



General safety measures to avoid injury and damage to gas plant



**Southern
Gas Networks**
A Scotia Gas Networks Company

The following protective and precautionary measures **MUST** be taken when working/excavating in the vicinity of our plant.

To avoid injury to yourself, your employees, colleagues and the general public you **MUST** verify the details provided on our plans by tracing, hand-digging, trial holes and suitably marking its position on site.

You **MUST** ensure current full colour copies of our plans are issued and the presence and location of our plant, prior to excavation, is understood by all relevant personnel on site.

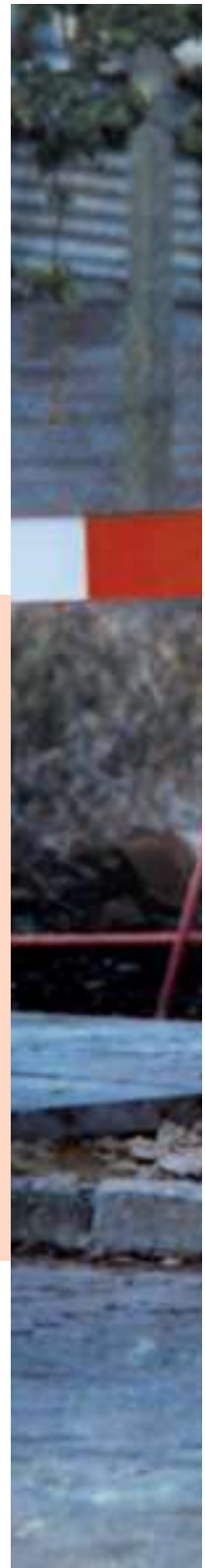
In an emergency

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

- a. Get everyone away from the immediate vicinity of the gas escape;
- b. Inform us immediately by calling the National Gas Emergency Number on **0800 111 999***;
- c. Do not attempt to repair the escape or stop the leakage;
- d. Ask occupants of buildings adjacent to the escape to leave until it is safe for them to return;
- e. Damage to a service supplying a building may result in gas entering the building. Do not attempt to operate any valves;
- f. Prevent any approach to the immediate vicinity of the gas escape;
- g. Prohibit smoking and extinguish all naked flames. Do not use mobile phones or other sources of ignition within 15m from the leakage; and
- h. Assist our representatives, and other emergency services for example police, fire and ambulance as requested.

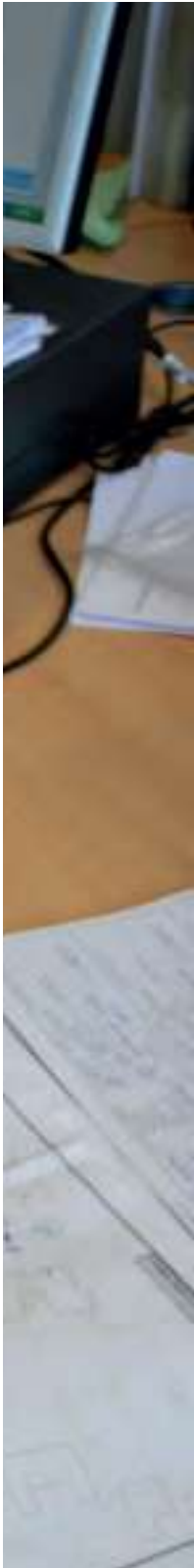
Additional reference material;

- HSE Guidance Note; HSG47 “Avoiding Danger from Underground Services” at www.hse.gov.uk and
- NJUG “Utilities Guidance on Positioning and Colour Coding of Apparatus” at www.njug.org.uk









Safe System of Work

We may request the production of Risk Assessments and Method Statements for any works deemed to have the potential to affect, cause risk to or pose a hazard to the safety and/or integrity of our plant. Where CDM legislation applies reference MUST be made to our plant within the site 'Health and Safety File'.

Financial

Every reasonable precaution MUST be taken to avoid personal injury or damage to our plant during the progress of the planned works. Any cost incurred by us for the repair of direct or consequential damage and the diversion of any affected plant will be recharged in full.

HSE

Any damage to our apparatus will be subject to legislative reporting responsibilities to the Health and Safety Executive under Reporting of Injuries, Diseases & Dangerous Occurrences Regulations (RIDDOR) and Gas Safety Management Regulations (GSMR).





Minimum safe working distances

If you are carrying out explosions, piling, splitting, boring and deep excavations, please contact us for further guidance. Trial holes **MUST** be dug by hand to determine the exact location of mains and service pipes in advance of mechanical excavation or thrust boring. Be aware of the potential for the presence of protruding objects from gas plant in the form of standpipes, test points and valve bodies.

