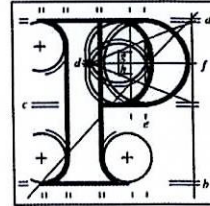


Our Case Number: ABP-317164-23



**An
Bord
Pleanála**

Gas Networks Ireland
Gasworks Road
Co. Cork
T12 RX96

Date: 18 July 2023

Re: Swords to City Centre Core Bus Corridor Scheme, Compulsory Purchase Order 2023
Swords to Dublin City Centre

Dear Sir / Madam,

An Bord Pleanála has received your letter of objection in relation to the above mentioned compulsory purchase order.

In respect of same, please note that in circumstances where:

- (i) no objections are received by the Board within the period provided for making objections, or
- (ii) all objections made are subsequently withdrawn, or
- (iii) all objections made relate exclusively to matters which can be dealt with by a property arbitrator the Board will inform the local authority as appropriate and, in such circumstances, the local authority can itself confirm the order with or without modification or refuse to confirm the order in accordance with the provisions of section 216 of the Planning and Development Act, 2000, as amended.

The Board has absolute discretion to hold an oral hearing in respect of any application before it, in accordance with section 218 of the Planning and Development Act 2000, as amended. Accordingly, the Board will inform you on this matter in due course.

If you have any queries in the meantime please contact the undersigned officer of the Board. Please quote the above-mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Sarah Caulfield
Executive Officer
Direct Line: 01-8737287

CH02

Tel	Tel	(01) 858 8100
Glaio Aitiúil	LoCall	1800 275 175
Facs	Fax	(01) 872 2684
Láithreán Gréasáin	Website	www.pleanala.ie
Ríomhphost	Email	bord@pleanala.ie

64 Sráid Maoilbhríde	64 Marlborough Street
Baile Átha Cliath 1	Dublin 1
D01 V902	D01 V902

Ceanncheathrú
Bóthar na nOibreacha Gáis
Corcaigh, T12 RX96
Éire

T +353 21 453 4000
F +353 21 453 4001

gasnetworks.ie

Headquarters
Gasworks Road
Cork, T12 RX96
Ireland



Líonraí
Gáis
Éireann

Gas
Networks
Ireland

AN BORD PLEANALA
LDG- 065071-23
ABP- 317164-23
14 JUL 2023
Fee: € _____ Type: _____
Time: _____ By: post

13th July 2023

An Bord Pleanála,
64 Marlborough Street,
Dublin 1
D01 V902

CPO Objection Notice – Swords to City Centre Core Bus Corridor Scheme
Plot List: 1042(1).1c, 1042(2).2c
Easement Plot List: CQ, EO

To whom it may concern,

Gas Networks Ireland (GNI) have received notification of the proposed compulsory purchase order 2023 for the Swords to City Centre Core Bus Corridor Scheme.

GNI has strategic gas infrastructure at this location, namely a high-pressure transmission pipeline, BGE/107, which provides gas supply to Dublin Airport, Swords, Malahide and the surrounding areas. Operating at 19 barg, the pipeline has surveillance, maintenance and access requirements which must be maintained in order to continue to be safely operated. See Appendix for a map of our gas infrastructure and Aurora telecom infrastructure. We have also included our Code of Practice for works taking place near the pipeline which must be adhered to. Please note supervision requirements for any works taking place near the pipeline as enclosed.

Additionally, GNI require the National Transport Authority (NTA) to please provide a response to the following queries;

1. Schedule Part 1 – Ref - 1042(1).1c (CQ on the map) Lands being permanently acquired

It is not clear if it is the intention of NTA to otherwise restrict or interfere with GNI's rights over this plot as we cannot see a reference to Part IV (Section B) in the Schedule. Can the NTA please clarify this position in terms of GNI's existing wayleave?

2. Schedule Part 2 – Ref - 1042(2).2c (EQ on the maps) Lands being temporarily acquired

GNI will require confirmation from NTA that the temporary acquisition of lands will not interfere with GNI's gas pipeline. Can the NTA advise on how GNI's rights are going to be temporarily restricted or otherwise interfered with and how they intend to protect GNI's gas pipe?

3. Schedule Part 4 (Section A) Description of private rights being acquired

GNI require clarification from the NTA if they will be extinguishing GNI's wayleave in relation to the area shaded orange and labelled CQ on map reference 0002-DM-0012? This will need to be assessed and its effect on GNI's operation of the gas pipeline at this location.

Tá Líonraí Gáis Éireann ina chuideachta gníomhaíochta ainmnithe atá faoi theorainn scaireanna, atá corpraithe in Éirinn leis an uimhir chláráithe 555744, a bhfuil IE3323308KH mar uimhir CBL aici agus a bhfuil a hoifig chláráithe lonnaithe ar Bhóthar na nOibreacha Gáis, Corcaigh, T12 RX96. Gas Networks Ireland is a designated activity company, limited by shares, incorporated in Ireland with registered number 555744, VAT number IE3323308KH and has its registered office at Gasworks Road, Cork, T12 RX96.

Stiúrthóirí/ Directors: Kevin Toland (Chairperson), Fiona Egan, Saoirse Fahey, Keith Harris, Sean Hogan, Geraldine Kelly, Cathal Marley, Joe O' Flynn, Keara Robins.

4. Schedule Part 4 (Section C) Description of private rights to be temporarily restricted or otherwise interfered with

GNI require clarification from NTA as to how its temporary restriction and interference with the area marked EO on map reference 0002-DM-0012 will affect GNI's pipe and wayleave?

We request that the NTA meet with our Safety team and Engineers to discuss their proposed plans.

We also request that the above is noted until we gain more information on the permanent and temporary land acquisition and the impact that this has on GNI's existing rights and its operation of the gas pipeline.

Yours sincerely,



Niamh Ryan

Land Management Strategy Lead

niamh.ryan@gasnetworks.ie



Gas Networks Ireland,
P.O. Box 51, Gasworks Road,
Cork, Ireland. T12 RX96.

References

Number on map deposited on NTA map

1042(1).1c Area (Ha): Area (m2): Description: County: Address: 0.00455 45.5 Commercial Dublin
Property at Airport, Swords Road, Co Dublin

1042(2).2c Area (Ha): Area (m2): Description: County: Address: 0.04435 443.5 Commercial Dublin
Property at Airport, Swords Road, Co Dublin

CQ All private rights within the area shaded orange and labelled 'CQ' on the deposit map reference
0002-DM-0012 associated with plot reference 1042(1).1 c as described in Part I of the Schedule

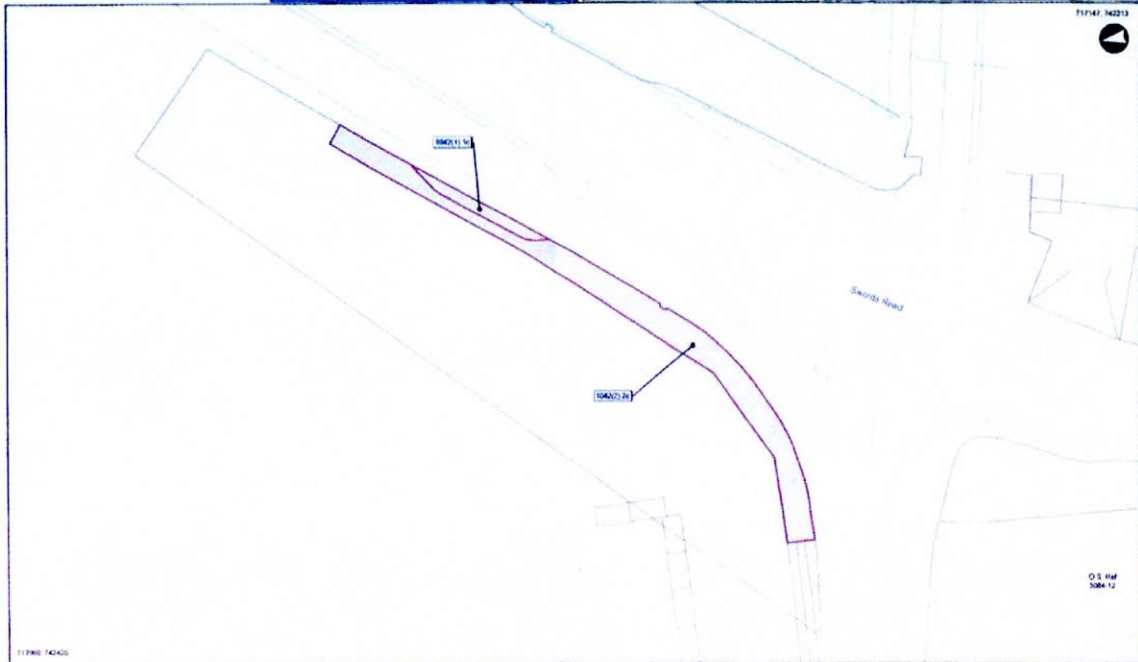
EO All private rights within the area shaded blue and labelled 'EO' on the deposit map reference
0002-DM-0012 associated with plot reference 1042(2).2 c as described in Part II of the Schedule



Lionraí Gáis Éireann

Gas Networks Ireland

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Legend:

- LANDS BEING PERMANENTLY ACQUIRED* (SCHEDULE PART I (Shaded in Green))
- LANDS BEING TEMPORARILY ACQUIRED** (SCHEDULE PART II (Shaded in Grey))
- Public rights of way to be extinguished or altered in accordance with Part 1 of the SCHEDULE PART I (Shaded in Green)
- Public rights of way to be extinguished or altered in accordance with Part 2 of the SCHEDULE PART II (Shaded in Grey)
- Private rights to be acquired or altered in accordance with Part 1 of the SCHEDULE PART I (Shaded in Green)
- Private rights to be acquired or altered in accordance with Part 2 of the SCHEDULE PART II (Shaded in Grey)
- Private rights to be extinguished or altered in accordance with Part 1 of the SCHEDULE PART I (Shaded in Green)
- Private rights to be extinguished or altered in accordance with Part 2 of the SCHEDULE PART II (Shaded in Grey)

NTA
 National Transport Authority
 Údarás Náisiúnta Iomparáil
 National Transport Authority

**Swords to City Centre
 Core Bus Corridor Scheme
 Compulsory Purchase Order 2023
 Land Acquisition Map**

Ref.	Date	Description	Page
001	2023-01-10	Initial Land Acquisition Map	1
002	2023-01-10	Final Land Acquisition Map	1

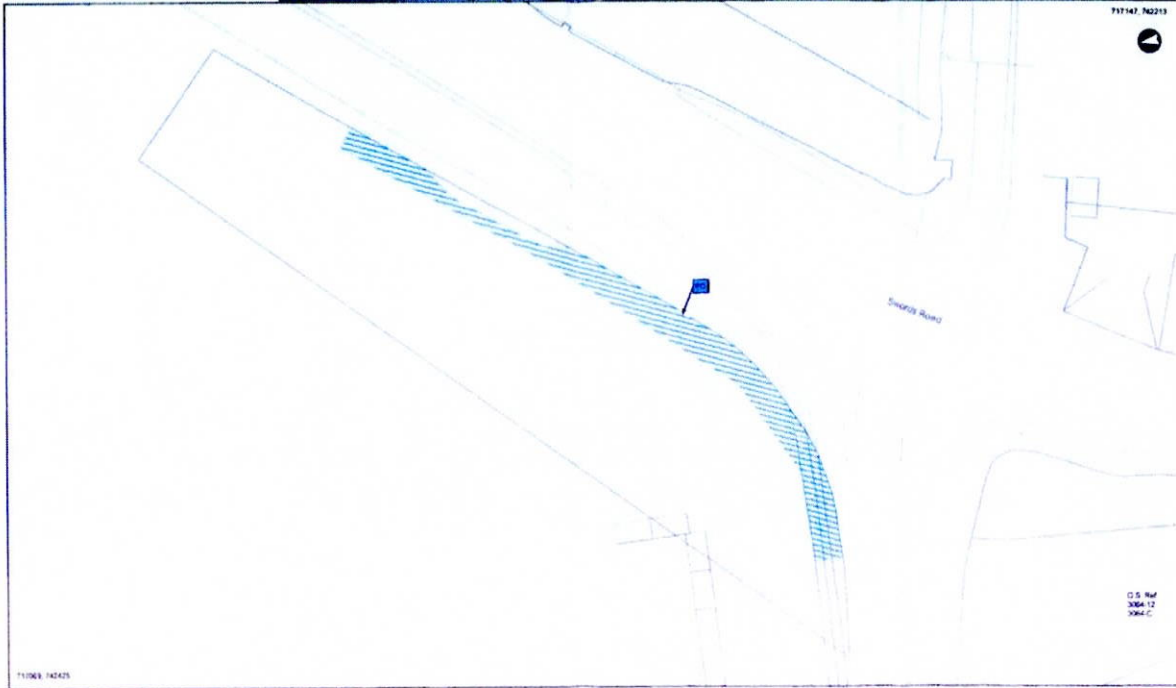
Lands to be Compulsorily Acquired Server Map	
Map No.	CP/2023/001
Map Date	2023-01-10
Map Scale	1:10,000
Map Author	NTA
Map Status	Final



