

**Firstgas<sup>®</sup>**

[firstgas.co.nz](http://firstgas.co.nz)

# Gas Pipeline Safety Guide



# At Firstgas we want to keep all contractors, customers and the public safe.

The safety of people is our number one priority at Firstgas. We rely on you as contractors who may be involved in upcoming works within the pipeline easement, to follow the correct safety and notification process. External interference is the leading cause of gas pipeline incidents, most commonly the use of excavation and directional drilling equipment.

Whenever you are working near gas pipelines there is a serious risk to life and property if these pipes are damaged. This booklet is a guide to safe working practices when working in the vicinity of the pipelines and provides information about the services we have to help you.

**If you have any questions regarding our gas/petroleum pipelines, please feel free to contact us on 0800 800 393.**

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## Key: Gas Network Icons



Transmission pipelines



Distribution pipelines

**Based in the energy  
rich region of Taranaki,  
Firstgas supplies gas  
to thousands of  
New Zealanders  
every day**

## **About us**

Firstgas owns and operates more than 2,500 kms of high-pressure gas/petroleum transmission pipelines, and 4,800kms of gas distribution networks across the North Island.

The high-pressure pipelines transport natural gas to over 300,000 homes and businesses everyday. We are proud of the contribution gas makes and the important role we play in peoples' lives every day, to ensure their energy needs are met now and into the future.





## Firstgas services to help you work safely

We provide a number of services to help people work safely around our transmission and distribution gas pipelines:



Reference maps which indicate the approximate location of our distribution pipelines.



Permits which are required by all parties who intend to work near a transmission pipeline.



FREE on-site location services for transmission pipelines. (Free for the first four hours)



Close Approach Consents which are required for all works within two metres of strategic gas distribution pipelines.



Pipeline safety awareness seminars on request.

## Your legal requirements



Worksafe NZ has minimum safe work practices for carrying out any work near gas/petroleum pipelines. It's Guide for Safety with Underground Services' states; "All underground services shall be physically identified, by way of pot holing using hand tools only, before any excavation can be carried out with machinery."

**There are also laws and regulations that specify safe working practices which must be followed:**

- Gas Act 1992 and amendments.
- Health and Safety at Work Act 2015.
- NZECP 34:2001 Electrical Safe Distances.
- Health and Safety in Employment (Pipeline) Regulations 1999.

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**Anyone who damages a gas pipeline as a result of unsafe work practices may be found in breach of the Act and liable to prosecution by Worksafe NZ.**

Firstgas may take legal action to recover both the cost of repairs and lost business from any party or parties responsible for damaging our pipelines.



## Transmission pipeline locations

The transmission system transports gas/petroleum under high pressure throughout the North Island.

Our transmission high pressure pipelines are located in registered easements located on private property and in the road reserve. Easement widths do vary but they are generally 12 metres wide for a single pipeline and increase by 4 metres for each additional pipeline.

Pipeline markers are located along the pipeline route. The signs are an indication only and a permit must be obtained before any excavations can commence.

### Look out for:

- Danger signs and painted posts on fences in rural areas.
- White triangular warning signs at major river and harbour crossings.
- Danger signs on kerbs, streetlights and power poles in urban areas.
- Marker tape may be in the trench line above the pipe.



## Planning your work



It takes time to arrange these services, so plan your work carefully and call us in advance. (Allowing two working days before you commence work).



## Contractor process for working near Firstgas assets



### Contact BeforeUDig

Call 0800 248 344 or visit [beforeudig.co.nz](https://beforeudig.co.nz)

Provide your work site information to receive your request.



### A Firstgas response provided

to determine if pipelines are present.



### Book in a FREE Location with Firstgas

before any work can be carried out.  
(First four hours free)



### Meet on site

to discuss the job and locate the pipeline.



### Undertake the approved works

(a permit will be given by Firstgas before any work can be carried out.)

# When do you need a Pipeline Easement Permit?

Pipeline Easement Permits are issued by Firstgas to authorise and control all works that could damage or endanger a transmission pipeline. The permit sets out the minimum safety conditions applicable to the proposed work which you must adhere to.

We will meet you at the site on an agreed day to locate and identify the pipeline. If works are approved by us we will then issue you with a permit.

**NEVER** commence work without a permit, or you could be liable for any damage to the pipeline and the surrounding easement.

