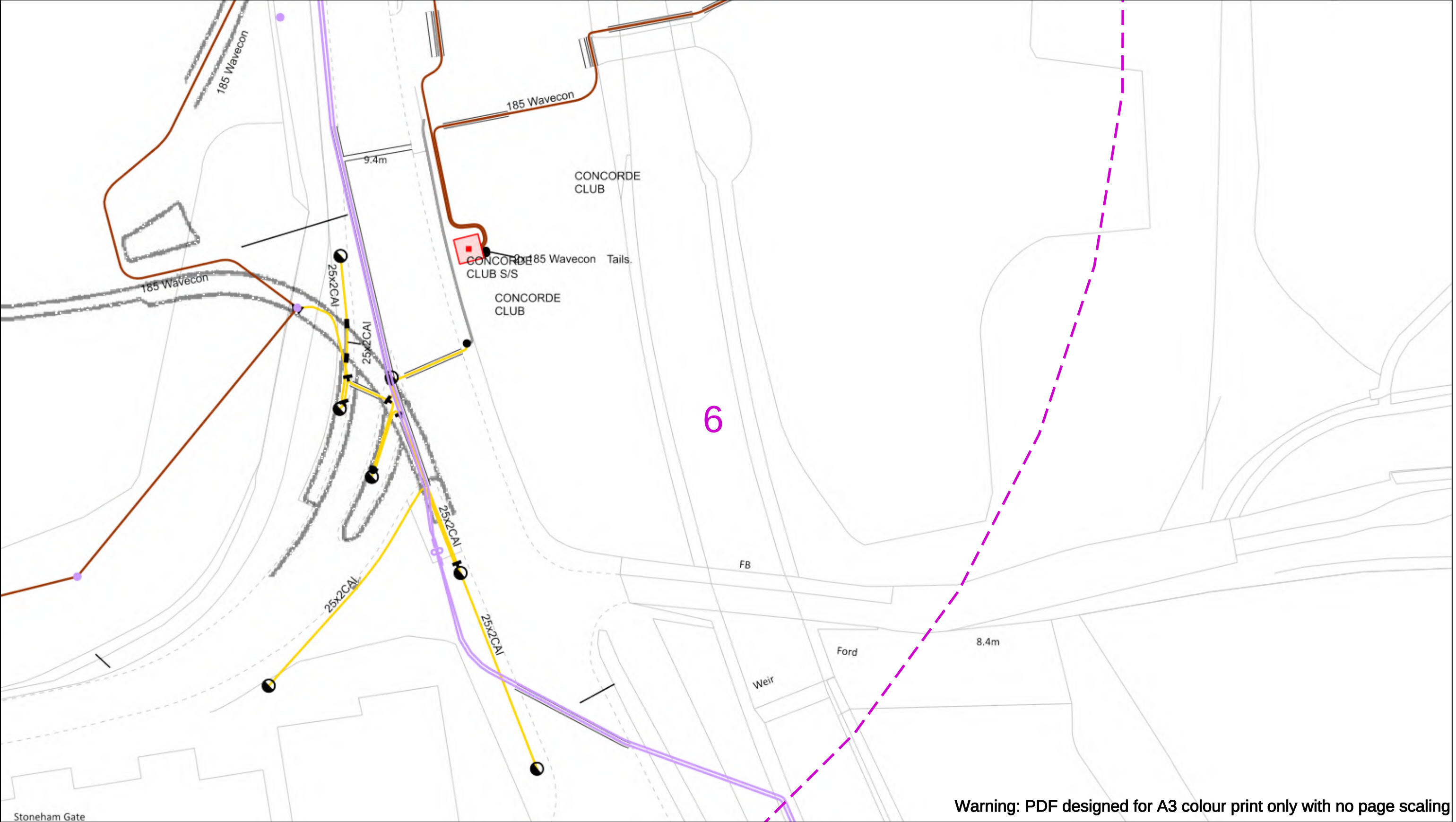
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Legend

Service Cable

LV Mains

2 – 3.3kV

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66kV

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275kV

400kV

Fibre Optic

Pilot Cable

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

Duct Route

Cross Section Route

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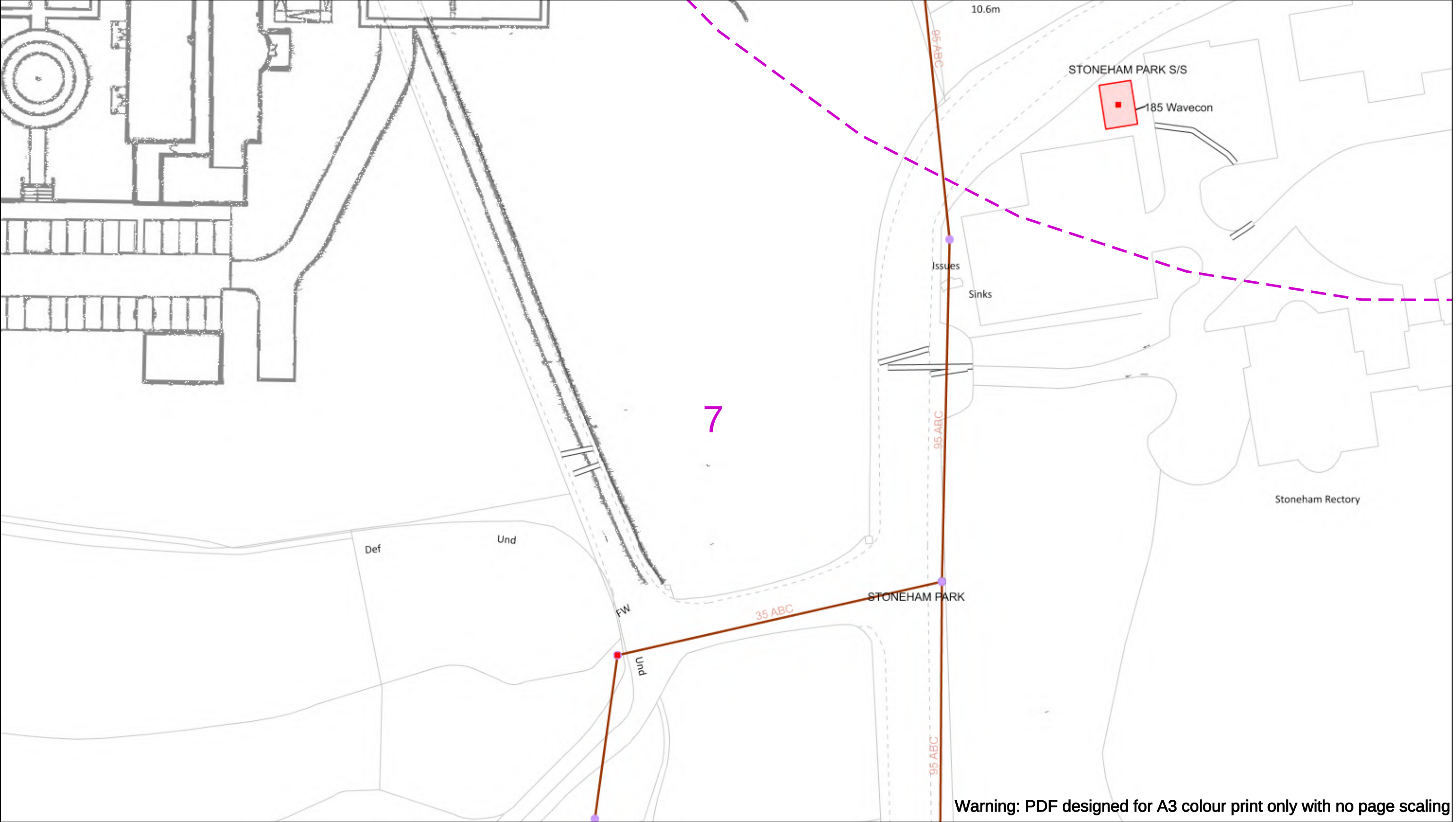
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Agricultural	1m	1m	1m	1.1m