Lionraí
Gáis
Éireann

Gas
Networks
Ireland

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Legend:

	LANDS BEING PERMANENTLY ACQUIRED *SCHEDULE PART I (Shaded in Grey)		Public rights of way in the acquired land in the SCHEDULE PART II (Shaded in Grey)		Public rights of way (other than those in Schedule Part II) in the land in the SCHEDULE PART II (Shaded in Grey)		Private rights to be interfered with in the SCHEDULE PART II (Shaded in Grey)		Private rights to be interfered with in the SCHEDULE PART I (Shaded in Grey)		Private rights to be interfered with in the SCHEDULE PART II (Shaded in Grey)
--	---	--	--	--	---	--	---	--	--	--	---

NTA
National Transport Authority
Udarás Náisiúnta Iompair
National Transport Authority

**Swords to City Centre
Core Bus Corridor Scheme
Compulsory Purchase Order 2023
Land Acquisition Map**

Part	Date	Description	Page
1	2023-01-24	Initial Plan	1
2	2023-01-24	Revised Plan	2

**Private rights
to be temporarily restricted or otherwise interfered with
Survey Map**

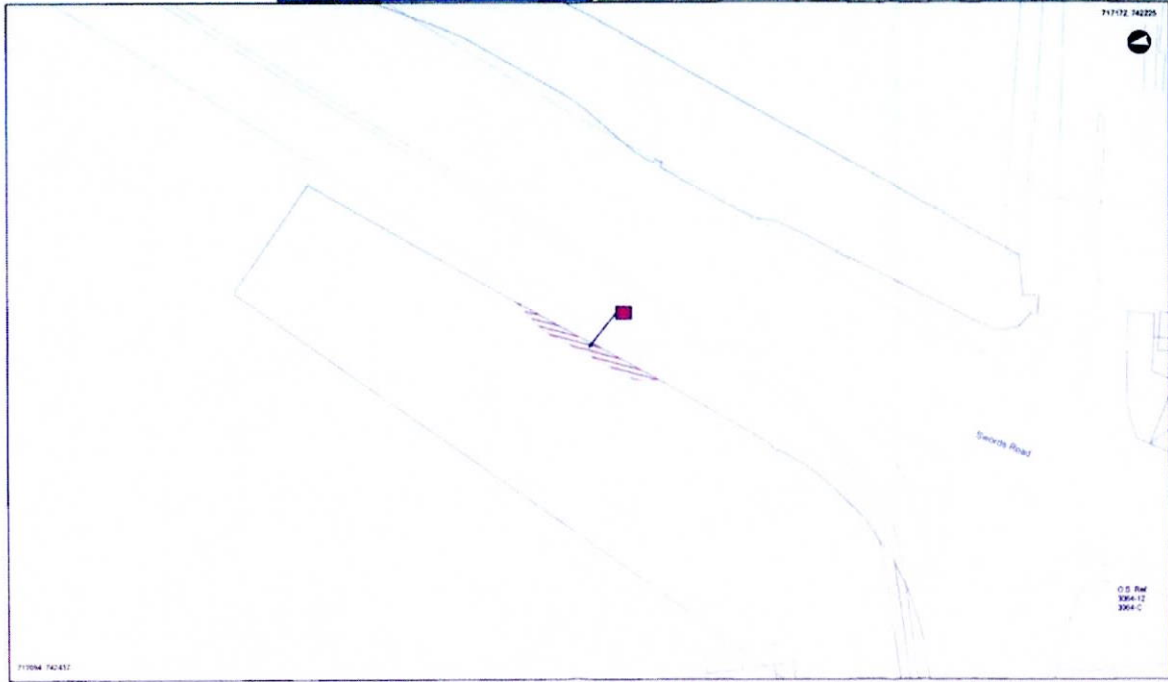
Part	Date	Description	Page
1	2023-01-24	Initial Plan	1
2	2023-01-24	Revised Plan	2



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Legend:

- LANDS BEING PERMANENTLY ACQUIRED* (SCHEDULE PART I) (Shaded in Grey)
- LANDS BEING TEMPORARILY ACQUIRED** (SCHEDULE PART II) (Shaded in Grey)
- Public rights of way in the longitudinal road in the SCHEDULE PART II (Section A)
- Public rights of way in the longitudinal road in the SCHEDULE PART II (Section B)
- Private rights to be acquired (SCHEDULE PART II) (Section A)
- Private rights to be acquired (SCHEDULE PART II) (Section B)
- Private rights to be acquired or otherwise protected with regard to the SCHEDULE PART II (Section C)
- Private rights to be acquired or otherwise protected with regard to the SCHEDULE PART II (Section D)

NTA
National Transport Authority
Udarás Náisiúnta Iompair
National Transport Authority

**Swords to City Centre
Core Bus Corridor Scheme
Compulsory Purchase Order 2023
Land Acquisition Map**

Area	Date	Description	Page
100	2023-01-10	100	100

**Private rights to be acquired
Server Map**

Map ID	100
Map Name	100
Map Date	2023-01-10
Map Author	100

Ceanncheathrú
Bóthar na nOibreacha Gáis
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Headquarters
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gasnetworks.ie

To whom it may concern,

In relation to the requested CPO of lands on Swords Rd, reference 1042(1).1c, 1042(2).2c, please see following standard response for any works taking place near the high pressure transmission pipeline.

You recently contacted Gas Networks Ireland and requested information on its infrastructure in the vicinity of your forthcoming works. The Gas Transmission Pipeline in the general area of interest to you is shown, in **RED**, on the drawing attached. Please treat all Gas Networks Ireland Drawings as 'indicative' only.

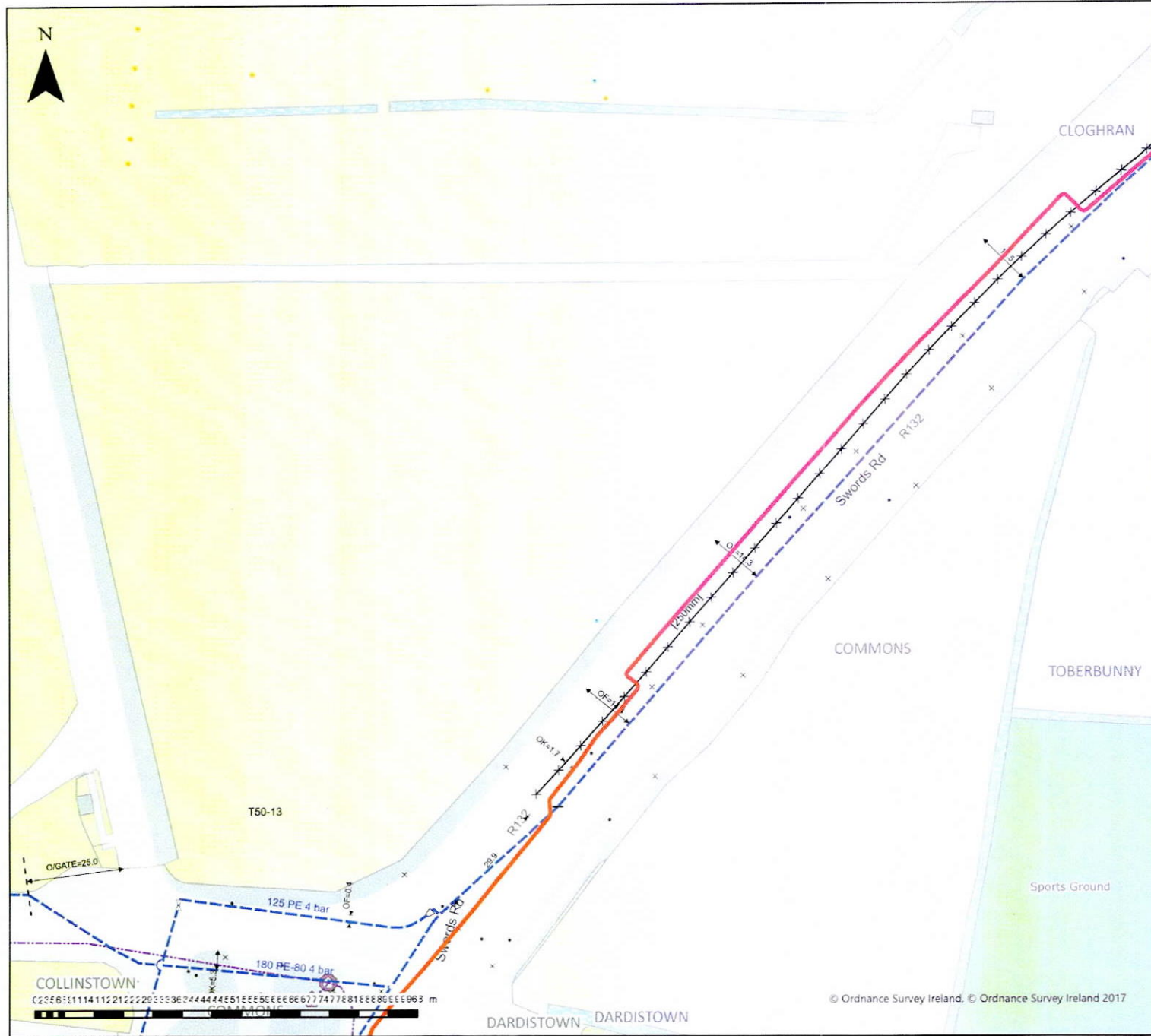
The Gas Distribution Network in the vicinity is shown, in **GREEN** and/or in **BLUE** on the drawing attached. Please refer to the attached Safety Advice Booklet for guidance on working in the vicinity of this infrastructure.

To verify the in situ position of the Gas Transmission Pipeline please contact Chris Dillon, chris.dillon@gasnetworks.ie. All work in the vicinity of a Gas Transmission Pipeline must be completed in compliance with the attached 'Code of Practice 2021'.

The Gas Transmission Pipelines exist within Gas Networks Ireland Wayleaves. No excavation may take place within any such Wayleave unless consent, in the form of a valid Excavation Permit, has been granted by Gas Networks Ireland. Chris Dillon will issue this permit once all conditions for excavations have been met.

There is some inert, redundant, GNI infrastructure in the vicinity as shown in **BLACK X-X** on the drawing attached. Your site crews should be made aware of same.

Aurora Telecom Ducts, where present, are shown as **MAUVE BROKEN LINES**. Please contact Aurora Telecom, at Auroralink@gasnetworks.ie for advice where Aurora Telecom infrastructure is present. The Aurora Emergency Number is 1800-42 7399



Important Safety Notice: Damage to gas pipelines can result in serious injury or death. Gas network information is provided as a general guide. The exact location and depth of medium or low pressure distribution gas pipes must be verified on site by carrying out necessary investigations, including, for example, hand digging trial holes along the route of the pipe. Service pipes are not generally shown but their presence should always be anticipated.