You must obtain a permit for all works within a pipeline easement or in the road reserve near a transmission pipeline, this includes:



Operating heavy machinery



Tree felling & logging



Under-boring directional drilling



Removing or increasing soil cover



All excavation works



Laying or working on other services



Drain construction & cleaning



Planting & deep ripping



Construction of roads & tracks



Building construction & development



Placement of fence posts



Blasting



## Distribution pipelines



Distribution pipelines carry different pressure. When a distribution pipeline has pressure of more than 420 kPa we refer to these as a Strategic Pipelines. Strategic distribution pipelines present slightly higher risk than standard service or main distribution pipelines which means the process when working around these is different.

## Distribution Pipeline Depths

Our distribution pipes are laid at different depths in the ground, varying from 400mm to over 1200mm. The gas network is made up of mains and services which are made of either steel or polyethylene.

We cannot guarantee the depth of any pipe due to alterations made to the ground cover which can reduce or increase the depths, this means all underground services need to be physically identified by way of pot holing and using hand tools before any excavation can be carried out with machinery (diggers, post hole boring etc).

It is important not to rely on finding buried marker tape when you dig as there are now new methods of installing pipe, (direction drilling) this does not require an open trench so tape does not need to be installed.

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### Reference Plans

Reference plans are provided via email and are valid for 28 days from date of issue. After 28 days you must request new plans.

The accuracy of our plans cannot always be guaranteed. Road realignment, reconstruction, alterations to ground cover and property boundaries can all affect accuracy.

## Strategic Pipelines

### Close Approach Consents

A close approach consent is the process of locating a Strategic Pipeline. Plans will indicate if a strategic gas distribution pipeline is in your area of work. If this is the case you will need to contact 0800 359 427 to organise a Close Approach Consent before any work can commence. This is a FREE service.

**NOTE:** Close Approach Consents are only valid for the dates applied for and the location and type of works as agreed on the Consent. Firstgas may supervise your works to ensure pipeline safety.

### Disconnect before you remove or demolish a building.

For your own safety, you must have your gas service permanently disconnected from Firstgas' gas network in the street and have your meter removed before you demolish or remove a building.

Contact your gas retailer or Firstgas for gas disconnections. You should allow 10 working days' notice. Charges will apply.



# Working safely around distribution pipelines



Before you begin any excavation or directional drilling work:



## Step 1. Obtain and check reference maps

Request plans via [www.beforeudig.co.nz](http://www.beforeudig.co.nz) at least two working days before you begin work and we'll provide reference maps by email indicating underground pipeline locations.



## Step 2. Mark out the pipeline locations

Use the *reference maps* as a guide for locating and marking out all pipes within your worksite.



## Step 3. Hand dig or hydrovac to expose pipes

Why hand dig?  
Hand digging is less likely to cause serious damage to pipes. You must dig with caution for your own safety. Any damage to a pipe should be reported to Firstgas immediately.

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**Firstgas reminds you of your responsibilities under the Health and Safety at Work Act 2015, whereby you must establish the location of underground services before commencing excavation.**



## Report all damage to pipelines

In the event of any damage, no matter how minor it may appear, it is essential that you notify Firstgas immediately.

Any damage to the coating or denting of the pipe could seriously impact the integrity, or shorten the life of the pipeline. Never try to repair the pipeline yourself. Repairs must only be made under Firstgas supervision or by a Firstgas representative.

**You can help us keep the pipelines safe by reporting any pipeline exposure, damage or signs of defects that could put the pipelines at risk.**

## What to do in an emergency

**If you damage or rupture a gas pipeline there is a risk of:**

- Gas igniting and causing serious harm to life and property.
- Gas accumulating in adjacent buildings and structures, which could cause an explosion.
- Major traffic delays and evacuation of buildings.

**If you hit a gas or petroleum pipeline, smell or hear gas escaping:**

- Switch off all machinery and remove all sources of ignition, including mobile phones.
- Move yourself and others to a safe area (at least 100 metres upwind of a transmission pipe)
- Report the emergency by calling us on one of the emergency numbers below.
- Call the fire service on 111 if you have any safety concerns.
- Leave the damaged pipe to vent.
- DO NOT start any vehicles for removal.
- DO NOT attempt to extinguish ignited gas.
- DO NOT try to cover the damaged pipe with any material, including digger buckets.
- Report any damage to gas pipes, even if the pipe is not leaking.
- One of our emergency response teams will be sent to the site immediately. Our trained personnel will make the area safe, isolate the gas supply if required and repair the damaged section of pipe.