Legend

Service Cable

LV Mains

2 – 3.3kV

6.6kV

13kV

23kV

33kV

66kV

132kV

275kV

400kV

Fibre Optic

Pilot Cable

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

Duct Route

Cross Section Route

Southern Electric Power Distribution plc

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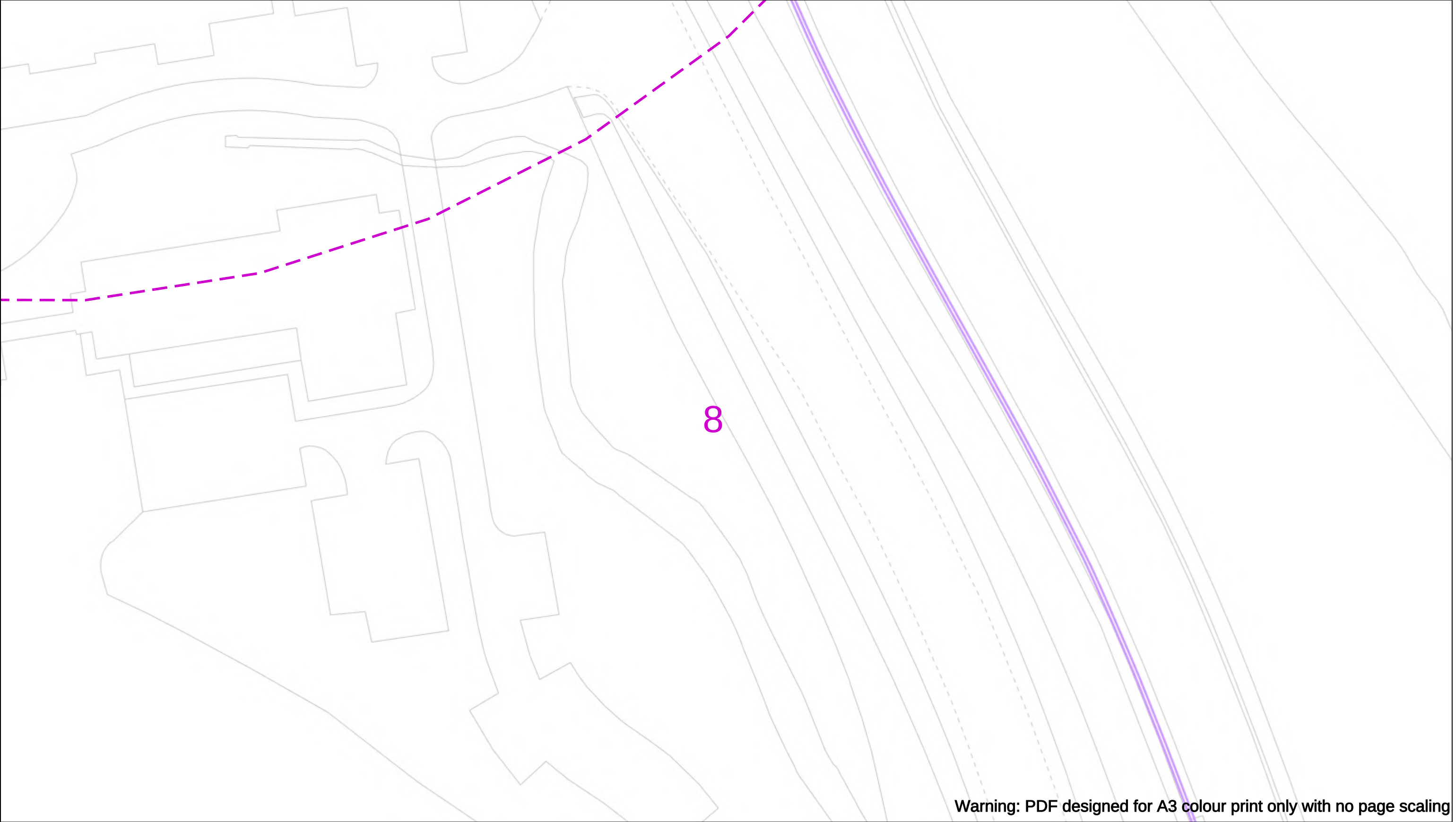
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Agricultural	1m	1m	1m	1.1m

Legend

Service Cable

LV Mains

2 – 3.3kV

6.6kV

13kV

23kV

33kV

66kV

132kV

275kV

400kV

Fibre Optic

Pilot Cable

Distribution Structures (Electric)

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

Duct Route

Cross Section Route

Scottish & Southern

Electricity Networks

Southern Electric Power Distribution plc

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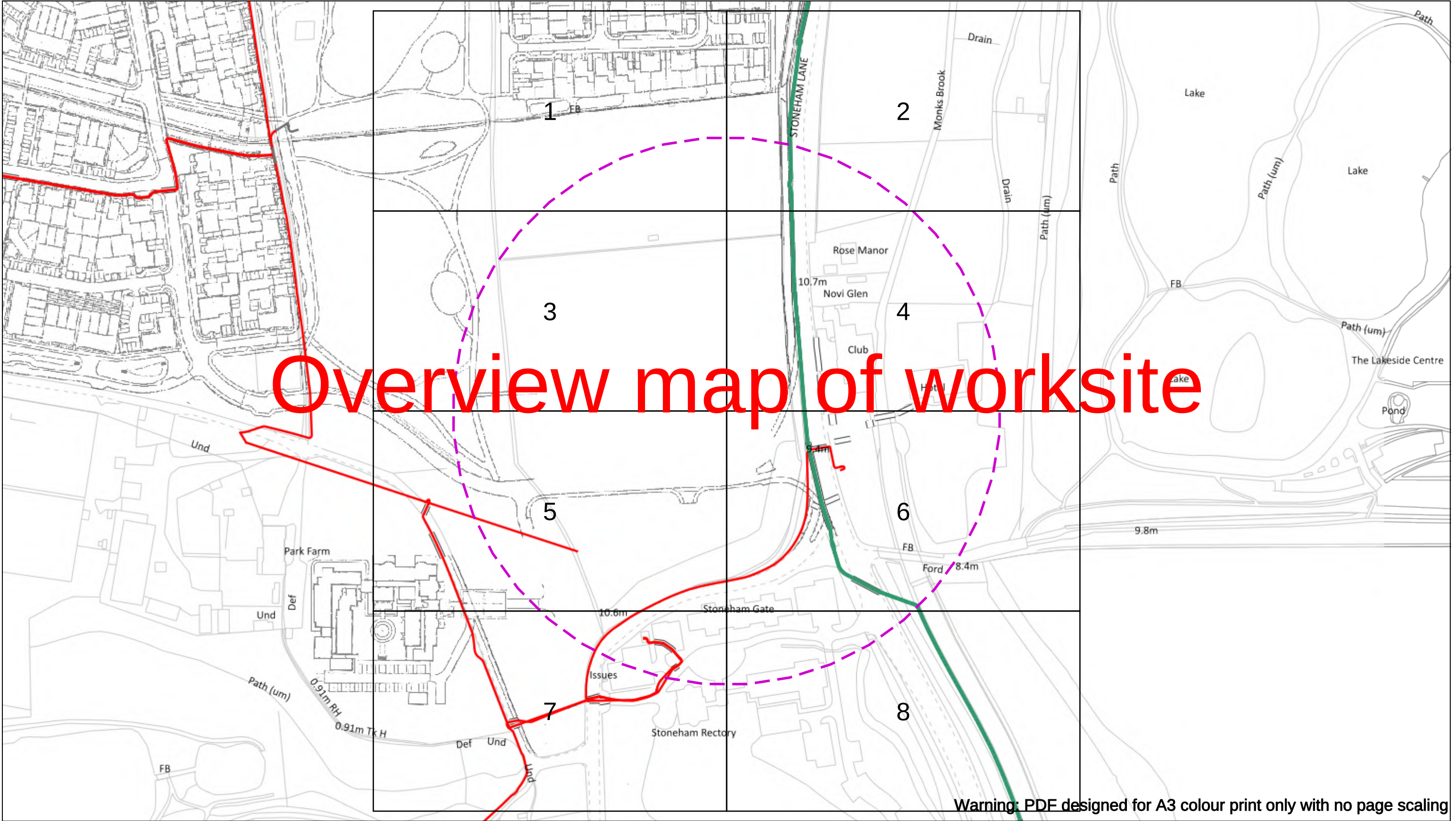
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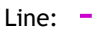
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Overview map of worksite



Dig Sites Area:  Line: 

Extra High Voltage cables in vicinity



Date Requested: 23/06/2021
Job Reference: 22479691
Site Location: 444174 117566
Requested by:
Mr Duncan Phillips
Your Scheme/Reference:
P2568

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Transmission 275,000V and 400,000V

NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID

	Services	LV	HV	EHV
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Road Crossing	0.6m	0.6m	0.75m	0.9m
Agricultural	1m	1m	1m	1.1m

Legend
Service Cable
0V Mains
2-3.3kV
6.6kV
11kV
22kV
33kV
66kV
132kV
275kV
400kV
Fibre Optic
Pilot Cable

Distribution Structures (Electric)
Pole, Existing Location
Pole Structure, Existing Location – Single
Pole Structure, Existing Location – H
Duct Route
Cross Section Route