High pressure transmission pipelines are shown in red. If a transmission pipeline is identified within 10m of any scheduled excavations then work must not proceed before GNI has been consulted. The true location and depth of a transmission pipeline must be verified on site by a representative of GNI. Contact can be made through 1800 427 747.

All work in the vicinity of the gas network must be completed in accordance with the current edition of the Health and Safety Authority publication, "Code of Practice For Avoiding Danger From Underground Services" which is available from the Health and Safety Authority (9815 258 355) or can be downloaded at www.hsa.ie

Legal Notice: Gas Networks Ireland (GNI) and its affiliates, accept no responsibility for the accuracy of any information contained in this document including data concerning location and technical designation of the gas distribution and transmission network (the "Information"). The Information should not be relied on for accurate distance or depth of cover measurements.


Any representations and warranties, express or implied, are excluded to the fullest extent permitted by law. No liability shall be accepted for any loss or damage including, without limitation, direct, indirect or consequential loss, arising out of or in connection with the use or re-use of the Information.

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 — Aurora Telecom Duct


 - - - Aurora Telecom Sub Duct


 Aurora Telecom Inserted Gas Pipe


Aurora Telecom Queries - 01-8926166 (Office Hours)
 Aurora_Network_Queries@gasnetworks.ie
 Aurora Telecom Emergency Only 1800 427399 / 01 2030120


 Transmission Pipe (High Pressure)


 Transmission Pipe (Construction Issue)


 Distribution Pipe (Medium Pressure)


 Distribution Pipe (Low Pressure)


 Service Pipe (Medium Pressure)

 Service Pipe (Low Pressure)

 Strategic Pipe (Medium Pressure)

 Strategic Pipe (Low Pressure)

 Inserted

 Abandoned Pipe

C=? Cover (depth in metres)  Pressure Monitor

 CP Test Point  Protection (Slabbing)

 End Cap  Protection (Sleeve)

 Hot Tap  Reducer

 Installation  Service Terminator

 Valve  Tee

 Mains Verification**  Transition

** Please contact GNI on 1800-427747 for specific information

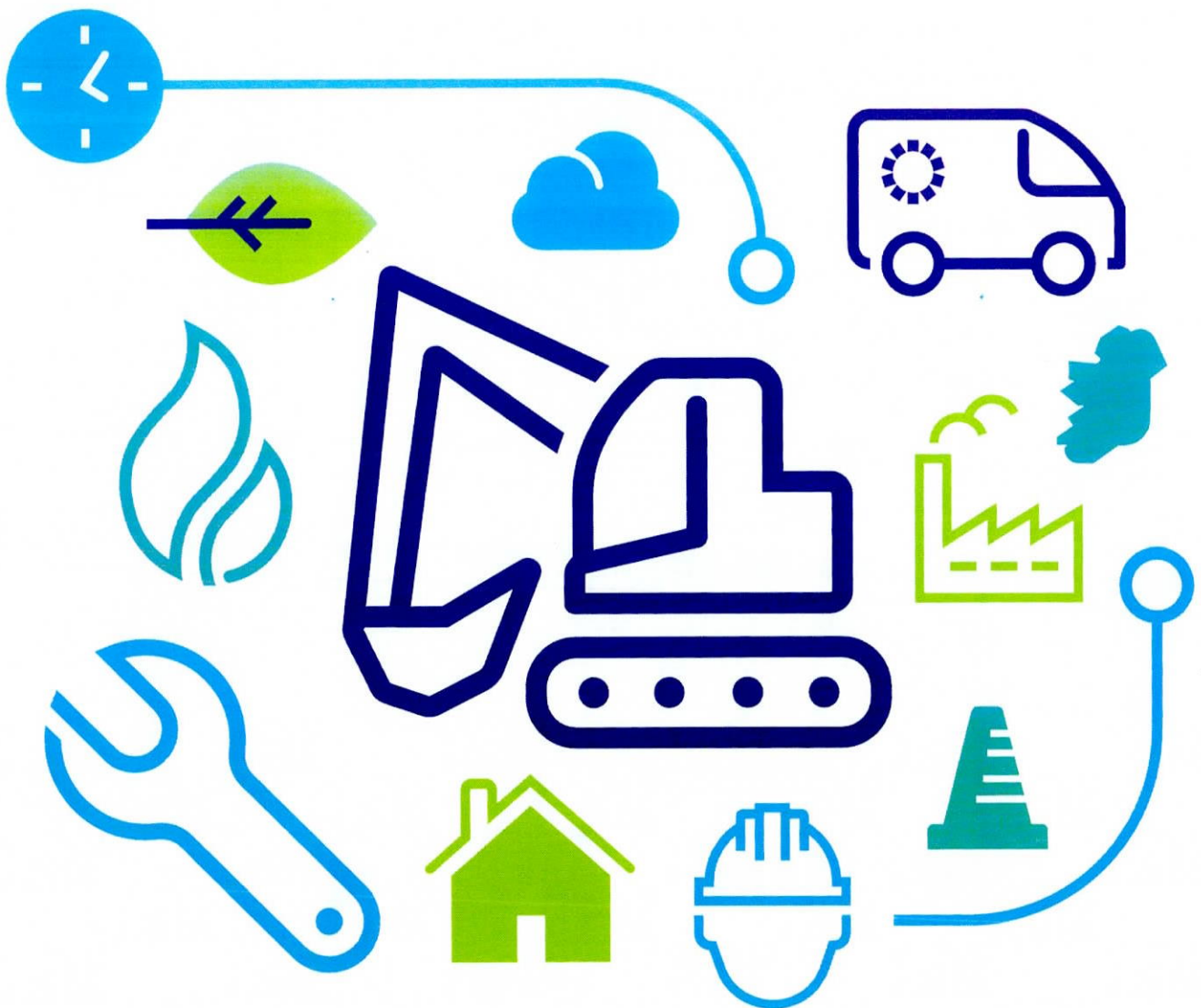



GAS NETWORK INFORMATION

Description: Swords Rd CPD - An Bord Pleanála	
Location: 717144,742384	
Plot Date: 12/07/2023 14:28	Scale: 1000 @ A3
Plotted By: 4969	Ref ID: 4969_12072023142859

Safety advice

for working in the vicinity
of natural gas pipelines



Important safety information



When planning any excavation works dial
1800 42 77 47

to obtain up to date gas network maps.

Monday to Friday 9am – 5.30pm

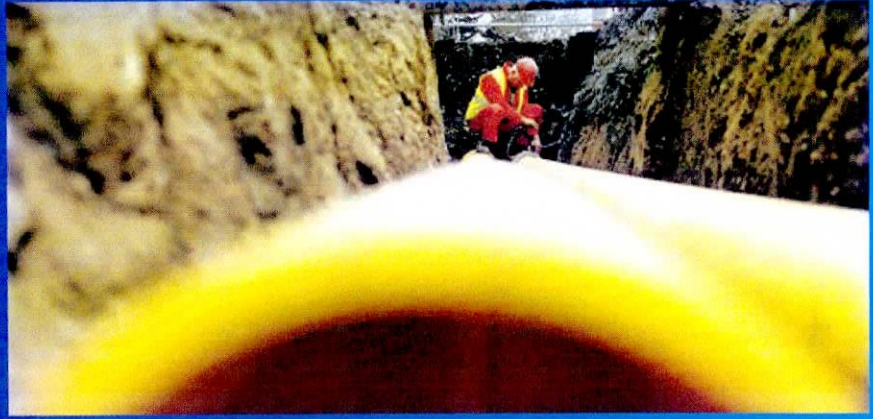
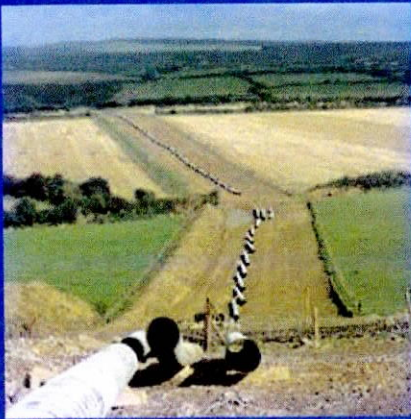
Or you can sign up to DBYD online at
gasnetworks.ie/dbyd
and have access to maps 24 hours, 7 days a week
You can also contact us on
dig@gasnetworks.ie

If you have damaged a gas pipe call
1800 20 50 50
immediately, even if you do not suspect that
gas is leaking

24 hours, 7 days a week

If you smell gas call
1800 20 50 50
24hr emergency service

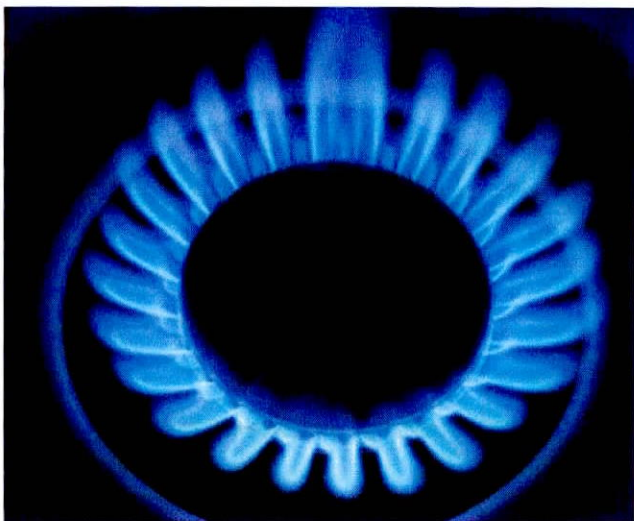
Contents



**This booklet contains important safety advice.
Please read the following before you start work:**

Natural gas characteristics and behaviour	4
Risks of damaging a gas pipe	5
Risks from a damaged gas pipe	6
Gas Networks Ireland transmission network.....	7
Gas Networks Ireland construction methods	11
Gas Networks Ireland construction – depth of cover....	12
Requesting Gas Networks Ireland maps.....	13
Reading Gas Networks Ireland maps	14
Gas services	16
Safe systems of work.....	17
What to do if a gas pipe is damaged	20
Gas Networks Ireland contacts	21
Other useful publications	22

Natural gas **characteristics and behaviour**



Characteristics

Natural gas is:

- a highly flammable gas;
- lighter than air and will rise when released;
- non-toxic (but can suffocate in enclosed or confined spaces); and
- made up mostly of methane and has a smell added for safety purposes.

Behaviour

During an uncontrolled escape, natural gas will behave in the following ways:

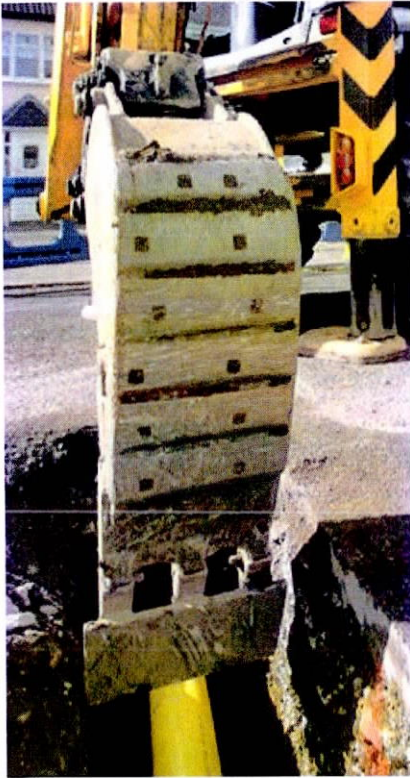
- In open excavations, where there is a clear path to the atmosphere, natural gas will rise, dilute and disperse into the air.
- If the path to the atmosphere is blocked, the gas will travel through soil, ducts, drains, sewers and voids. It can also follow the line of other buried utility services. This can lead to gas entering a building or other confined spaces, and may lead to a fire or explosion.