## EMERGENCY CONTACT NUMBERS

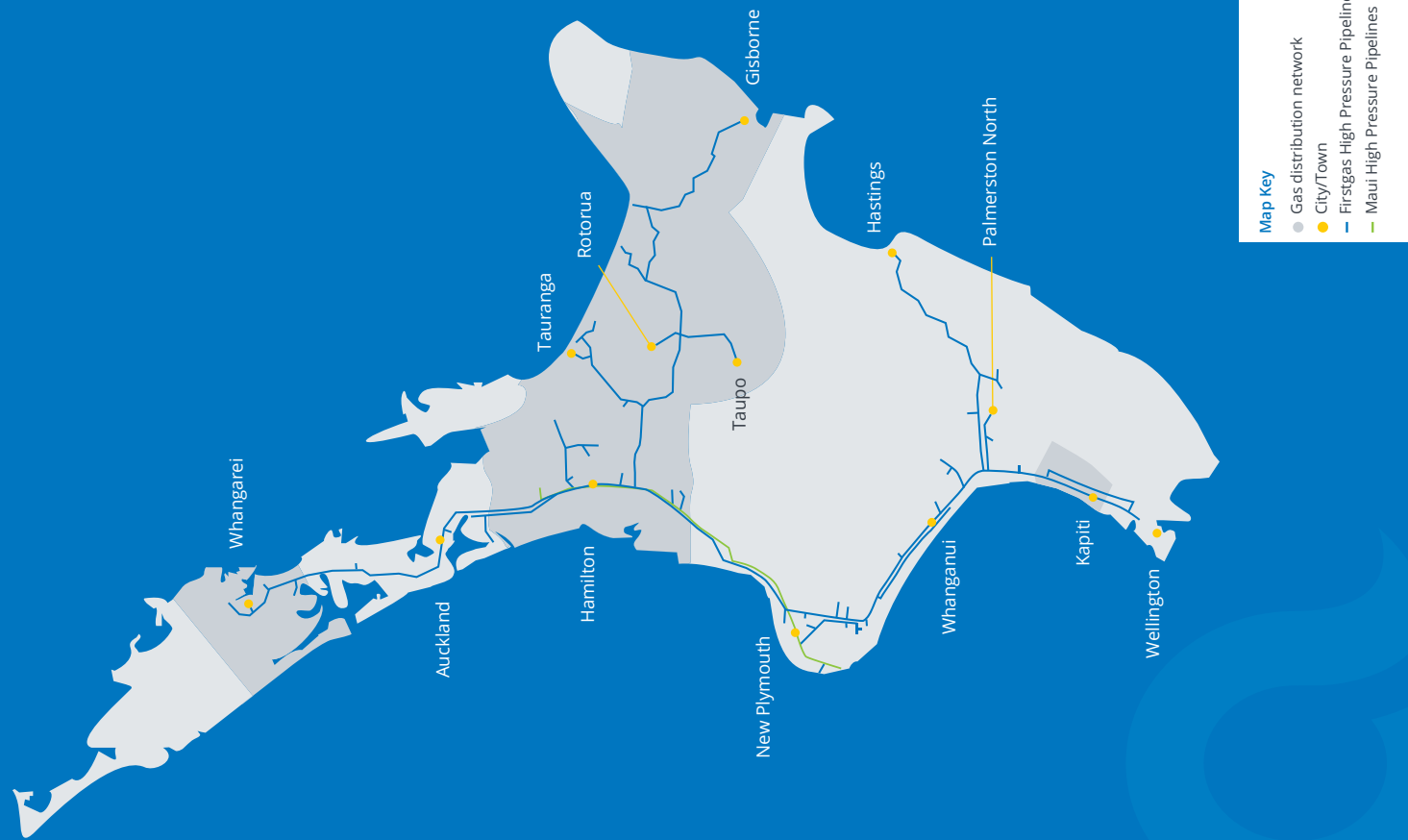


**Transmission pipelines:**  
0800 734 567



**Distribution pipelines:**  
0800 802 332

# Pipeline map





## Disclaimer

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- Accept any responsibility to inform the recipient of any matter arising or coming to their notice that may affect any matter referred to in this document.





# Contact us



## **Transmission pipelines:**

For work planning, permits,  
on-site supervision and general enquiries:  
0800 800 393 or [locations@firstgas.co.nz](mailto:locations@firstgas.co.nz)

**Emergencies**

0800 734 567



## **Distribution pipelines:**

**Reference maps and Close Approach Consents**  
0800 248 344 or visit [www.beforeudig.co.nz](http://www.beforeudig.co.nz)

**General enquiries and safety advice**

0800 NEW GAS (0800 639 427)

**Emergencies**

0800 802 332

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