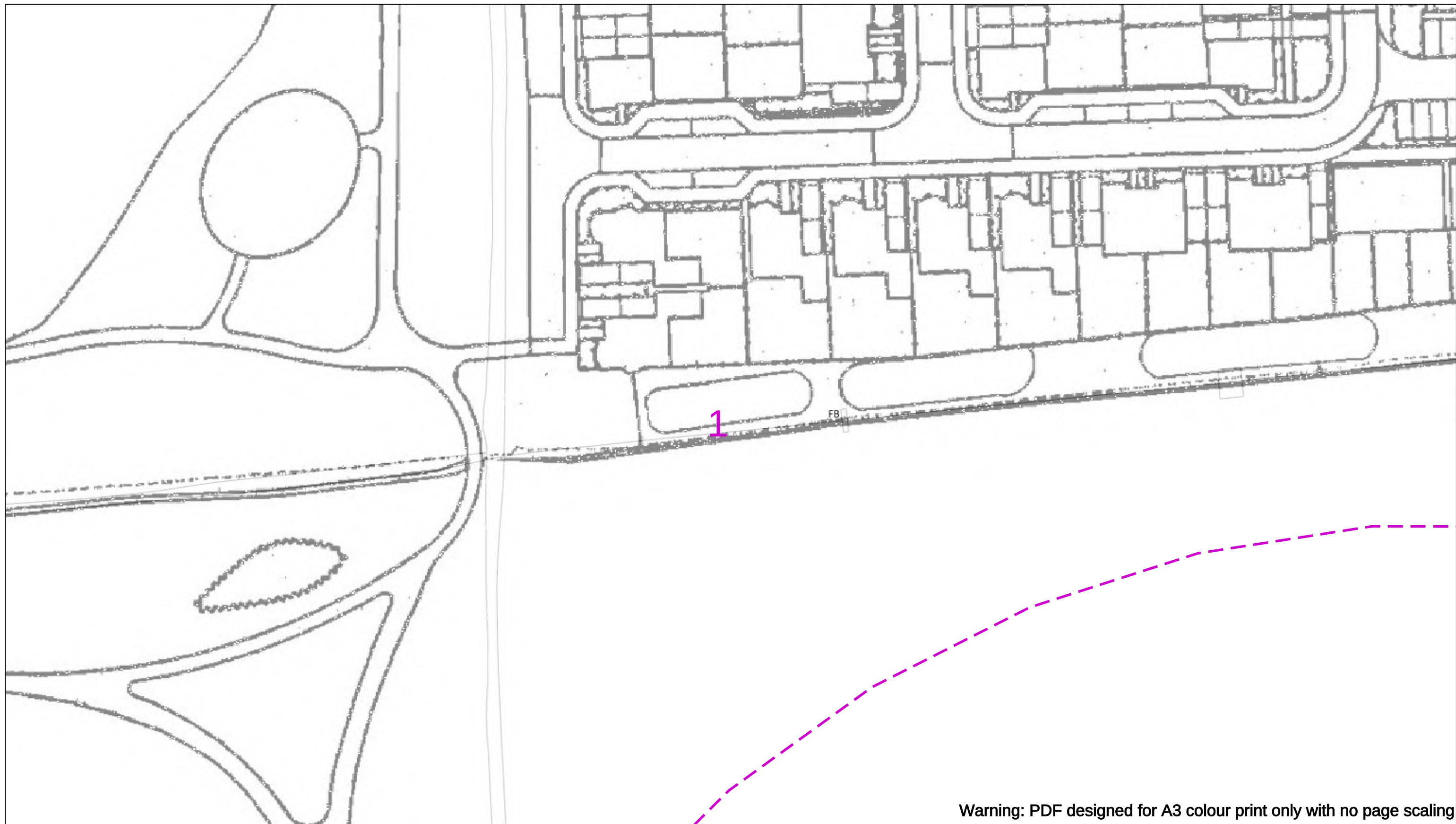
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Area:

— — — — —

Line:

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VOLTAGES (V)				
LV (Low Voltage) and Services			Up to 1,000V	
HV (High Voltage)			Over 1,000V to 11,000V	
EHV (Extra High Voltage)			22,000V to 132,000V	
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Road Crossing	0.6m	0.6m	0.75m	0.9m
Agricultural	1m	1m	1m	1.2m

Legend

- Service Cable
- UV Mats
- 2 - 3.3kV
- 5.5kV
- 13kV
- 23kV
- 38kV
- 69kV
- 132kV
- 275kV
- 400kV
- Fibre Optic
- Pilot Cable

Distribution Structures [Electric]

- Pole, Existing Location
- Pole Structure, Existing Location - Single
- Pole Structure, Existing Location - H
- Duct Route
- Cross Section Route

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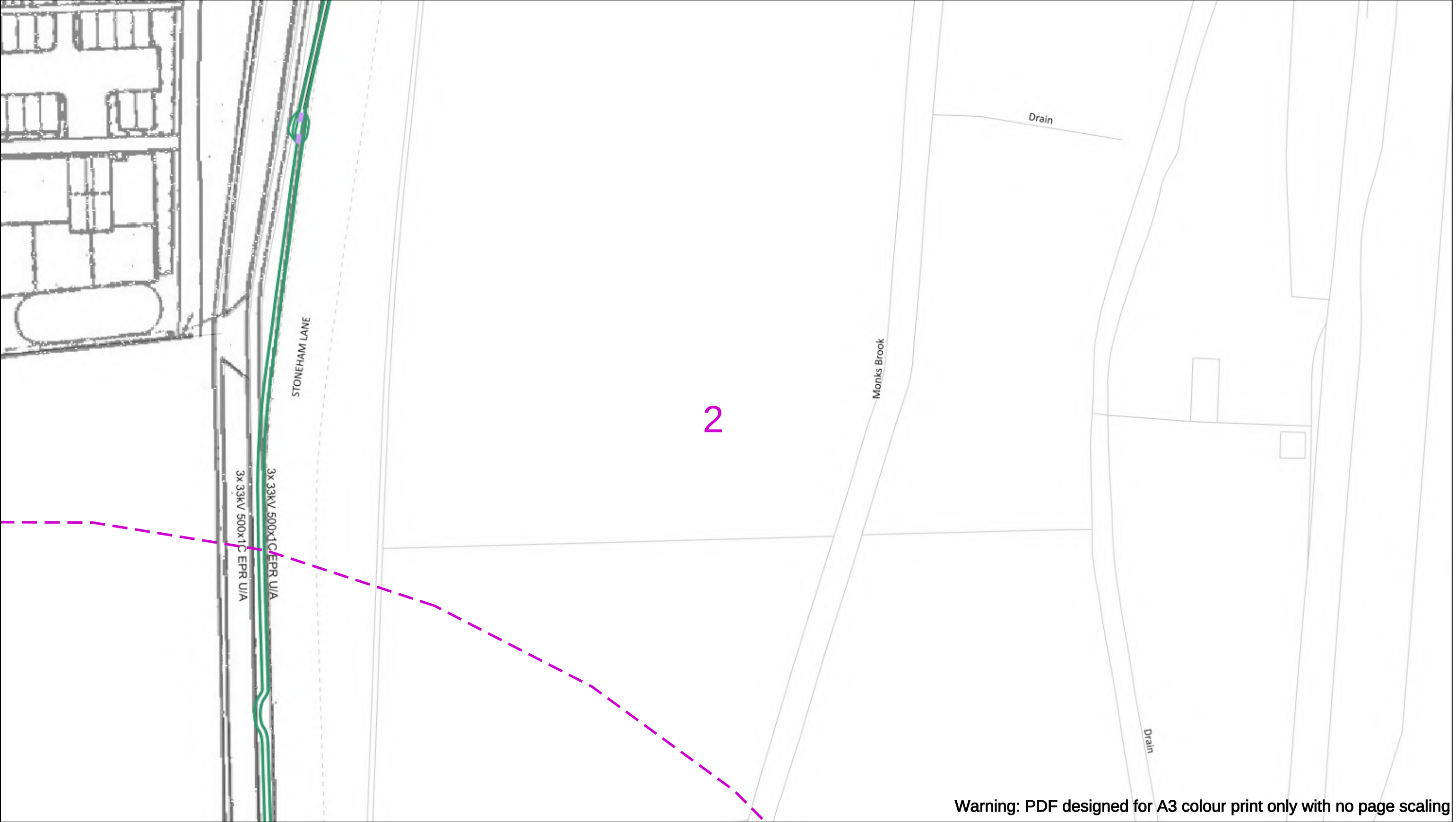
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Agricultural	1m	1m	1m	1.1m