Note: Never cover a damaged gas pipe; or attempt to carry out a repair. Call 1800 20 50 50 immediately.

Risks of **damaging a gas pipe**

The risks of damaging a gas pipe can be classified as:

Highest Risk



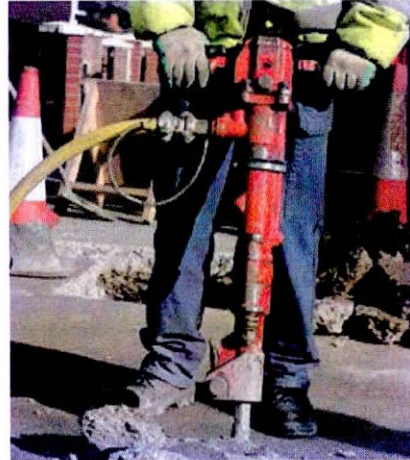
Mechanical excavators pose the highest risk and "should not be used within 500 mm of a gas distribution pipe."

(HSA Code of Practice)

Mechanical excavators must not be used within 3 metres of a Transmission pipeline.

(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

High Risk



Hand held power tools should not be used directly over the line of a gas pipe, unless the gas pipe has been positively located by hand and a safe working distance has been established.

Use of handheld power tools is not permitted within 1.5 m of a Transmission pipeline.
(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

Damage to gas pipes from power tools presents a high risk to the operatives involved in the work.

Low Risk



Hand digging using shovels and spades presents the lowest risk of damaging a gas pipe.

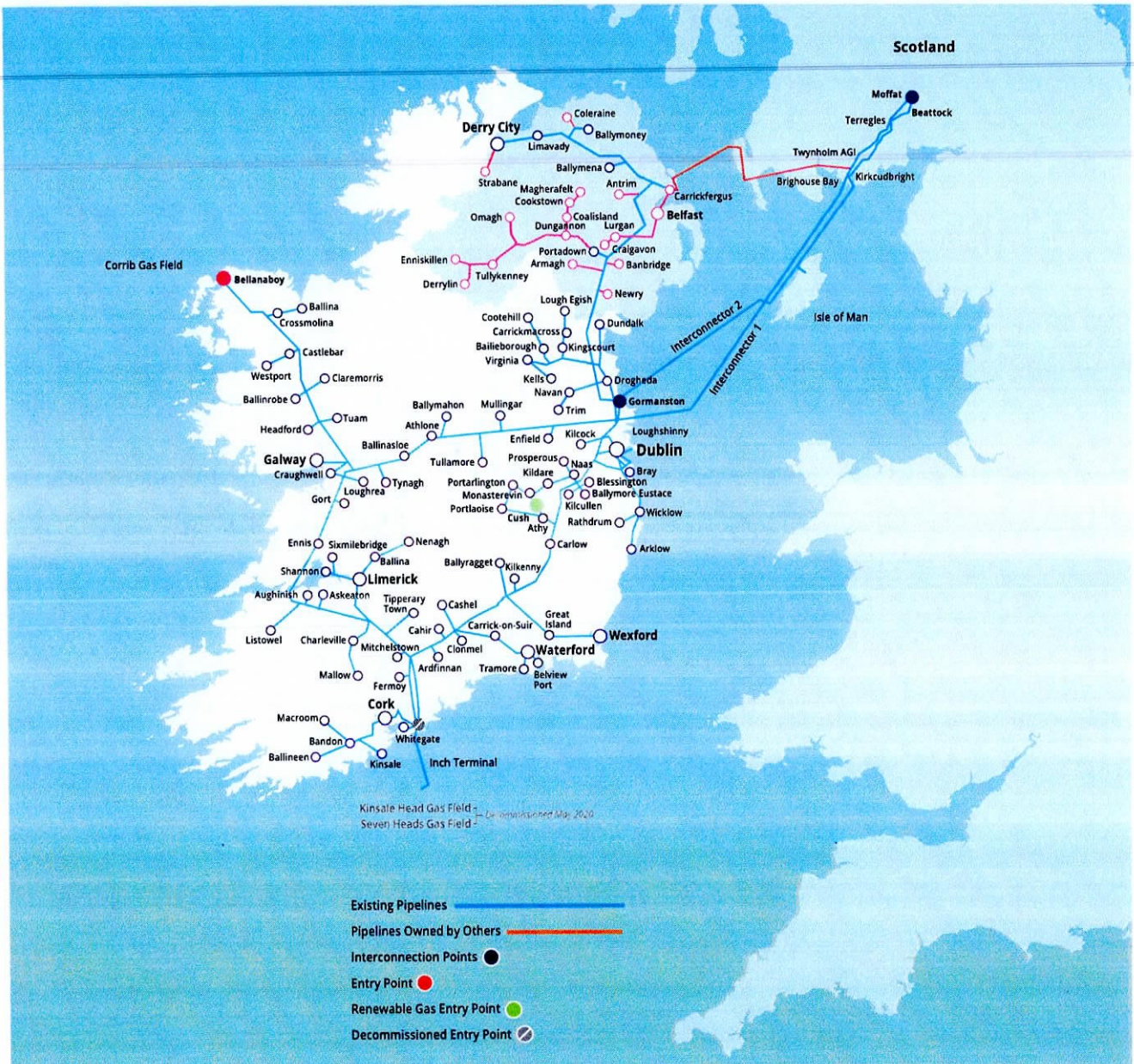
This is the method that should be used where the presence of gas pipes is suspected or close to a known gas pipe.

Risks from a **damaged gas pipe**



- Remember when gas escapes, or is released in an uncontrolled way; it can fuel a fire, give rise to an explosive atmosphere or cause asphyxiation.
- If you suspect there is a gas leak, immediately call Gas Networks Ireland's 24hr Emergency Service on **1800 20 50 50**.
- Gas can quickly fill underground cavities and travel into buildings through soil, or following the line of other buried utilities.
- Gas can only burn if exposed to an ignition source:
 - Do not turn electrical switches on or off
 - Do not operate any plant or equipment
 - Do not use naked flames, smoke or vape
 - Do not use mobile phones in the vicinity.
- Move people away from, and upwind of, the affected area.
- If gas has entered a confined space or building:
 - Open doors and windows
 - Turn off the gas supply at the meter
 - Do not expose to an ignition source.

Gas Networks Ireland **transmission network**



Gas Networks Ireland transports gas in Ireland through a network of steel and polyethylene (PE) pipes. The network operates at pressures between 20 mbar and 85 bar and is split between Transmission and Distribution pipelines.

The **Transmission** system is made up of steel pipes and operates from 7 bar to 85 bar.

The **Distribution** system is made up mostly of polyethylene pipes and operates from 20 mbar to 7 bar.

The **network**

The network is made up of three elements:

.....
Transmission pipes
.....

Distribution pipes
.....

Pressure Regulating Installations
.....



Transmission pipes

.....

These are high pressure pipelines that transfer gas across the country. They are constructed from steel, with a black, white, cream, yellow or concrete coating, and may have marker posts at intervals along their length, particularly at field boundaries and road crossings.

If a transmission pipeline is identified near intended excavations then work must not proceed until Gas Networks Ireland Transmission has been consulted on 1800 42 77 47.



The **network**

Distribution pipes

These are medium or low pressure pipelines within urban areas. They are mainly constructed from Polyethylene (PE) and are predominantly yellow in colour, but may have brown or black stripes. There are two types – Mains and Services.

Mains gas pipes usually run parallel to property in the footpath, grass verge or road and range in size from 63 mm to 400 mm diameter.

Service gas pipes are connected to mains and run to a meter position at the property, and range in size from 20 mm to 63 mm diameter.

Note: There is a limited use of steel pipes in areas like bridges or where only shallow depths can be achieved.

There are still a small number of ductile and cast iron gas mains in use, ranging in size from 3 inch (75 mm) to 24 inch (600 mm) in diameter (these mains are similar in appearance to metal water mains). Steel and PE gas services are run from these metal mains to the meter location at each building.

These ductile and cast iron mains and services have been largely replaced with PE pipes. In urban areas a large number of redundant ductile or cast iron pipes are utilised as carrier pipes for new PE pipelines.

Some Distribution pipelines have been classified as strategic mains due to their pressure, diameter and/ or location and the elevated consequences if they are damaged.

If a Distribution strategic main is identified near an intended excavation then work must not proceed until Gas Networks Ireland has been consulted on 1800 42 77 47.



The **network**



District Regulating Installation (DRI)

Pressure Regulating Installations

There are two types: Above Ground and Under Ground

Above Ground Installations (AGI) / District Regulating Installations (DRI)

An AGI/DRI is a fenced area containing a visible arrangement of pipework and ancillary equipment and will be clearly marked with Gas Networks Ireland signage. Some DRI's can be housed in a steel unit with no fencing surround.

Under Ground Installations (UGI /DRIug)

Gas Networks Ireland also have underground pressure regulating installations which have metal or concrete cover plates. There will be no visible arrangement of pipework etc, as this will be contained within the chamber.

If an AGI/DRI or UGI/DRIug is identified near intended works, then work must not proceed until Gas Networks Ireland has been consulted on 1800 42 77 47.



Gas Networks Ireland **construction methods**

Gas Networks Ireland use three main construction methods:

'Dig' Technique



Open Cut – installing pipe using standard trenching techniques. Pipe is laid with a sand or pea gravel surround and gas marker tape is laid above the sand.

'No-Dig' Techniques



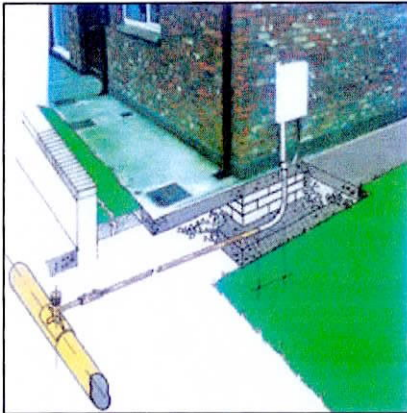
Insertion – utilising existing metal gas mains / services as a carrier for new PE pipes. Inserted PE may be a close or loose fit. The carrier pipe is broken out at connection points, i.e. at pipe joints or where a gas service pipe is connected.



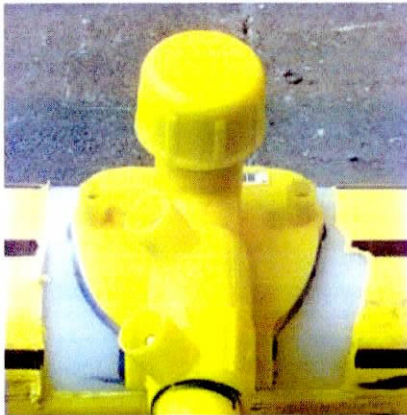
Moling/Directional Drilling – installing mains/ services where a 'moling' machine drills from one location to another pulling the pipe behind it using "no-dig" technology.

Note: Where pipe has been installed using "no-dig" techniques, the gas pipe will not have sand surround or marker tape.

Gas Networks Ireland construction – **depth of cover**



Typical service arrangement



Service Connection



Purge Point

New Mains – Normally 750 mm in roads and 600 mm in footpaths. (1.1 m in open fields)

New Services – 450 mm rising to 375 mm within 1.5 m of the building line. In some cases these depths are not achievable.

Note:

Older mains and services may have reduced cover.

Services and other connections are taken from the top of the main and will therefore have a reduced depth of cover.

Alteration since original installation – roads, footpaths and grass verges may have been altered since the gas main or service was laid and reduced the depth of cover.

Purge Points and Test Caps – Mains are laid with “purge points” and/or test caps at the ends. These may also rise above the top of the main.

Gas Valve Covers – Gas valves are a key safety component part of the gas network.

Some gas mains and services have valves installed below ground with valve covers marked “GAS”.

Do not cover over or remove gas valve covers.