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 (as depicted 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	3.0 metres	- - - - -

Note: We MUST be consulted prior to any planned excavation works within 10m of Pressure Reduction Equipment and may consider issuing a Permit to Work, if appropriate.

High pressures

In addition to receiving a copy of our 'Safe working in the vicinity of Southern Gas Networks high pressure pipelines and associated installations', if any activities proposed are closer than the minimum distances listed below you **MUST** discuss with us to agree your site specific requirements.

Power Excavators in easements	>3 metres
Power Excavators in highway	>3 metres
Pressure testing	>8 metres
Piling	>15 metres
Demolition	>150 metres
Blasting	>250 metres
No-dig techniques	Method Statement required
Crossing easement with plant	Written Consent required

Clearance requirements

No plant is to be laid over and along the line of a gas pipe irrespective of clearance. To allow the future repair and maintenance of gas plant, a minimum clearance of 250mm for low and medium pressure pipelines and 600mm for intermediate and high pressure pipelines, or 1.5 times the external diameter of the gas pipe, which ever is the greater, should be maintained between the gas plant and any new plant. Where this minimum clearance cannot be achieved, site discussions should be held with us or our representatives to agree a suitable clearance. Explosives shall not be used within 30m of our plant (400m for Pressure Reduction Equipment) without prior agreement. No piling or boring shall be carried out within 15m of our plant without prior consultation and agreement.









Surface boxes/Manholes

Do not bury or move our surface boxes. Access **MUST** be maintained both during and after your works. No manhole cover or other structure is to be built over, around or under a gas pipe and no work is to be carried out which results in a reduction or increase in cover or protection without prior written agreement.

Deep excavations

Where excavations adjacent to any of our potentially affects its security and integrity, adequate protection (approved by us) **MUST** be applied to such plant. Ground movement around gas **MUST** be prevented. If a sewer trench or any other water authority is to be constructed at greater than 1.5 metres deep near to a buried gas main or service pipe, we **MUST** be contacted. We should be provided with detailed drawings showing the line and width of the proposed sewer or other trench, together with the soil group classifications of the area concerned.

Crossing our plant

The placing of heavy construction plant, equipment, materials or the passage of heavy vehicles over our plant is prohibited unless specially agreed protective measures (i.e. the construction of reinforced crossing points) have been carried out. This is particularly important where reductions in side support or ground cover are planned.

Working in easements should not be undertaken without our prior written consent.

Exposed plant

Where excavations adjacent to gas plant 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 and restraints, thrust blocks and supports **MUST** not be removed without our agreement.

Hot works

The potential exists for heat damage to plastic pipelines/coatings. Where welding or other hot works involving naked flames is to be carried out in proximity to our plant, our representative should be present.

Backfilling

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

- 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 should not be used; and
- It **MUST** be laid to a minimum depth of 250mm above the crown of the pipe.