Legend

Service Cable

0V Mains

2-3.3kV

6.6kV

11kV

22kV

33kV

66kV

132kV

275kV

400kV

Fibre Optic

Pilot Cable

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

Duct Route

Cross Section Route

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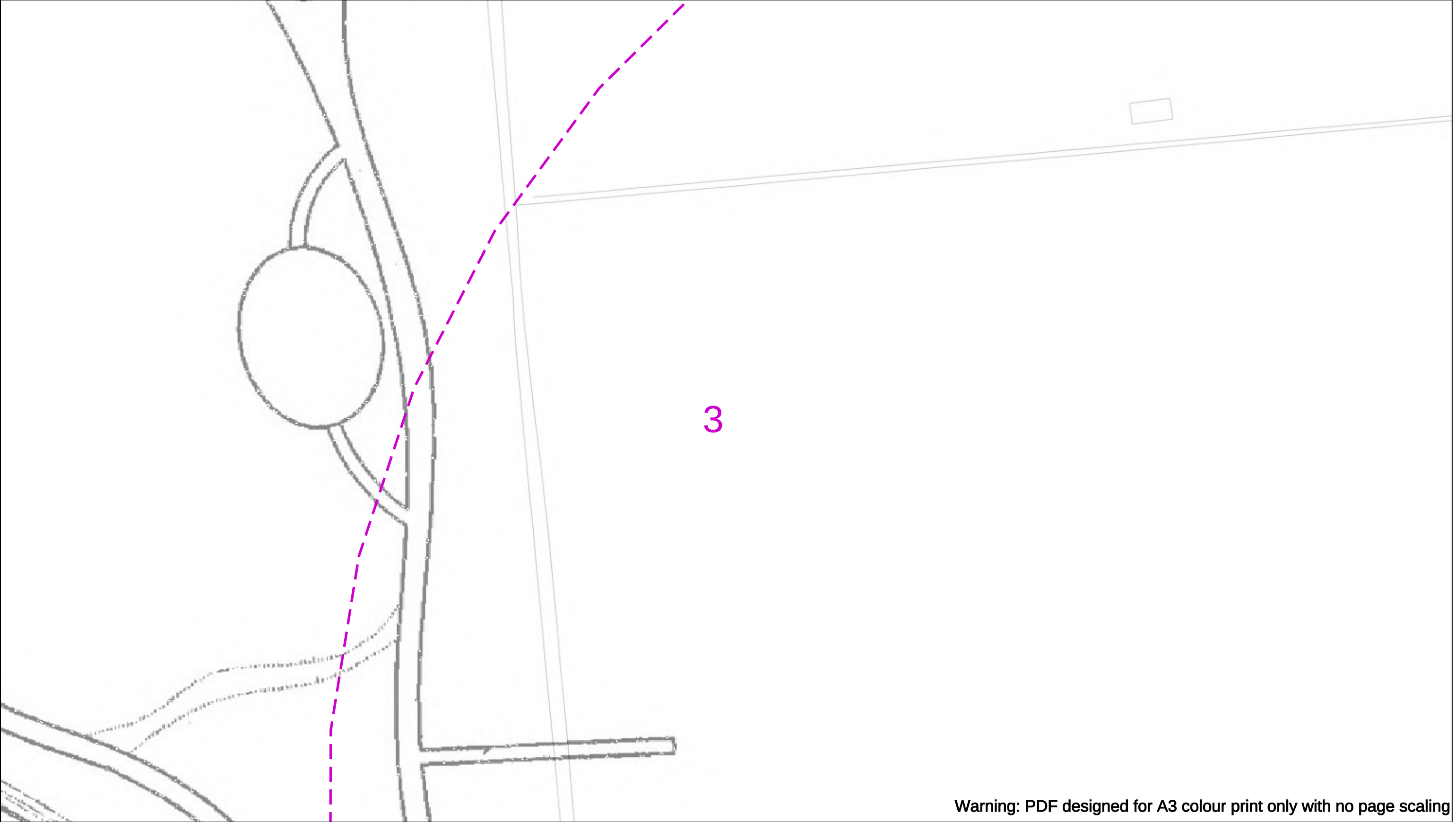
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50m

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Legend

Service Cable

0V Mains

2-3.3kV

6.6kV

11kV

22kV

33kV

66kV

132kV

275kV

400kV

Fibre Optic

Pilot Cable

Distribution Structures [Electric]

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

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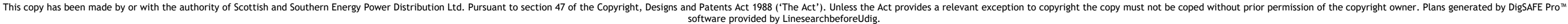
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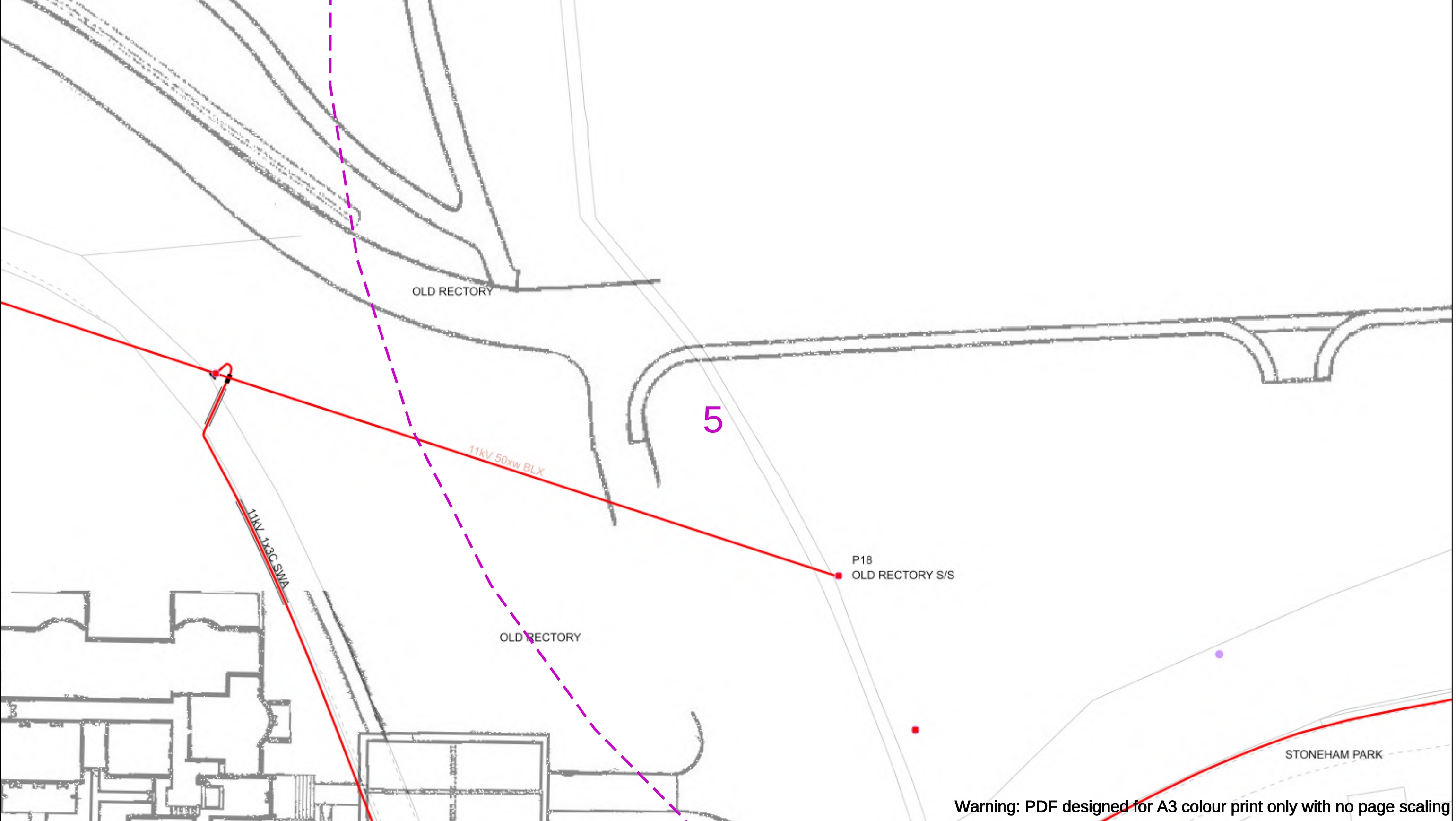
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050m

Dig Sites

Area:

Line:

Extra High Voltage cables in vicinity

Date Requested: 23/06/2021

Job Reference: 22479691

Site Location: 444174 117566

Requested by: Mr Duncan Phillips

Your Scheme/Reference: P2568

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HV (High Voltage)	Over 1,000V to 11,000V			
EHV (Extra High Voltage)	22,000V to 132,000V			
Transmission	275,000V and 400,000V			

	NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID			
	Services	LV	HV	EHV
Footpath/Unmade	0.45m	0.45m	0.6m	0.8m
Road Crossing	0.6m	0.6m	0.75m	0.9m
Agricultural	1m	1m	1m	1.1m