The risk of a gas valve cover being removed or covered over is particularly high during resurfacing or reinstatement works.

Even shallow excavation techniques such as road planing can damage gas pipelines with reduced cover.

Requesting **Gas Networks Ireland maps**

Gas Networks Ireland operates a **Dial Before You Dig** service to enable those involved in excavations to obtain natural gas network maps prior to starting work.

This service operates from 9am to 5.30pm, Monday to Friday.

Or you can sign up to DBYD online at **gasnetworks.ie/dbyd** and have access to maps 24 hours, 7 days a week.

You can also email your enquiry to: **dig@gasnetworks.ie**

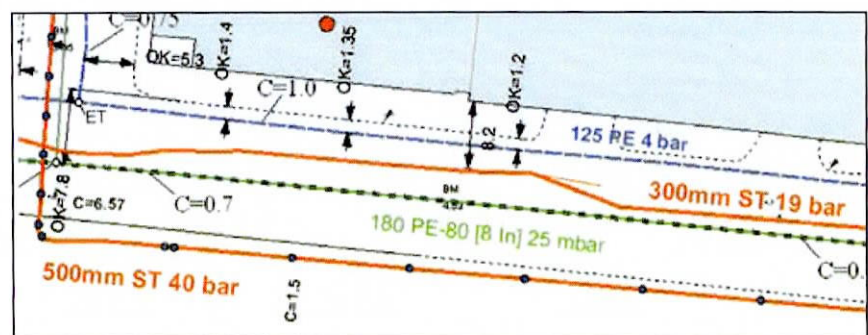


Maps will be sent out by post or by email where appropriate. When you contact Gas Networks Ireland to request a map, ensure you give the precise location of the intended works. You may be required to give some information regarding the nature of the planned work, i.e. start date, any high risk activity, etc.

Ensure you have allowed enough time for the maps to be obtained and to organise for the pipe location to be marked out if transmission pipelines are involved.

Note: Typical turnaround for maps is five working days when contact is made through phone or email, however using the online system will allow you instant access to up-to-date maps.

Organisers or planners of any work should ensure that the map is made available to personnel on-site.



Excerpt from a Gas Networks Ireland map.

Reading **Gas Networks Ireland maps**

Note: Natural Gas Network maps will only show mains and not services.

See page 16 for more information on service pipe locations.



The colour coding is as follows:

Red = Transmission Main*
= 7 to 85 bar.

Blue = Distribution Medium Pressure
= 100 mbar to 7 bar.

Blue Buffer = Distribution strategic main*
= 100 mbar to 7 bar.

Green = Distribution Low Pressure
= up to 100 mbar.



Typical AGI

Pressure regulating installations are marked as:

DRI – District Regulating Installation (Above Ground).

DRIug - District Regulating Installation (Under Ground).

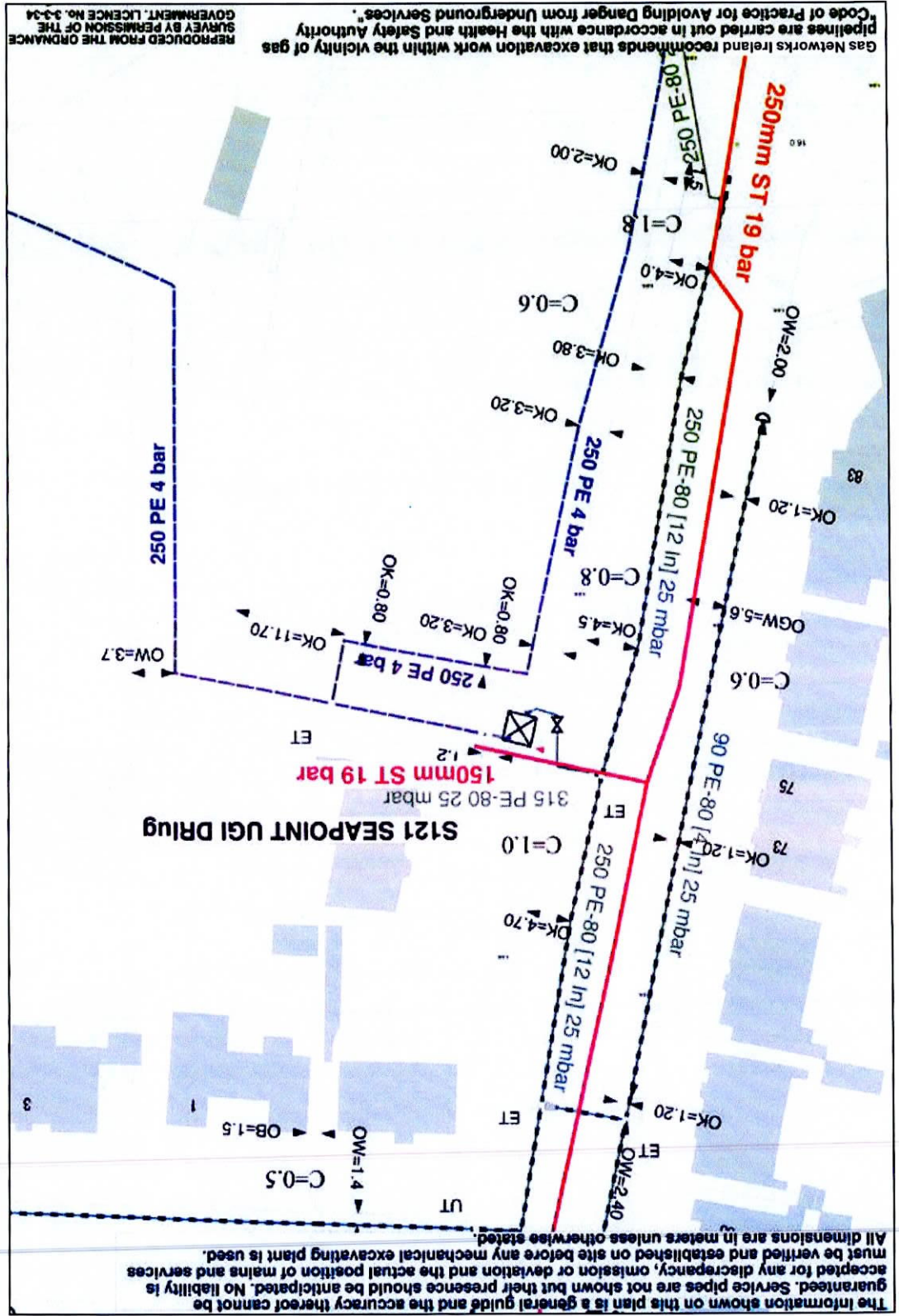
UGI – Under Ground Installation.

AGI – Above Ground Installation.

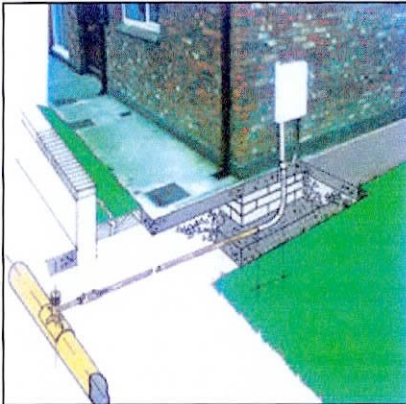
* If you obtain a natural gas network map that shows a **red** Transmission main in the area of the proposed works or a distribution strategic main with a blue buffer, a consultation with Gas Networks Ireland **must** take place **before** starting works. Gas Networks Ireland will advise you on the safety measures required and will arrange for the location of the pipe to be marked out on site.

Reading Gas Networks Ireland maps

Example of a Gas Networks Ireland map



Gas services



Typical service arrangement



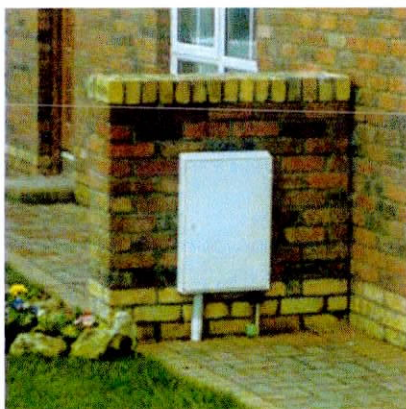
Service riser cover

Natural gas services are not normally identified on network maps, but their presence should be assumed. Services will normally, but not always, run at right angles from the main to the meter point.

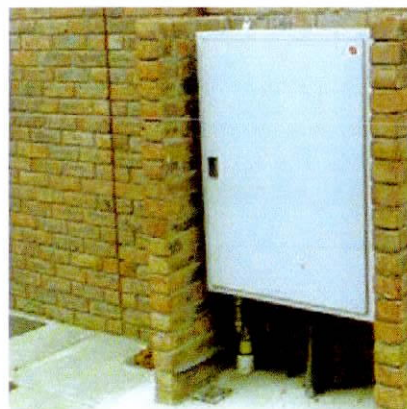
To assist in determining the approximate position of gas services ensure you:

- Obtain a natural gas network map to identify the position of the gas main.
- Complete a site survey looking for gas meter boxes/cabinets, house entry points, service risers and gas valve covers.
- Older buildings may have no visible signs of a service, as the service may run directly into the building underground, with the meter fitted internally. In these cases a check should be made inside the building to identify the meter position.

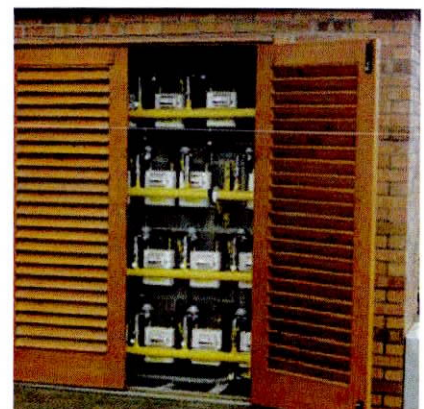
Note: Ensure you utilise safe digging practices to locate the exact position of gas services.



Domestic meter box



Six meter cabinet



Purpose built multi-meter house (apartment complex).

Safe systems of work

Safe systems of work, as recommended by the Health and Safety Authority (HSA) should be employed on all projects.

Guidance on this can be found in the:

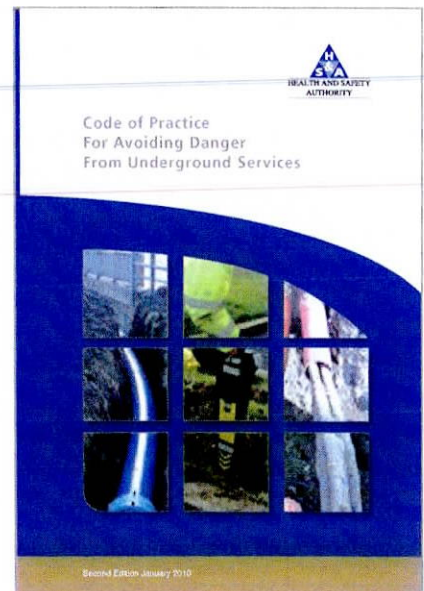
[HSA: Code of Practice for Avoiding Danger from Underground Services.](#)

Available from HSA website: www.hsa.ie

A safe system of work will include the following elements:

- Planning.
- Obtaining and using utility maps.
- Identifying pipes/services.
- Safe digging practices.
- Explosives must not be used within 30 m of any gas pipe (400 m for Transmission Pipelines), without prior consultation with Gas Networks Ireland.
- Piling, directional drilling or boring must not take place within 15 m of a gas pipe unless Gas Networks Ireland has been consulted.
- Extra care should be exercised when performing 'hot work' (such as welding) where a gaseous atmosphere could exist. If this potential exists Gas Networks Ireland must be consulted.
- Extra care should also be taken when using welding equipment, burners, torches or other heat generating equipment near pipelines (even if there is no potential for a gaseous atmosphere to exist) to ensure that the heat or sparks generated do not lead to the melting of polyethylene pipes or damage to pipeline coatings.