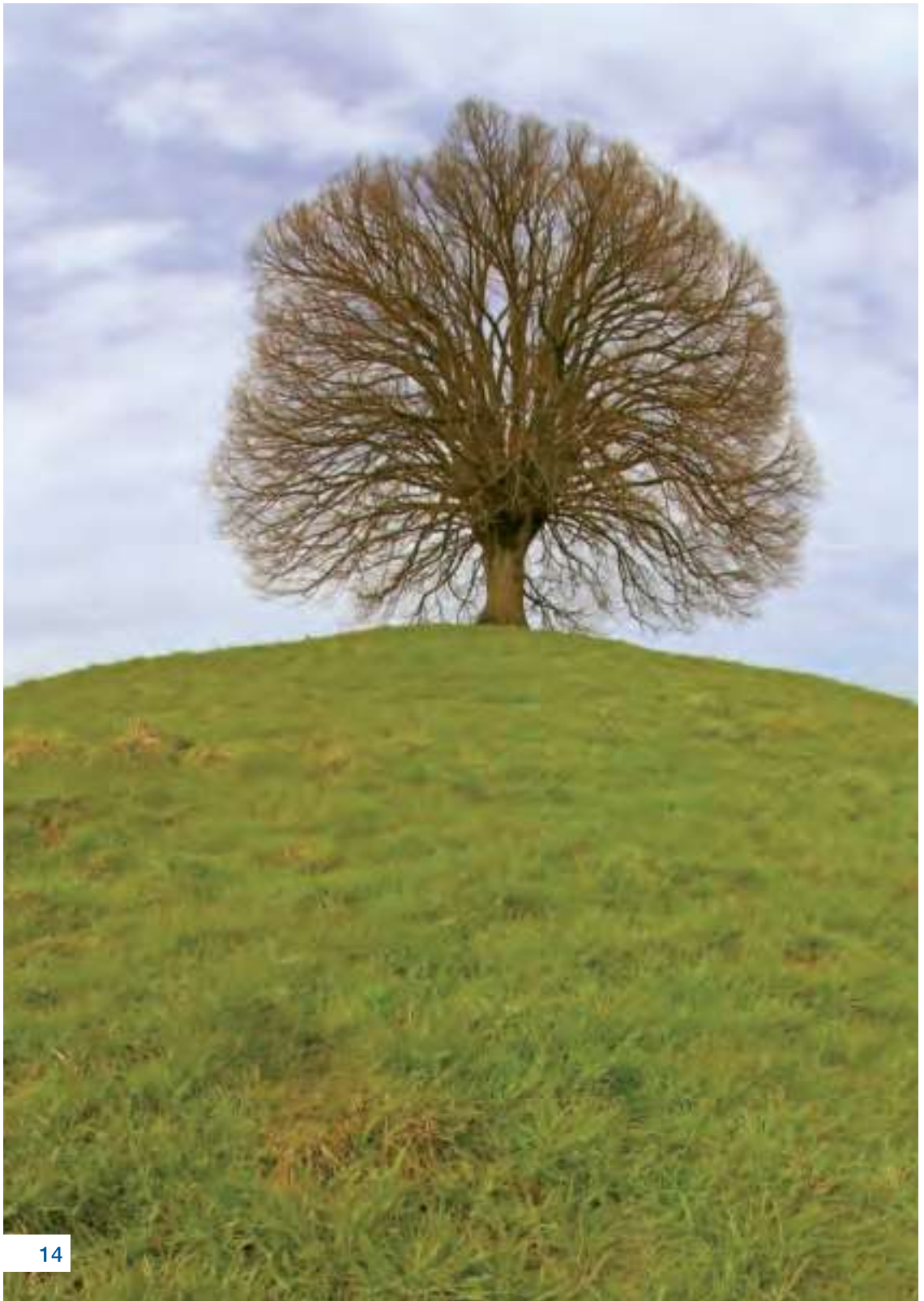
Note: Power ramming should not take place until a 300mm hand rammed layer has been completed over the crown of the pipe.

Access

Access to sites and our plant **MUST** be provided at all times. This includes temporary structures and spoil heaps over our pipes.









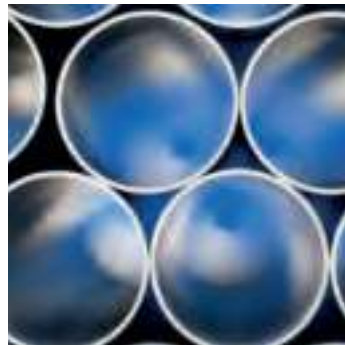
Tree planting

If trees or shrubs are to be planted adjacent to our plant, the selection of the type of tree or shrub and its planting **MUST** be considered so that root damage to buried mains or services will be avoided and that damage to trees or shrubs will not be caused by any subsequent excavations for repair and maintenance.

Before any tree planting is carried out on the easement, our written approval **MUST** be obtained. Any approval we grant to plant trees on the easement shall be subjecting to retaining the rights to remove, at any time in the future, all trees which in our opinion might become a danger to the pipe.

The written consent to plant trees will state what area may be planted and also the type of tree.

See over for specific species and the distances they **MUST** be planted from the pipeline.



The following trees and those of similar size, which may be deciduous or evergreen, shall not be planted within six metres of the centre line of the pipe e.g. Ash, Beech, Birch, most Conifers, Elm, Maple, Lime, Horse Chestnut, Oak, and Sycamore. Apple and Pear trees are also included in this category.