Legend

Service Cable

0V Mains

2-3.3kV

6.6kV

11kV

22kV

33kV

66kV

132kV

275kV

400kV

Fibre Optic

Pilot Cable

Distribution Structures [Electric]

Pole, Existing Location

Pole Structure, Existing Location - Single

Pole Structure, Existing Location - H

Duct Route

Cross Section Route

Southern Electric Power Distribution plc

Registered Office: No.1 Forbury Place

43 Forbury Road Reading RG1 3JH

Registered In England & Wales No.04094290

If you're unsure & need to seek advice before commencing excavations please contact:

General Enquiries: 0800 048 3516

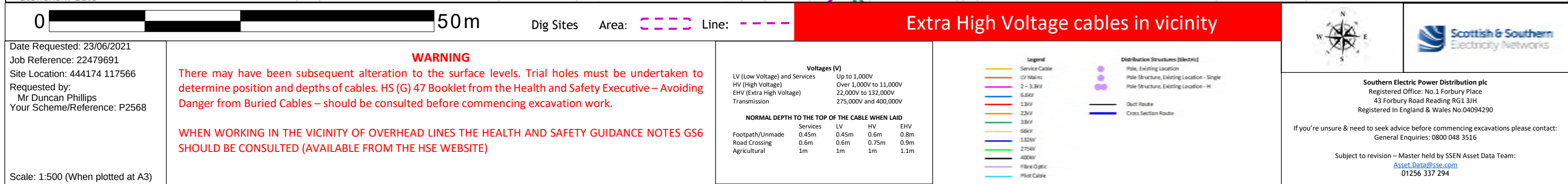
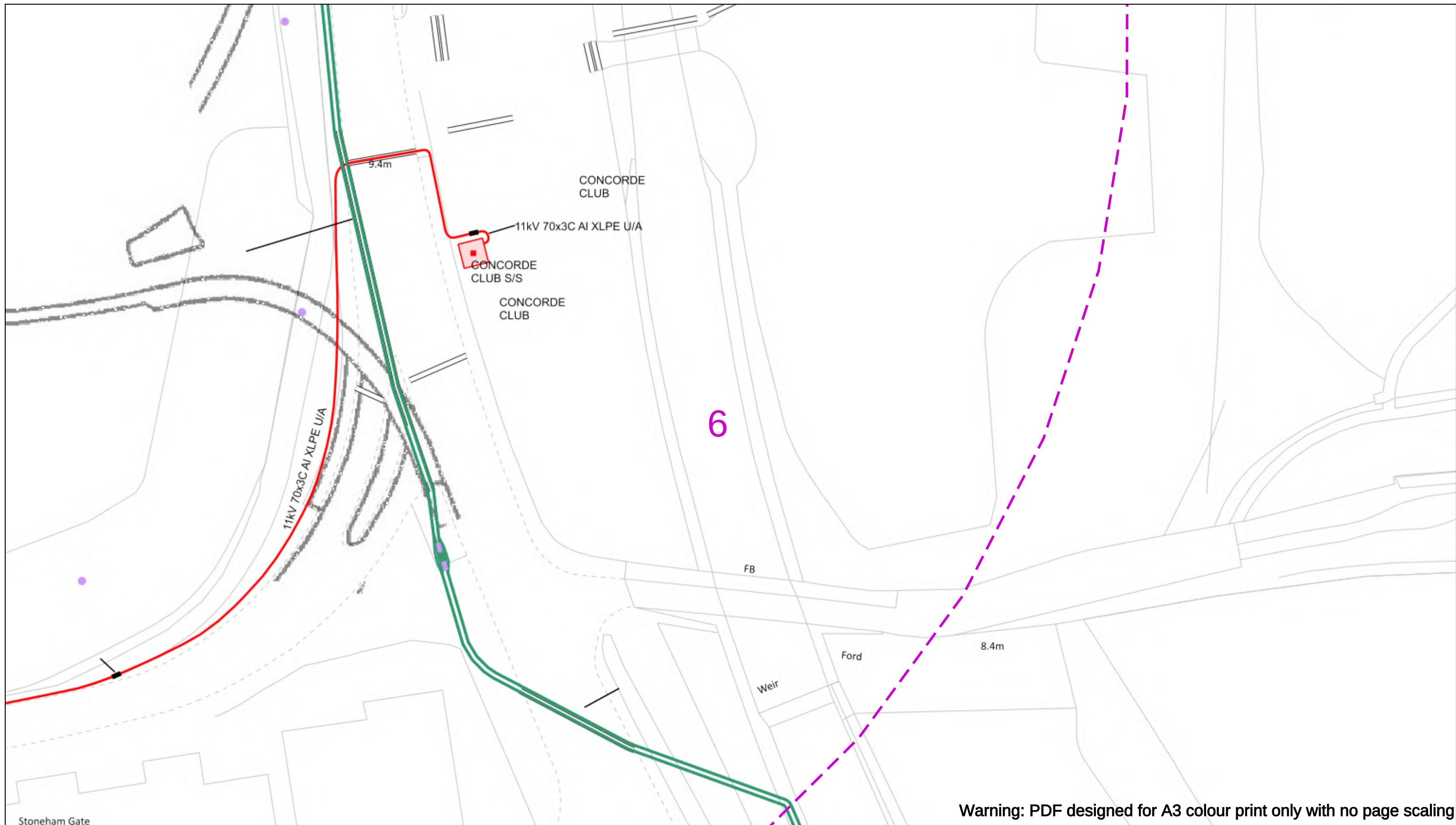
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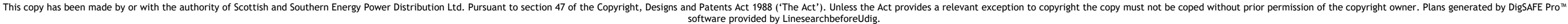
Asset.Data@sse.com

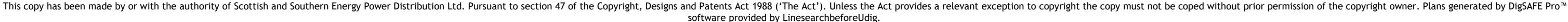
01256 337 294

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

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GUIDE TO INTERPRETING MAINS RECORDS PLAN



INTRODUCTION

The Health & Safety Executive have produced a document entitled 'Avoiding danger from underground services'. Copies are available from HMSO's accredited agents and good booksellers, Ref HS(G)47, ISBN 0118854925.

WHEN WORKING IN THE VICINITY OF ELECTRICITY CABLES AND OVERHEAD LINES PLEASE FOLLOW THE DO'S & DON'T'S LISTED BELOW.

DO'S

- Do** Make sure that you have plans of the cables in the area before any excavation work starts. Remember that some cables such as service cables may not be shown on the plans. Cables owned by other companies are not shown, e.g. local authorities, Department of the Environment, National Grid Co. etc.
- Do** Make sure that you understand the plans that have been supplied to you. For detailed explanation of the symbols used by Scottish & Southern Electricity Networks refer to this guide & the key shown on the plan
- Do** Use a cable avoidance tool (CAT) to determine the position of the existing cables in the work area. The positions should be clearly marked, and further tests made as work proceeds. **If in doubt, get advice from your supervisor.**
- Do** Hand dig trial holes over the indicated route of the cable, excavate alongside.
- Do** Ask for a cable to be made dead if it is buried in concrete. Please note that this is likely to be a costly process.
- Do** Watch for signs of cables as work progresses, such as marker tapes or cable covers which may be exposed.
- Do** Backfill carefully using stone free soil around cables, replacing marker tapes and covers.

- Do** Ensure that there is maximum clearance above all cable & joints.
- Do** Notify Scottish & Southern Electricity Networks immediately should accidental damage to cables occur however large or small. Arrange to keep people well clear of the cable that has been damaged. Do not backfill an area where cable damage has occurred.

DON'T'S

- Don't** Operate a bulldozer, scraper, dragline or excavator unless you are satisfied that there are no buried cables or overhead lines in the working area.
- Don't** Use picks, forks or pointed instruments in soft clay or soil where cables are present, exercise extreme caution where such instruments are used to free lumps of stone or to break up firmly compacted ground.
- Don't** Use exposed cables as a convenient step or handhold.
- Don't** Handle or attempt to alter the position of any cable.

REMEMBER THAT A DAMAGED CABLE MAY CAUSE EXTENSIVE LOSS OF SUPPLIES, MAKE EXPENSIVE REPAIRS NECESSARY AND CAUSE SERIOUS OR EVEN FATAL INJURY.