Contact Gas Networks Ireland for general enquiries on: 1800 464 464.



Safe systems of work

Planning

- Early contact should be made with Gas Networks Ireland to obtain a Natural Gas Network map.
Dial Before You Dig 1800 42 77 47
or visit **gasnetworks.ie/dbyd**
- Work involving piling, demolition, directional drilling, use of explosives or 'hot works' should be mentioned, as this may necessitate a site visit from Gas Networks Ireland personnel.
- Ensure you have allowed enough time to obtain the maps.

Maps

- Gas Networks Ireland will issue maps as outlined in this booklet. It is imperative that these maps are available for the operatives on-site for the duration of any works. The responsible person should ensure that operatives on-site understand the maps.

Identifying Pipes

- Steel, cast iron and ductile iron gas pipes can usually be traced using a conventional pipe/cable locating device set to "R" (Radio) mode.
- Polyethylene mains and services cannot be traced using conventional devices, so it is essential that maps are used and site surveys for meter boxes, valve covers, service risers, reinstatement scarring and other signs are completed.
- During the progress of works ensure no gas valve covers or markers are covered over.
- The position of gas mains and services should be marked out as they are located.

Note: Transmission pipelines pipelines and Distribution strategic mains must be marked out by a Gas Networks Ireland inspector.

Safe systems of work

Safe Digging Practices:

- As per the HSA Code of Practice, gas mains and services should be located by digging trial holes by hand. Mechanical excavators should not be used within 500 mm of any gas main.

Mechanical excavators MUST NOT be used within 3 m of a Transmission pipeline.

(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

- Never use hand held power tools directly over gas pipes unless precautions to prevent damage have been made and the pipe has been positively located.

Use of handheld power tools is not permitted within 1.5 m of a Transmission pipeline.

(Refer to Code of Practice for Working in the Vicinity of the Transmission Network - AO/PR/127)

- Do not leave a polyethylene gas pipe exposed.
- Provide adequate support for any gas pipe uncovered during the work.
- Report any damage, no matter how minor it may appear, to **1800 20 50 50**.
- If you have any concerns regarding safety around gas pipes contact Gas Networks Ireland for advice on **1800 464 464**.



What to do if a gas pipeline is damaged

(or if you smell gas in the area)

- Do not turn any electrical switches on or off, e.g. ignition switches.
- Do not operate any plant or equipment.
- Move people away from, and upwind of, the affected area.
Restrict employee and public access to the affected area.
- Prevent smoking, vaping, the use of naked flames, the use of mobile phones and other ignition sources in the vicinity of the leak.
- Report the leak/damage immediately to:
Gas Networks Ireland 24hr Emergency Service on 1800 20 50 50.
- Provide accurate information on your location and the nature of the incident.
- Do not attempt to repair the damage.
- Do not cover up a damaged main or service, this may lead to the gas travelling through soil, ducts, sewers, chambers or voids and potentially building up inside a premises or confined space.
- Do not turn off any gas valves in the road or footpath (you may be causing further problems by doing so).
- Assist Gas Networks Ireland emergency personnel as required.
- Remember any damage to gas pipes, even if the pipe does not appear to be leaking, must be reported to Gas Networks Ireland.

If you smell gas call

1800 20 50 50
24hr emergency service

Gas Networks Ireland contacts

The main contact numbers for Gas Networks Ireland are

24hr Emergency Service
1800 20 50 50

24 hours, 7 days a week

Dial Before You Dig
1800 42 77 47

Monday to Friday 9am – 5.30pm

or sign up to DBYD online
gasnetworks.ie/dbyd

General Enquiries
1800 464 464

Monday to Friday 8am – 8pm

Saturday 9am – 5.30pm

gasnetworks.ie

For “Dial Before You Dig” posters or stickers for your workplace call: **1800 464 464**



Other useful publications

HSA: Code of Practice for Avoiding Danger
from Underground Services

HSA: Guide to Safety in Excavations

both are available free of charge from:
Health and Safety Authority on **01 614 7000**
www.hsa.ie

ESB Networks: How you can avoid hitting electrical
cables when digging and drilling

available free of charge from:
ESB Networks on **1800 372 757**
esb.ie/esbnetworks



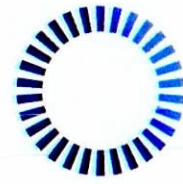
The main contact details for
Gas Networks Ireland are:

General Enquiries
1800 464 464

.....
Dial Before You Dig
1800 42 77 47

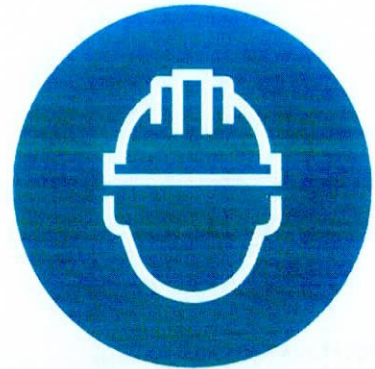
.....
24hr Emergency Service
1800 20 50 50

.....
networksinfo@gasnetworks.ie
.....
gasnetworks.ie



Code of Practice for **Working in the Vicinity of the Transmission Network**

Procedure No: AO/PR/127 Rev 3 Date: May 2021



Contents

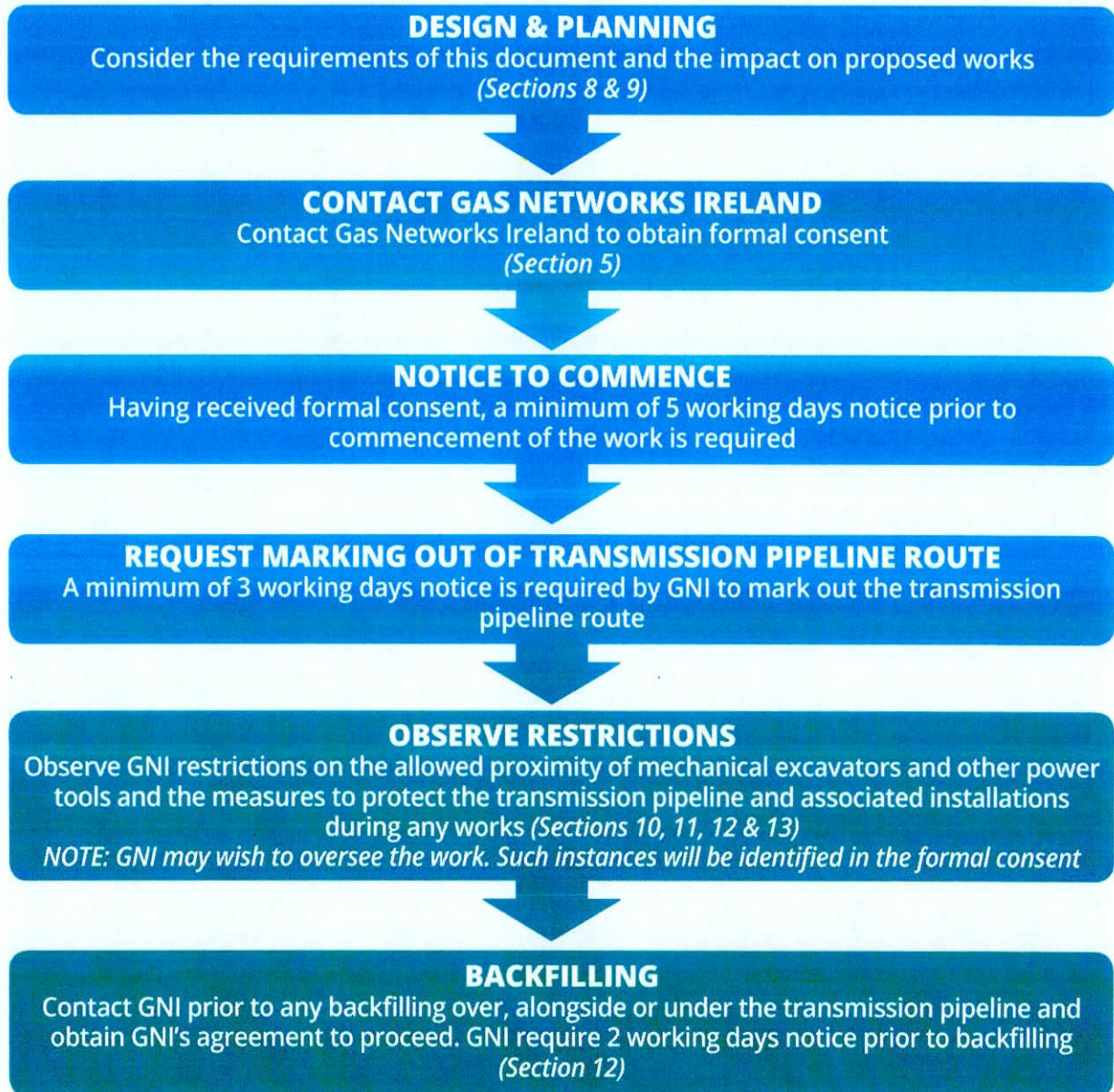
1	Safety Procedure in the Case of Damage to the Transmission Network	6
2	Definitions	7
3	Scope	8
4	Purpose	8
5	Formal Consent	9
6	Indemnity	9
7	Role of GNI Inspector	10
8	Design Consideration for Proposed Works	11
8.1	Services Crossing Transmission Pipelines and Distribution Strategic Mains	11
8.2	Services Parallel to Transmission Pipelines and Distribution Strategic Mains	11
8.3	Cathodic Protection	11
8.4	Installation of Electrical Equipment	12
8.5	Slabbing and other Protective Measures	12
8.6	Changes to Depth of Cover	12
9	General Consideration for Proposed Works	13
9.1	GNI Protective Measures	13
9.2	Gaseous Atmospheres	13
9.3	Inductions	13
9.4	Method Statements	13
9.5	Identification of Transmission Pipeline and Distribution Strategic Mains Routes	13
9.6	Handheld Power Assisted Tools	13
9.7	Hot Work	14
9.8	Induced Voltage	14
9.9	Construction Traffic	14
9.10	Lifting	14
9.11	Storing Materials	15
9.12	Fires	15

10	Preliminary Works	15
10.1	Demarcation	15
10.2	Surface Stripping	15
<hr/>		
11	Excavations	16
11.1	Plant/Equipment Limitations	16
11.2	Exposed Pipeline Protection	17
11.3	Pipeline Support	17
<hr/>		
12	Backfilling	18
<hr/>		
13	Above Ground Installations	18
13.1	PPE Requirements	18
13.2	Above Ground Pipework With Ancillary Connections	18
13.3	Above Ground Pipework Without Ancillary Connections	19
13.4	Vehicles, Plant and Machinery	19
13.5	General	19
<hr/>		
14	Specific Activities	20
14.1	Trenchless Techniques	20
14.2	Piling	20
14.3	Surface Mineral Extraction	21
14.4	Land Filling	21
14.5	Demolition	21
14.6	Blasting	22
14.7	Pressure Testing	22
14.8	Seismic Surveys	22
14.9	Wind Farm Development	22
14.10	Solar Farm and Battery Storage Facilities	22
<hr/>		
15	Referenced External Documents	23
<hr/>		
16	Referenced Gas Networks Ireland Documents	23
<hr/>		
17	Safety Information	23

When carrying out work in the vicinity of the transmission network follow the following process

IMPORTANT:

Flowchart should be used in conjunction with this Code of Practice and not in isolation. If at any time during the works the transmission network is damaged, even slightly, then observe the precautions in Section 1 of this document.



SPECIFIC ACTIVITIES
If work involves any of the following activities:
Trenchless Techniques, Piling,
Surface Mineral Extraction, Land Filling, Demolition,
Blasting, Pressure Testing, Seismic Surveys, Wind Farms
Comply with the requirements in Section 14

If in doubt contact Gas Networks Ireland



Foreword

Compliance with this Code of Practice does NOT confer immunity from prosecution for breach of statutory or other legal obligations.