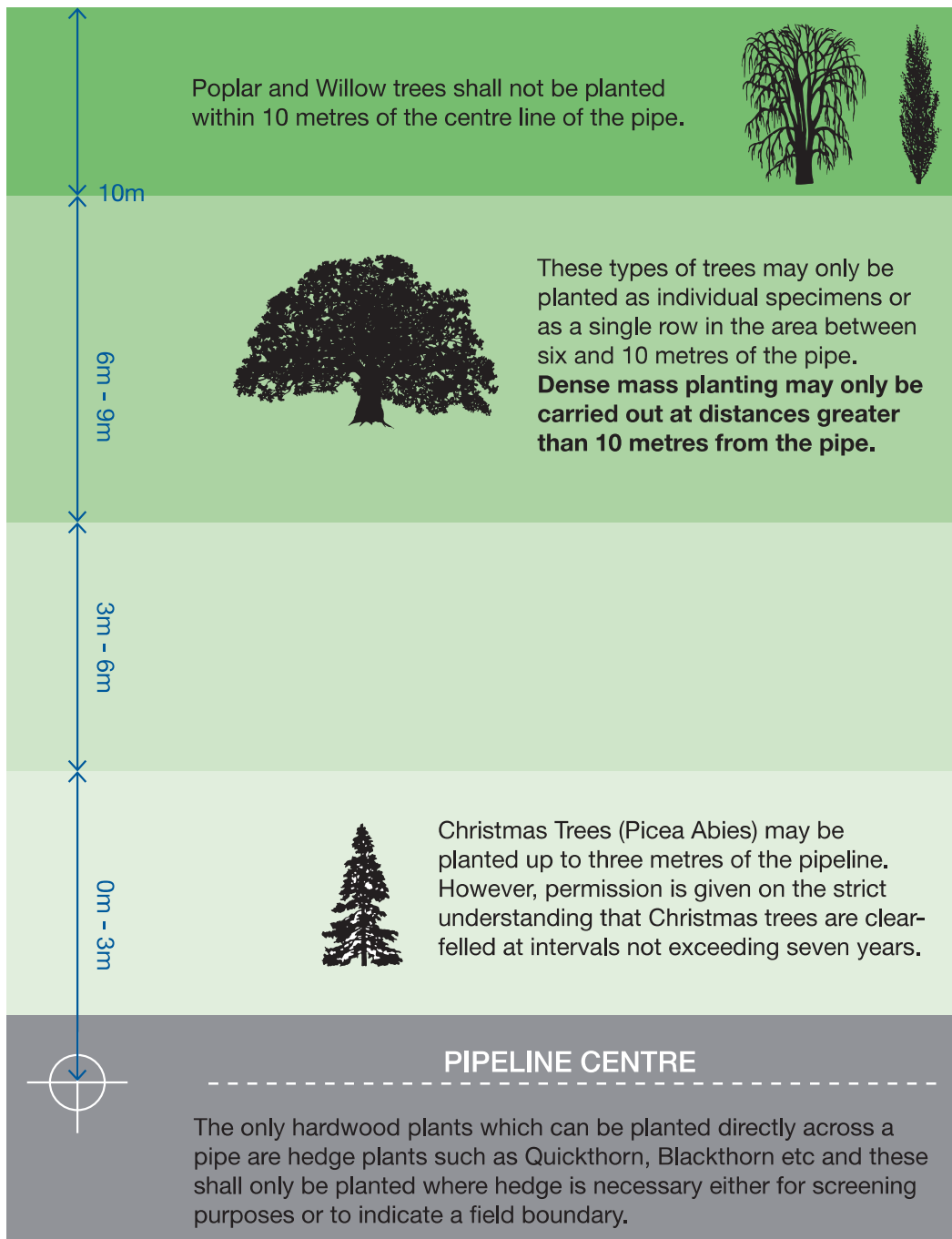
Dwarf Apple Stocks may be planted up to three metres of the centre line of the pipe.



In cases where screening is required, the following are shallow rooting and may be planted close to the pipeline; Blackthorn, Broom, Cottoneaster, Elder, Hazel, Laurel, Quickthorn, Privet, Snowberry and most ornamental shrubs.

PIPELINE CENTRE

Raspberries, Gooseberries and Blackcurrants may be planted on the pipe, but a four metre strip, centred on the pipe, MUST be left clear at all times.



Note: For further guidance refer to NJUG 10.

Notes

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Notes

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**Southern Gas Networks provides a
free plant location enquiry service
during office hours.**

Contact:

Tel: 0845 0703 497 or 0141 418 4093

Fax: 0141 429 6432

Email: plantlocation@sgn.co.uk

**Southern Gas Networks, Plant Location Team,
Tradeston, 95 Kilbirnie Street, Glasgow, G5 8JD**

www.sgn.co.uk

We regret that information cannot be supplied by telephone. Requests **MUST** be made in writing (via letter, email or fax). For **ALL** enquiries please include the following information:

1. Full contact details (name, company name, address, telephone number and e-mail address).
2. Full site address, postcode and easting/northing grid reference.
3. Plan showing the site boundary.
4. Details of the work to be carried out.
5. The proposed start date (please specify if work is planning only).