IF IN DOUBT ASK SCOTTISH & SOUTHERN ELECTRICITY NETWORKS

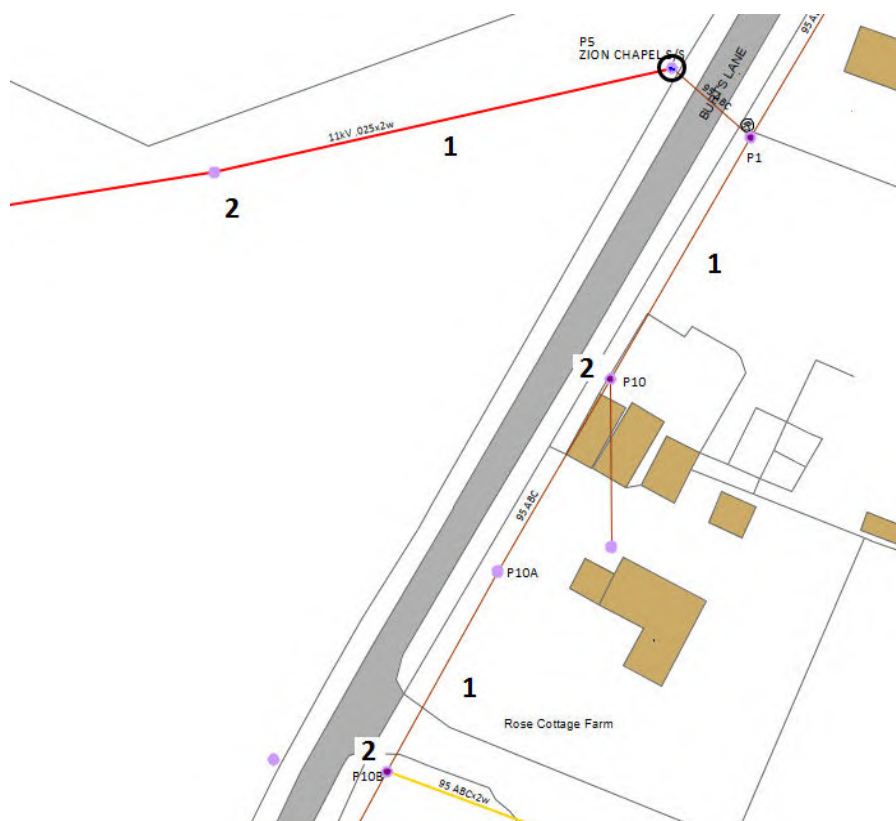
UNDERSTANDING THE INFORMATION ON THE PLANS.

AVERAGE DEPTH OF CABLES: Footpaths 0.6 metres
 Road Crossings 0.75metres

NB These depths are only approximate, depths may vary. It should also be noted that surface levels can change subsequent to the cables being laid.

Mains records symbols definitions and examples:

A) Overhead lines & Poles – These are depicted as follows:



1. Overhead Line – These can be either High Voltage or Low Voltage, colour denotes voltage.
2. Poles.
3. Pole Mounted Transformer.

B) Typical example of Low Voltage cable records:



1. Sub Station
2. Low Voltage Underground cable.
3. Link Boxes: This is a box with a manhole cover marked as belonging to Scottish & Southern Energy containing links. Either two or four cables will lead away from a link box.
4. Straight Joint: This is where two separate cables are joined together.
5. Breech Joint: This is where another cable is attached to the main.
6. Pot End: This is the end of the cable. In certain circumstances service cables to properties can be taken from the pot end. These services may not be shown on the plans.
7. Road crossing duct where a cable is routed under a path or road.
8. Cable terminations/Pole Box: Where underground cables are connected to overhead lines
9. Overhead line.
10. Street Lamps.

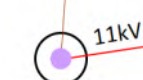
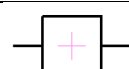
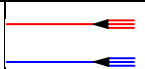
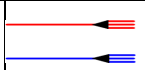
11. Services to properties: The service cable to an individual property are not always shown on the mains records that Scottish & Southern Electricity Networks supply. In some cases, a service can be looped from an adjacent property.

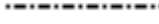
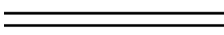
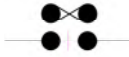
C) Typical example of High Voltage cable record.

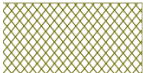


1. Sub Station
2. High Voltage Underground cable – Colour denotes voltage.
3. Straight Joint: This is where two separate cables are joined together.
4. Breech Joint: This is where another cable is attached to the main.
5. Cable terminations/Pole Box: Where underground cables are connected to overhead lines
6. Overhead Switch.

GIS ELECTRIC SYMBOLS

Service cable		Single Poles	
LV Mains		H Poles	
LV Mains and Services (Split Phase)		3 Poles	
2-3.3kV		Tower	
6.6kV		Pole Mounted Transformer	
11kV		Circuit Breaker	
22kV		Switch Disconnecter/ OH Air Break	
33kV		Pole Box	
66kV		Straight Joint	
132kV		Mains Breech Joint (Tee)	
275kV		Service Breech Joint	
320 kV		Trifurcating Joint	
400kV		Pot End	
Fibre Optic		Capped End	
Pilot Cable		Sealing End	

Assumed Route		Surge Diverters	
Out of Service		Pillar	
Service Connector Joint		Substation	
Overhead Connector		Non Electrical Item	
Wall Box Joint		Street Furniture	
Flying Stay		LV Link Box	
Stay		LV Supply Point	
PME Earth		Oil Pipeline	
Neutral Earth		Gas Pipeline	
Ducting		Areas of Outstanding Natural Beauty	
Pit		National Park	
Embedded Network		Borehole	
Other Network		ASLs	
Water Extraction Point		Sensitive Waterway	

Source Protection Zone		Site of Special Scientific Interest (SSSI)	
Vulnerability Zone		National Nature Reserve (NNR)	
Access		RAMSAR Special Area of Conservation (SAC)	
Ownership		Special Protection Area (SPA)	
Monuments		Ancient Woodland	
Flood Area		Restricted Access	

Watch it!

Safety advice brought to you by Scottish and Southern Electricity Networks

These notes are intended to help all those who have to work in the vicinity of electrical apparatus. Employers have a legal obligation to ensure that their operatives are fully instructed in the correct procedures.

The Electricity at Work Regulations 1989 impose health and safety requirements upon employers, employees and self-employed persons with respect to electricity at work. The regulations impose restrictions on persons being engaged in work activities on or near live conductors.

Regulation 14 requires that: "No person shall be engaged in any work activity on or near any live conductor (other than one suitably covered with insulating material so as to prevent danger) that danger may arise unless:

- ♦ it is **unreasonable** in all circumstances for it to be dead; and
- ♦ it is **reasonable** in all circumstances for him to be at work on or near it while it is live; and
- ♦ suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent injury."

The purpose of the regulations is to require precautions to be taken against the risk of death or personal injury from electricity in work activities.

Publications

The Health and Safety Executive have produced a document entitled 'Avoiding Danger from Underground Services', and the Appendix 1 deals specifically with electric cables. Copies are available from the HSE's Accredited Agents and good booksellers, Ref. HS (G) 47.

Copies of Health and Safety Guidance note GS 6 relating to safe working in proximity to overhead lines, are available from the Health and Safety Executive's website - www.hse.gov.uk.

Note

In situations of emergency or danger, or where the advice contained in these notes cannot be followed, you must consult Scottish and Southern Electricity Networks immediately. Tel. 0800 0727282 for southern England or 0800 300999 for Scotland.

Additional copies of these "Watch it!" leaflets can be obtained from our Asset Data Team office upon request. Tel. 01256 337294, or Fax 01256 337295.

You must read and accept the following safety notes as part of the contract to receive our network plans. You will have the option to print these and issue them to site staff.

Watch it! - Working in the vicinity of underground cables

Our plans show the positions and normal depths for the buried cables and pipes at the time when they were installed. However, alterations to road alignments surface levels and buildings may have occurred subsequently without our knowledge. If you discover plant or cables that are not marked or incorrectly marked, then you are required to contact us as soon as possible to give us the opportunity to amend our plans.

These plans show the equipment owned by Scottish and Southern Electricity Networks. There may be other privately owned plant in the area, which is outside of our control. You should always check with the Local Authority, National Grid Company, Department of the Environment, other Electricity Companies and other utilities before proceeding.

It is not intended that the issue of these plans will absolve either party from their obligation under any of the acts that control digging in the public highways.

Supplies To Properties, etc.

The location of cables supplying individual properties, street lighting, traffic signs, telephone kiosks etc. are not always shown on the plans. You should assume that each property, streetlight etc. will have its own supply cable.

Major Circuits

Where our plans indicate the presence of cables with a voltage exceeding 11,000 volts, you are advised to contact our local depot (telephone number is on the plans), before commencing any excavations within the vicinity of these cables. These major circuits form an extremely important link in Scottish and Southern Electricity Networks' networks, and damaging or modifying these circuits is a major and costly undertaking. Any development should therefore be designed to allow these circuits to remain undisturbed and accessible in their present location.