This code of practice does **not** cover emergency work or normal agricultural work (as defined below), but it is recommended that in such cases the requirements of the code should be observed as far as possible.

Any damage to a transmission pipeline or its coating can affect its integrity and can result in failure of the transmission pipeline with potentially serious hazardous consequences for individuals located in the vicinity of the transmission pipeline. It is therefore essential that the procedures outlined in this document are complied with when working near the transmission network.

Failure to apply for consent and/or to comply fully with this Code of Practice to the satisfaction of GNI may result in the commencement of legal proceedings by Gas Networks Ireland to stop such works.

Activities associated with working in the vicinity of the transmission network may impact on the safety of the general public, site workers, GNI staff and contractors, and may affect the local environment. All Third Parties working close to the transmission network shall carry out suitable and adequate risk assessments prior to the commencement of work to ensure that all such issues are properly considered and risks mitigated.

Contractors and other users external to GNI should direct their requests for further copies of GNI engineering documents to Gas Networks Ireland.

1 Safety Procedure in the Case of Damage to the Transmission Network

If the GNI transmission network is damaged or leaking, the following precautionary measures shall be taken immediately:

- In the event of gas leakage do **not** switch any machinery on or off in the vicinity of the leak.
- Advise GNI or its representative if there are any safety features on the machine such as engine idling automatic shutoff facilities.
- Prohibit smoking, the use of naked flames, the use of electrical switches, the use of mobile phones and the use of all other ignition sources in the vicinity of the leak/damage.
- Evacuate all personnel away from and upwind of the affected area.
- Ensure that no one approaches the affected area without the consent of Gas Networks Ireland.
- Once clear of the area, report all damage or leakage, however minor it may appear, to the Gas Networks Ireland **24hr Emergency Service on 1800 205050**
- Do **not** attempt to repair the damage or stop the leak.

Note: Any damage to the coating of a GNI transmission pipeline, no matter how apparently insignificant, shall be brought to the attention of GNI in order to carry out repairs. Minor damage to pipe coating and/or ancillary connections brought to the attention of GNI will be repaired *free of charge*.

If you smell gas call
1800 20 50 50
24hr emergency service

2 Definitions

For the purpose of this Code of Practice the following definitions shall apply:

GNI: Gas Networks Ireland.

GNI Inspector: The person appointed from time to time by GNI, to act as the GNI Representative on site, to ensure compliance with this Code of Practice.

Third Party: The promoter of New Works, the person or persons, firm, company or authority for whom new services or other works are being provided, including their servants, agents and contractors.

Wayleave: A strip of land, upon and over which GNI has, under the terms of Gas Act (1976 as amended), acquired the rights to lay, construct, inspect, maintain, protect, use, replace, remove or render unusable a main or pipe for the transmission or storage of gas or other materials connected with the exercise and performance of the functions of GNI and all necessary apparatus ancillary thereto. The wayleave can extend up to 9 metres either side of the transmission pipeline.

A GNI wayleave is a legal burden on the title of the property within which it exists and is noted as such on the relevant Land Registry Folio.

Normal Agricultural Works: For the purpose of this Code of Practice, 'Normal Agriculture Works' are such works which do **not** involve the use of

- a) Excavators (tracked or wheeled) irrespective of the proposed excavation depth, or
- b) Other mechanical soil penetrating machines such as fence post augers.

Installation: GNI transmission installations are primarily above ground (AGI) with a number below ground (UGI) comprising some or all of the following: Main stream pipework, control pipework, telemetry, instrumentation, boiler houses, analyser kiosks, generators and services.

Hot Works: Hot works is any tool, equipment and/or activity, which produces sparks, fire or has the potential to cause fires or explosions including, but not limited to, electric/battery powered tools, welding, cutting, brazing, soldering, grinding, etc.

Distribution Strategic Mains: Due to an increased gas safety risk the following Dx mains shall be designated as strategic:

- Single feeder mains to with in excess of 5000 customers
- PE400 mains.

3 Scope

This Code of Practice sets out the requirements and considerations for the design, construction and maintenance of services and/or structures and other works in the vicinity of existing Gas Networks Ireland (GNI) Gas transmission pipelines and associated Installations located in both Wayleaves and public roadways.

4 Purpose

The purpose of this Code of Practice is to:

- Set out considerations for the design, planning and execution of works.
- Advise on the GNI procedures associated with works.
- Identify the measures to be taken to ensure the integrity of the gas network, and
- Assist in ensuring the safety of persons involved in the works.

5 Formal Consent

Work shall not be undertaken within a wayleave, installation, or within 3 meters either side of a transmission pipeline or distribution strategic mains in a public roadway without the prior Formal Consent of Gas Networks Ireland.

- GNI shall be consulted if work is to be undertaken within 10 meters either side of a transmission pipeline or distribution strategic mains in a public roadway.
- Formal Consent may be issued by GNI following receipt of the following items.
- Written agreement to implement the terms and conditions of this Code of Practice and any site specific requirements as advised by GNI.
- A method statement detailing the work which will be undertaken and the means of ensuring the integrity of the gas network.
- An indemnity as outlined in Section 5.
- Evidence of insurance cover to the level required by GNI.
- Formal Consent may, in its simplest form, consist of a valid GNI Permit or a more comprehensive list of conditions.
- Where Formal Consent has been issued, the Third Party shall notify GNI, 5 working days in advance of commencing the works.

6 Indemnity

It is an essential part of the granting of Formal Consent in the terms of this document that the Third Party shall indemnify GNI, its servants, agents and contractors against all loss, damage, expense, claims and actions incurred by or brought against GNI, its servants, agents and contractors in consequence of the provision of the new service and any works and activities associated therewith, or ancillary thereto.

7 Role of GNI Inspector

The primary role of the GNI inspector is to ensure the integrity of the gas network.

The GNI Inspector has the right to stop any work where in his/her opinion, the actions of the Third Party may adversely affect the integrity of the gas network.

The GNI Inspector shall inform the person in charge on site of his/her reason for stopping work and afford them the opportunity to address the issue to the satisfaction of the GNI Inspector.

A 'Corrective Action' shall be issued and recorded against the Third Party if the reason for stopping work is for non-conformance to any, some or all of the following:

- This Document,
- Conditions of the Formal Consent,
- Conditions of GNI Permits.

The GNI Inspector reserves the right to inspect any plant or equipment and/or any or all documentation/certification associated with plant, equipment and/or personnel associated with the work and not permit the use of any such plant, equipment and/or personnel in the works if found to be non-compliant.

8 Design Consideration for Proposed Works

8.1 Services Crossing Transmission Pipelines and Distribution Strategic Mains

Where a new service is to cross over the transmission pipeline or distribution strategic mains a clearance distance of 0.6 meters between the crown of the pipeline and underside of the service shall be maintained. If this cannot be achieved the service shall cross under the transmission pipeline with a minimum clearance distance of 0.6 meters.

8.2 Services Parallel to Transmission Pipelines and Distribution Strategic Mains

Pipelines within a wayleave

No new service shall be laid parallel to the transmission pipeline within a wayleave.

Pipelines within a roadway

- Any new service running parallel to a transmission pipeline in a roadway may, in consultation with GNI, be laid with a minimum horizontal clearance of 1m (5m for High Tension Cables) to the side of the pipeline and may not be above or below a transmission pipeline within that distance.
- Under certain circumstances consideration may be given to the relaxation of the above conditions on a case by case basis following prior consultation with GNI Asset Integrity, where the methods and safeguards to be employed have been considered and specified under a Safe System of Work Plan and where the work is supervised by GNI on site.

8.3 Cathodic Protection

Cathodic Protection is applied to GNI's transmission network and is a method of protecting pipelines from corrosion by maintaining an electrical potential difference between the pipeline and anodes placed at strategic points along the pipeline.

Where a new service is to be laid and is to be similarly protected, GNI will need to carry out interaction tests to determine whether its own system is adversely affected. The cost of any mutually agreed remedial action shall be borne by the Third Party.

Should any cathodic protection posts or associated apparatus need moving to facilitate construction operations, reasonable notice shall be given to GNI.

8 Design Consideration for Proposed Works *(continued)*

8.4 Installation of Electrical Equipment

Where electrical equipment is being installed close to the transmission network, the effects of a rise of earth potential under fault conditions shall be considered by the third party and a risk assessment shall be submitted to GNI for its approval as part of the Formal Consent process.

8.5 Slabbing and Other Protective Measures

Protective measures including the installation of concrete slab protection shall **not** be installed over or near to the transmission pipeline without the prior written consent of GNI.

Where consent has been given, a GNI Inspector must be present for the entire installation.

The material, composition, dimensions and method of installation of the proposed protective measure shall be agreed with GNI and shall form part of the submission for Formal Consent.

8.6 Changes to Depth of Cover

Any works, which will result in an increase or decrease in the cover of an existing Transmission Pipeline or distribution strategic mains on completion of those works, shall be agreed with GNI in advance.

9 General Consideration for Proposed Works

9.1 GNI Protective Measures

Where protective measures are required by GNI, work shall **not** commence until such time as the GNI Inspector is satisfied that those measures meet the requirements of GNI.

9.2 Gaseous Atmospheres

Third Parties shall be mindful of potentially gaseous atmospheres and the generation of sparks, particularly indoors or when a change in wind conditions/direction occurs.

9.3 Inductions

Personnel involved in the works may be required to attend a GNI induction. Such a requirement shall, if required, be identified in the Formal Consent.

9.4 Method Statements

Method statements, where required, shall include risk assessments and be submitted to GNI for review no fewer than 10 working days in advance of commencing works associated with that method statement.

9.5 Identification of Transmission Pipeline and Strategic Mains Routes

Before any work is carried out in the vicinity of existing transmission pipelines or distribution strategic mains, GNI shall, with 3 working days notice, mark/peg out the transmission pipeline route.

The Third Party shall confirm the position of the pipeline before work commences.

A GNI Inspector shall be in attendance for the duration of the excavation of any trial holes necessary to confirm the position of the pipe.

9.6 Handheld Power Assisted Tools

Where the use of handheld power assisted tools is required in the vicinity of the live network, alternatives to electrically/battery powered tools should, in the first instance, be considered. These tools, as with others, by virtue of their makeup generate a spark when activated/run and as such are in themselves subject to 'Hot Work' permits and associated procedures.

9 General Consideration for Proposed Works *(continued)*

9.7 Hot Work

Hot works shall **not** take place within an installation, wayleave or within 3 metres either side of a transmission pipeline in a public roadway without the prior written consent of Gas Networks Ireland.

9.8 Induced Voltage

Where high voltage power lines run parallel to a transmission pipeline, there is potential to induce high voltages on the pipeline. To prevent injury, people working on exposed pipe in this area must have suitable protection against electric shock. GNI can provide advice in relation to suitable protection measures and a GNI Inspector must be present when any such work is being performed.

9.9 Construction Traffic

Construction traffic shall not be sited over or moved along or across a transmission pipeline without the prior written approval of GNI.

Construction traffic shall only cross a transmission pipeline at previously agreed and clearly marked crossing lanes.

All crossing lanes shall be fenced on both sides over a width to be specified by GNI. These fences shall be returned along the wayleave on both sides for a distance of 6m away from the crossing.

The crossing lane shall be protected by laying approved sleeper rafts or by protection made from other GNI approved materials, unless otherwise agreed in writing with GNI.

Construction traffic shall be operated at "dead slow" when using crossing lanes.

Suitable warning notices, drawing attention to the danger of not using the crossing, shall be erected and maintained in a clearly legible condition.

9.10 Lifting

Any plant and/or equipment involved in lifting shall be certified fit for purpose.

Slewing across an exposed pipe shall not be permitted. However, under certain circumstances consideration may be given to the relaxation of this rule on a case by case basis provided that the lifting methods and safeguards to be employed have been formally **risk assessed and the work is approved and**

9 General Considerations for Proposed Works *(continued)*

supervised by GNI or its representative on site. Reference can be made to the **GNI Lifting Procedure AO/PR/174.**

9.11 Storing Materials

Materials, including those excavated or stripped shall not be stored within a wayleave or Installation without the prior written approval of GNI.

Materials, including those excavated or stripped shall not be stored over a transmission pipeline.

9.12 Fires

Fires shall **not** be permitted within a wayleave or in the vicinity of an installation.

10 Preliminary Works

10.1 Demarcation

Where work is being carried out parallel to a transmission pipeline within or immediately adjoining a wayleave, a demarcation line shall be erected, to the satisfaction of GNI, so as to clearly delineate the boundary between the works site and the wayleave/pipeline.

10.2 Surface Stripping

Cultivated/Unmade Ground

- Where trial holes have established that sufficient depth of cover exists, light tracked vehicles may strip top soil to a depth of 0.25 metres using a toothless bucket.

Metalled Surfaces

- Bituminous or concrete surface layers may be stripped to a depth of 0.3 metres by mechanical means.
- Where the bituminous or concrete layer extends below 0.3m, only the use of handheld power assisted tools is permitted, and only in the presence of GNI.

11 Excavations

11.1 Plant/Equipment Limitations

The following limitations shall be observed when working in the vicinity of a transmission pipeline or distribution strategic mains.

- Hand dig within 1.5 meters of the pipeline.
- Handheld power assisted tools permitted beyond 1.5 meters of the pipeline.
- Mechanical excavators permitted beyond 3 meters of the pipeline.
- The use of 'chain trenchers' is not permitted within 3 meters of the pipeline.
- A mechanical excavator may **not** reach across a pipeline while working, i.e. cab at one side of pipeline with bucket (rock breaker, etc.) on opposite side of pipeline.
- A mechanical excavator shall **not** 'pull' towards the pipeline.

Under certain circumstances consideration may be given to the relaxation of the above conditions on a case by case basis provided that the excavation methods and safeguards to be employed have been considered and specified under a Safe System of Work Plan and the work is approved and supervised by GNI on site.

Factors that should be considered in this determination include, but are not limited to:

- Pipeline size, pressure, wall thickness and location.
- Excavator size (weight)
- Operator competency and experience
- Type and width of bucket/attachment
- Type and width of bucket/attachment (e.g. toothless)
- Ground conditions (e.g. rock, soft ground etc.)
- Weather conditions
- Visibility, particularly of the machine operator
- Machine orientation (e.g. working along the axis of the pipe)
- Supervision arrangements

Note: Mechanical excavators must never be permitted to work closer than 0.5 meters from the pipeline.

11 Excavations *(continued)*

11.2 Exposed Pipeline Protection

Once a pipeline has been exposed, it shall be immediately protected with timber or nylon batons at least 50mm wide and 25mm thick secured to each other with webbing at a distance of no greater than 10mm over the entire exposed area of the pipeline. The method of securing the webbing to batons should be such that any impact would not cause damage to the pipeline coating or other methods approved by GNI.

Where heavy gauge trench sheets are used in addition to batons to protect a pipeline, care should be taken while placing the trench sheets that buried stones, debris, etc. are not dislodged against the pipeline.

Depending on the type of work being carried out, ground conditions, etc., GNI may require additional measures.

11.3 Pipeline Support

Where it is necessary to excavate below a transmission pipeline, the pipeline shall, during stages of the operation, and for the duration of the works, be supported to the satisfaction of GNI, by means of ratchet straps secured to a steel beam (or GNI approved equivalent) across the pit/trench. On completion, permanent supports shall, if necessary, be constructed to avoid future settlement.

12 Backfilling

The Third Party shall give GNI at least 2 working days' notice of their intention to backfill below, above or adjacent to an existing transmission pipeline.

The Third Party shall afford GNI the opportunity and facility to inspect the coating on the pipeline and/or ancillary connections to the pipeline prior to backfilling.

A GNI Inspector shall be in attendance to monitor backfill around the pipeline during the whole of the backfilling operations.

Note: Any damage to the coating of a GNI transmission pipeline, no matter how apparently insignificant, shall be brought to the attention of GNI in order to carry out repairs. Minor damage to pipe coating and/or ancillary connections brought to the attention of GNI will be repaired *free of charge*.

13 Above Ground Installations

13.1 PPE Requirements

GNI's minimum PPE requirements for working in a live installation are hard hat, safety glasses, safety shoes/boots, gloves and Hi-Viz Jacket/vest. All clothing shall be anti-static and flame retardant. Contact GNI Safety Department for information on compliance of PPE.

13.2 Above Ground Pipework With Ancillary Connections

Where construction plant and machinery are used in an AGI, all above ground pipework with ancillary control pipework, telemetry and/or instrumentation adjacent to the work, shall be protected on all sides by timber/metal hoarding, secured in place, a minimum of 2 meters from any extremity and extending vertically to the uppermost point of any pipe/equipment. A suitable point of access shall be provided in the hoarding. Where this 2 meter separation distance cannot be physically achieved due to the layout and size of an installation, the works may be allowed to proceed but only where suitable precautions have been agreed and implemented to protect all relevant pipework and personnel.

13 Above Ground Installations *(continued)*

The risks and associated mitigating measures shall be identified on the relevant risk assessment and method statement for the proposed works. The relevant details supporting any relaxation of this code of practice shall be recorded on the relevant general works permit or excavation permit by the permit issuer.

Heras type fencing may be used where a distance of 6m from any extremity can be achieved.

13.3 Above Ground Pipework Without Ancillary Connections

Where construction plant and machinery are used in an AGI, all above ground pipework which does **not** have ancillary connections adjacent to the work, shall be protected on all sides by heras type fencing a minimum of 2 meters from any extremity. A suitable point of access shall be provided in the fencing. Where this 2 meter separation distance cannot be physically achieved due to the layout and size an installation, the works may be allowed to proceed but only where suitable precautions have been agreed and implemented to protect all relevant pipework and personnel. The risks and associated mitigating measures shall be identified on the relevant risk assessment and method statement for the proposed works. The relevant details supporting any relaxation of this code of practice shall be recorded on the relevant general works permit or excavation permit by the permit issuer.

13.4 Vehicles, Plant and Machinery

Only diesel powered vehicles are permitted within the confines of an AGI. Petrol, Electric or compressed natural gas CNG vehicles are not permitted.

All plant and machinery used within an AGI shall be diesel powered.

Petrol or electrically powered equipment may be used under hot works permit system if a diesel alternative is not available. Any hot works permit for petrol powered equipment are issued at the discretion of GNI and to be supervised by GNI or its representatives.

13.5 General

This code of practice shall apply to all work carried out within an AGI.

14 Specific Activities

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of the transmission network. Consult GNI if you are intending to undertake one of the listed prescribed activities and/or you require further advice on whether the work that you are intending to undertake has the potential to affect the transmission network.

The table below shows, for some specific activities, the prescribed distances within which GNI shall be consulted.

Activity	Distance within which GNI shall be consulted
Any Excavation Actions	10 m
Piling	15 m
Surface Mineral Extraction	100 m
Land filling	100 m
Demolition	150 m
Blasting	400 m
Wind Farm	2 times the turbine mast height from the nearest edge of a transmission pipeline
Trenchless Techniques	10 m
Pressure Testing	8 m

14.1 Trenchless Techniques

Trenchless techniques must **not** take place within 10m of the GNI Transmission Network without prior consultation with GNI.

14.2 Piling

Piling shall **not** be permitted within 15 metres of the transmission network without an assessment of the vibration levels at the pipeline. Contact GNI with regard to peak particle velocity criteria and other precautionary measures.

Where ground conditions are of submerged granular deposits of silt and sand, an assessment of the effect of vibration on settlement and liquefaction at the transmission pipeline shall be made.

14 Specific Activities *(continued)*

14.3 Surface Mineral Extraction

An assessment shall be carried out on the effect of surface mineral extraction activity within 100 meters of the transmission network.

Where the mineral extraction extends up to the transmission pipeline wayleave, a stable slope angle and stand-off distance between the transmission pipeline and slope crest shall be determined by GNI. The wayleave strip should be clearly marked by a suitable permanent boundary such as a post and wire fence, and where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the Third Party. The wayleave and slope needs to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including bulging, the development of tension cracks on the slope or wayleave, or any changes in drainage around the slope. The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100 meters of the transmission pipeline but do not extend up to the pipeline wayleave boundary, an assessment, by GNI may be made on whether the planned activity could promote instability in the vicinity of the pipeline. This may occur where the transmission pipeline is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives the provisions of section 14.6 apply.

14.4 Land Filling

The creation of slopes outside of the wayleave may promote instability within the vicinity of the transmission pipeline. An assessment should therefore be carried out on the effect of any land filling activity within 100 meters of a transmission pipeline. The assessment is particularly important if land filling operations are taking place on a slope in which the pipeline is routed.

14.5 Demolition

Demolition shall **not** be permitted within 150 meters of a transmission network without an assessment of the vibration levels at the pipeline. Contact GNI with regard to peak particle velocity criteria and other precautionary measures.

Where ground conditions are submerged granular deposits of silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the transmission pipeline shall be made.

14 Specific Activities *(continued)*

14.6 Blasting

Blasting shall **not** be permitted within 400 meters of a transmission network without consulting GNI and making an assessment of the vibration levels at the pipeline. Contact GNI on **1800 42 77 47** with regard to peak particle velocity criteria and other precautionary measures.

Where ground conditions are of submerged granular deposits of silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the transmission pipeline shall be made.

14.7 Pressure Testing

Hydraulic or pneumatic testing shall **not** be permitted within 8m of the transmission network unless precautions have been taken against the effects of a possible burst. These precautions may include the use of pre installation tested pipe, sleeving, barriers, etc., as agreed with GNI.

14.8 Seismic Surveys

GNI shall be advised of any seismic surveying work in the vicinity of a transmission pipeline. Contact GNI with regard to peak particle velocity criteria and other precautionary measures.

14.9 Wind Farm Development

GNI should be consulted if wind turbines are to be sited any closer than 2 times the proposed height of the turbine mast away from the nearest edge of a transmission pipeline or associated installation.

14.10 Solar Farm and Battery Storage Facilities

GNI shall be consulted if Solar Farm or Battery Storage Facilities are to be sited in the vicinity of a transmission pipeline or associated installation.

15 Referenced External Documents

IS328: Code of Practice for Gas Transmission Pipelines & Pipeline Installations.

HSA Code of Practice for Avoiding Danger from Underground Services

HSA Guide to Safety in Excavations

Both are available free of charge from:

Health and Safety Authority on **1890 289 389/ www.hsa.ie**

16 Referenced Gas Networks Ireland Documents

Categorizing & Processing of Dial Before You Dig Queries	AM/WI/072
Guide to Dealing with DBYD Online Queries	HSQE/GU/033
Dial Before You Dig Process (Map)	HSQE/BP/042
Safety Advice for Working in Vicinity of Natural Gas Pipelines	HSQE/GU/016
GNI Lifting Procedure	AO/PR/174

17 Safety Information

The online version of this code of practice is available at

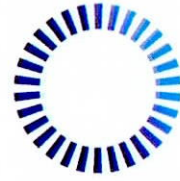
<https://www.gasnetworks.ie/home/safety/dial-before-you-dig/>

Before starting any excavation work, it is essential to check for the location of gas pipes by calling **1800 42 77 47** or emailing **dig@gasnetworks.ie**

In an Emergency dial **1800 20 50 50**



If you smell gas call
1800 20 50 50
24hr emergency service



**Gas
Networks
Ireland**

The main contact details for Gas
Networks Ireland are:

General Enquiries

1800 464 464

.....
Dial Before You Dig

1800 42 77 47

.....
24hr Emergency Service

1800 20 50 50

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networksinfo@gasnetworks.ie

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[@GasNetIRL](https://twitter.com/GasNetIRL)

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gasnetworks.ie