For your own and your workmates' safety, please follow the **do's** and **don'ts** listed below:

- ü **do** make sure you have plans of the underground cables in the area **before** any excavation work starts. Remember that some cables may not be shown on plans. If carrying out emergency work, excavate as though there are buried live cables in the vicinity.
- ü **do** use a cable locator to determine the position of existing cables in the work area. The positions should be marked and tests made as work proceeds. **If in doubt, get advice from your supervisor.**
- ü **do** ask for a cable to be made dead if it is buried in concrete.

- ü **do** backfill carefully, using stone-free soil around the cables, replacing marker-tapes and / or covers.
- ü **do** notify us immediately if you accidentally damage our cables. Arrange to keep people well clear of a cable that has been damaged until we have confirmed it has been made safe.
- ü **do** make sure before starting to demolish a building that all cables have been disconnected. We welcome prior notice of the intention to demolish buildings. This enables us to ensure that the site has been made safe electrically.
- ü **don't** operate a bulldozer, scraper, dragline or excavator; unless you are satisfied that there are no buried cables in the working area.
- ü **don't** use picks, pins, forks or pointed instruments in soft clay or soil when cables are present. Exercise extreme caution where such instruments are used to free lumps of stone, or break up firmly compacted ground. **Never** throw a fork or sharp instrument into the ground.
- ü **don't** dig trial holes over the indicated route of the cable. Excavate alongside instead.
- ü **don't** use exposed cables as a convenient step or handhold.
- ü **don't** handle or attempt to alter the position of any cable.

Remember that a damaged cable may cause extensive loss of supplies, make expensive repairs necessary and cause serious or even fatal injury.

If effective measures are not adopted to protect our equipment, we will take steps to recover the cost of any damage caused. Persons causing damage resulting in loss of supply to customers can be held legally responsible for any claims made by those customers. Promptness in reporting an incident will minimise costs.

In most cases it is not practicable to make cables dead without interrupting supplies to our customers. But given adequate notice, we will wherever possible, give advice regarding special precautions which may be necessary on any site where particular problems are likely to be encountered. The right is reserved to make a charge for this service.

Electricity cables can exist anywhere - under paths or roads, in gardens or driveways, on new housing or industrial development sites or even farmland.

Watch it! - Working in the vicinity of overhead lines

For your own and your workmates' safety, please follow the **do's** and **don'ts** listed below

- ü **do** carefully note the position of all overhead lines before commencing work.
- ü **do** co-operate with us during planning and sitework stages.
- ü **do** follow the advice given in HSE Guidance Note GS 6 when siting barriers, goal posts, bunting etc.
- ü **do** keep overhead lines in view when moving scaffolding or machinery and take special care when felling or lopping trees.
- ü **do** remember that the raising or slewing of a crane or excavator jib may cause danger when operating near an overhead line.

- ü **do** avoid any machinery that is in contact with an overhead line until we confirm that conditions are safe.
- ü **do** warn others to keep well clear.
- ü **don't** drive a high vehicle below an overhead line when an alternative route is available.
- ü **don't** raise the bed of a tipper lorry beneath an overhead line or drive under the line with the body of the vehicle raised.
- ü **don't** steady any suspended load until you are satisfied that there is no danger from overhead lines.
- ü **don't** handle or use scaffold platforms, poles, pipes or ladders unless they are at a safe distance from overhead lines.
- ü **don't** transport long objects beneath overhead lines, unless they are carried in a horizontal position.
- ü **don't** approach or touch any broken or fallen overhead lines.

Always remember that:

- Electricity can jump gaps.
- Contact or near contact with a crane jib, scaffold or ladder can cause a discharge of electricity with a risk of fatal or severe shock and burns to any person in the vicinity.

If effective measures are not adopted to protect our equipment, we will take steps to recover the cost of any damage caused. Persons causing damage resulting in loss of supply to customers can be held legally responsible for any claims made by those customers. Promptness in reporting an incident will minimise costs.

In most cases it is not practicable to make overhead lines dead without interrupting supplies to customers. However, provided adequate notice is given, then we will, whenever possible, give advice regarding special precautions which may be necessary on site where specific problems may be encountered. The right is reserved to make a charge for this service.

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 No.1 Forbury Place 43 Forbury Road Reading RG1 3JH which are members of the SSE Group www.ssen.co.uk

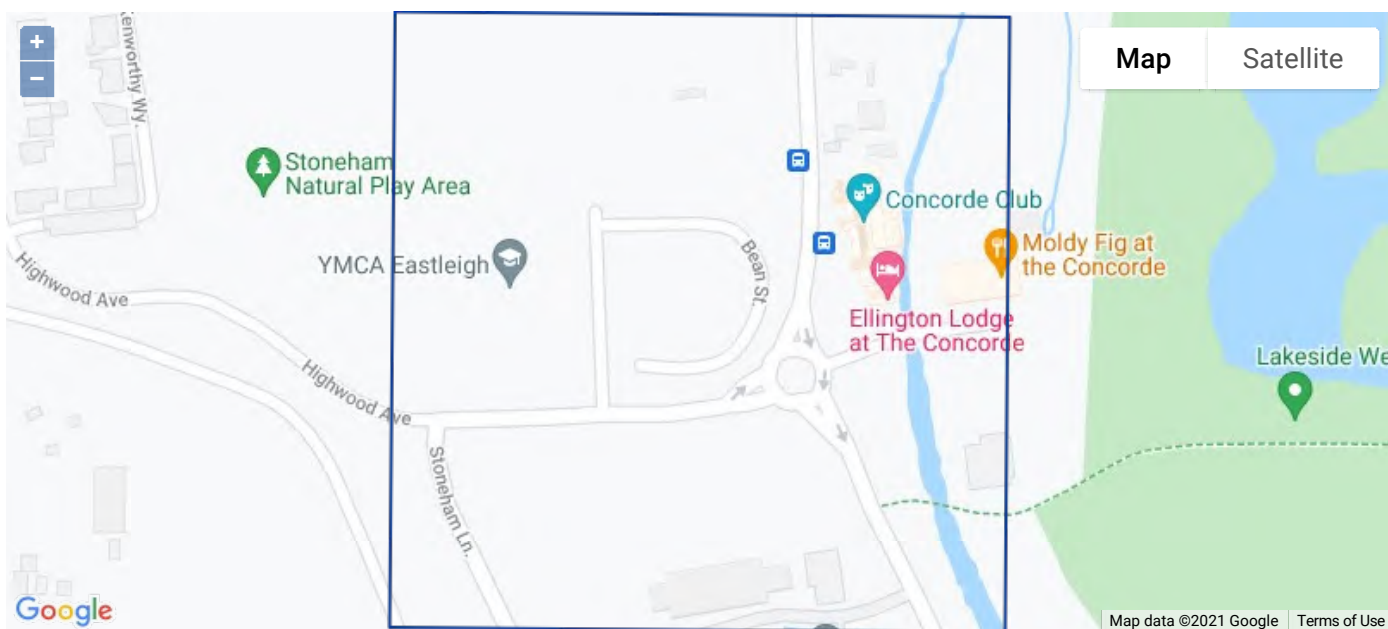
THIRD PARTY SEARCHES



Search requested by:		Date / Time: Wed, 23 Jun 2021 8:40	
Name	DUNCAN	Company	CORNERSTONE PROJECTS LTD
Address	91 Market Street, Hoylake, Wirral, CH47 5AA		
Email	searches@cornerstoneprojects.co.uk	Telephone	01516325142

Search details:			
Site Name	P2568	Work type	Other
Site Ref. No 1	P2568	Site Ref. No 2	
Address	SO50		
Grid Reference	444172 / 117565		

Search area:



Affected Utilibilly asset owners - please click 'Order affected plans' button below to have detailed plans emailed to you

Utility	Results Valid Until	Plan Cost	Order
Engie	Sat, 03 Jul 2021	£0.00	☒
Total Cost		£0.00	Order affected plans

Unaffected Utilibilly asset owners:

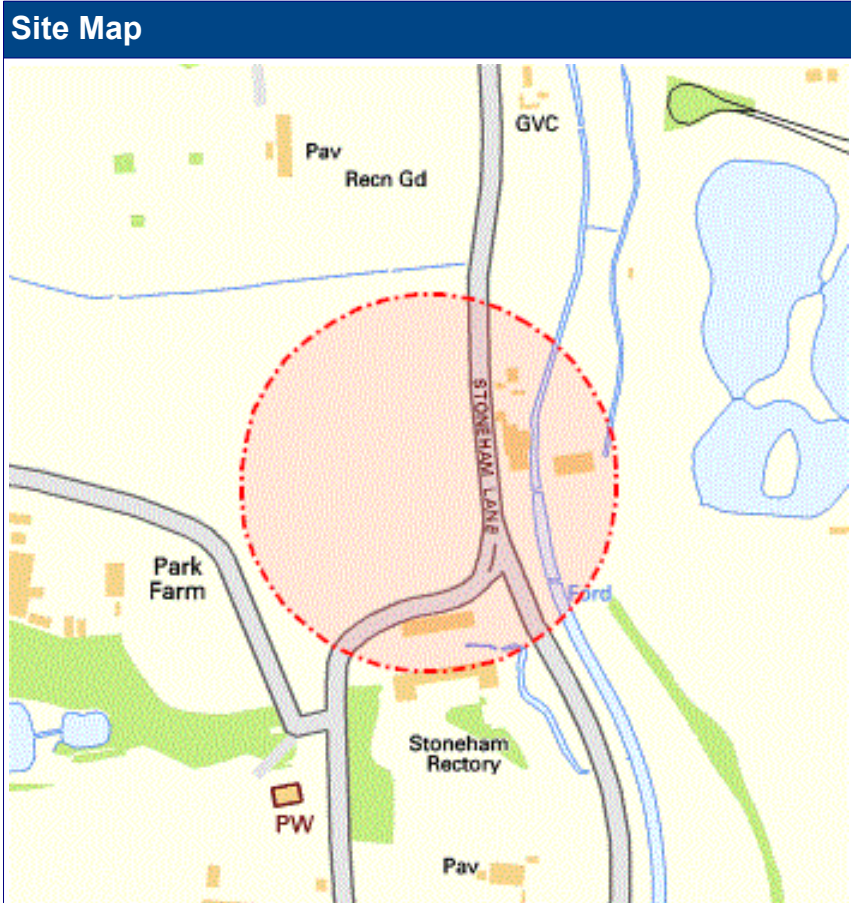
Albion Water
SOTA
Telent
KCom
Cholderton Water
Leep Utilities
CGI Logica
Trafficmaster
Enviroenergy
Wight Fibre



Enquirer			
Name	Mr Duncan Phillips	Phone	01516325142
Company	Cornerstone Projects	Mobile	Not Supplied
Address	91 Market Street Hoylake Merseyside CH47 5AA		
Email	searches@cornerstoneprojects.co.uk		

Enquiry Details			
Scheme/Reference	P2568		
Enquiry type	Initial Enquiry	Work category	Development Projects
Start date	30/06/2021	Work type	Commercial/industrial
End date	30/06/2021	Site size	315 metres diameter
Searched location	XY= 444174, 117565	Work type buffer*	75 metres
Confirmed location	444174 117566		
Site Contact Name	Not Supplied	Site Phone No	Not Supplied
Description of Works			

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.



Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.lineasearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Notes. Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineasearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. **LSBUD Members who have assets registered within your search area. ("Affected")**
 - a. These LSBUD Members will either:
 - i. Ask for further information ("Email Additional Info" noted in status). The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. Respond directly to you ("Await Response"). In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. **LSBUD Members who do not have assets registered within your search area. ("Not Affected")**
3. **Non LSBUD Members who may have assets within your search area.** Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

Asset Owner	Phone/Email	Emergency Only	Status
Fulcrum Pipelines Limited	03330146455	0800111999	Await response
Scottish and Southern Electricity Networks	08000483516	08000727282	Await response
SGN	08009121722	0800111999	Await response

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

AWE Pipeline	Balfour Beatty Investments Limited	BOC Limited (A Member of the Linde Group)
Box Broadband	BP Exploration Operating Company Limited	BPA
Carrington Gas Pipeline	CATS Pipeline c/o Wood Group PSN	Cemex
Centrica Storage Ltd	CNG Services Ltd	Concept Solutions People Ltd
ConocoPhillips (UK) Teesside Operator Ltd	Diamond Transmission Corporation	DIO (MOD Abandoned Pipelines)
DIO (MOD Live Pipelines)	E.ON UK CHP Limited	EirGrid
Electricity North West Limited	ENI & Himor c/o Penspen Ltd	EnQuest NNS Limited
EP Langage Limited	ESP Utilities Group	ESSAR
Esso Petroleum Company Limited	Exolum Pipeline System	Gamma
Gas Networks Ireland (UK)	Gateshead Energy Company	Gigaclear Ltd
Gtt	Harbour Energy	Heathrow Airport LTD
Humbly Grove Energy	IGas Energy	INEOS FPS Pipelines
INEOS Manufacturing (Scotland and TSEP)	INOVYN ChlorVinyls Limited	INOVYN Enterprises Limited
Intergen (Coryton Energy or Spalding Energy)	Jurassic Fibre Ltd	Last Mile
Mainline Pipelines Limited	Manchester Jetline Limited	Manx Cable Company
Marchwood Power Ltd (Gas Pipeline)	Melbourn Solar Limited	Murphy Utility Assets
National Grid Gas (Above 7 bar), National Grid Gas Distribution Limited (Above 2 bar) and National Grid Electricity Transmission	Neos Networks	Northumbrian Water Group
NPower CHP Pipelines	NTT Global Data Centers EMEA UK Ltd	NYnet Ltd
Oikos Storage Limited	Ørsted	Perenco UK Limited (Purbeck Southampton Pipeline)
Petroineos	Phillips 66	Portsmouth Water
Premier Transmission Ltd (SNIP)	Redundant Pipelines - LPDA	RWE - Great Yarmouth Pipeline (Bacton to Great Yarmouth Power Station)
RWEnpower (Little Barford and South Haven)	SABIC UK Petrochemicals	Scottish Power Generation
Seabank Power Ltd	SES Water	Shell
Shell NOP	SSE Generation Ltd	SSE Transmission
SSE Utility Solutions Limited	Tata Communications (c/o JSM Construction Ltd)	Total Colnbrook Pipelines
Total Finaline Pipelines	Transmission Capital	UK Power Networks

Uniper UK Ltd	University of Cambridge Granta Backbone Network	Vattenfall
Veolia ES SELCHP Limited	Veolia ES Sheffield Ltd	VPI Power Limited
Wales and West Utilities	West of Duddon Sands Transmission Ltd	Western Power Distribution
Westminster City Council	Zayo Group UK Ltd c/o JSM Group Ltd	

CABLE

Searches - Cornerstone Projects Ltd

From: Abdul Shukur, Shaik <Shaik.AbdulShukur@atkinsglobal.com>
Sent: 24 June 2021 14:23
To: Searches - Cornerstone Projects Ltd
Subject: RE: Plant Enquiries - Site Ref. P2568 Stoneham Lane
Attachments: Stoneham Lane.pdf; Vodafone External Apparatus Special Requirements.pdf

Please accept this email as confirmation that Vodafone: Fixed **does** have apparatus within the vicinity of your proposed works detailed below.

Please see attached network information.

IMPORTANT - PLEASE READ - Your Next Step?:-

Where apparatus is affected and requires diversion, please send all the scheme related proposals that affects the Vodafone Network to c3requests@vodafone.com with a request for a 'C3 Budget Estimate'. Please ensure you include a plan showing proposed works. (A location plan is insufficient for Vodafone to provide a costing). These estimates will be provided by Vodafone directly, normally within 20 working days from receipt of your request. Please include proof of this C2 response when requesting a C3 (using the 'forward' option). Diversionary works may be necessary if the existing line of the highway/railway or its levels are altered.

If you require a quote for new development, commercial site connections - please email your requirements and associated plans to c3requests@vodafone.com and a budget estimate will be returned, within 10 working days of receipt

Plant Enquiries Team
T: +44 (0)1454 662881
E: osm.enquiries@atkinsglobal.com

ATKINS working on behalf of Vodafone: Fixed



This response is made only in respect to electronic communications apparatus forming part of the Vodafone Limited electronic communications network formerly being part of the electronic communications networks of Cable & Wireless UK, Energis Communications Limited, Thus Group Holdings Plc and Your Communications Limited.

PLEASE NOTE:

The information given is indicative only. No warranty is made as to its accuracy. This information must not be solely relied upon in the event of excavation or other works carried out in the vicinity of Vodafone plant. No liability of any kind whatsoever is accepted by Vodafone, its servants, or agents, for any error or omission in respect of information contained on this information. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for the full cost of repairs to Vodafone's apparatus and all claims made against them by Third parties as a result of any interference or damage.



Please consider the environment before printing this e-mail

From: Searches - Cornerstone Projects Ltd <searches@cornerstoneprojects.co.uk>
Sent: 23 June 2021 13:38
To: National Plant Enquiries <OSM.enquiries@atkinsglobal.com>
Subject: Plant Enquiries - Site Ref. P2568 Stoneham Lane

Dear Sir/Madam,





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Legend

-  Access Chamber.Location Active Footway Chamber
-  Underground Route.Route Act. - Owned
-  Underground Route.Route Act. - Leased



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

Plot Date : 24/06/2021	Scale : 1:1250
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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.