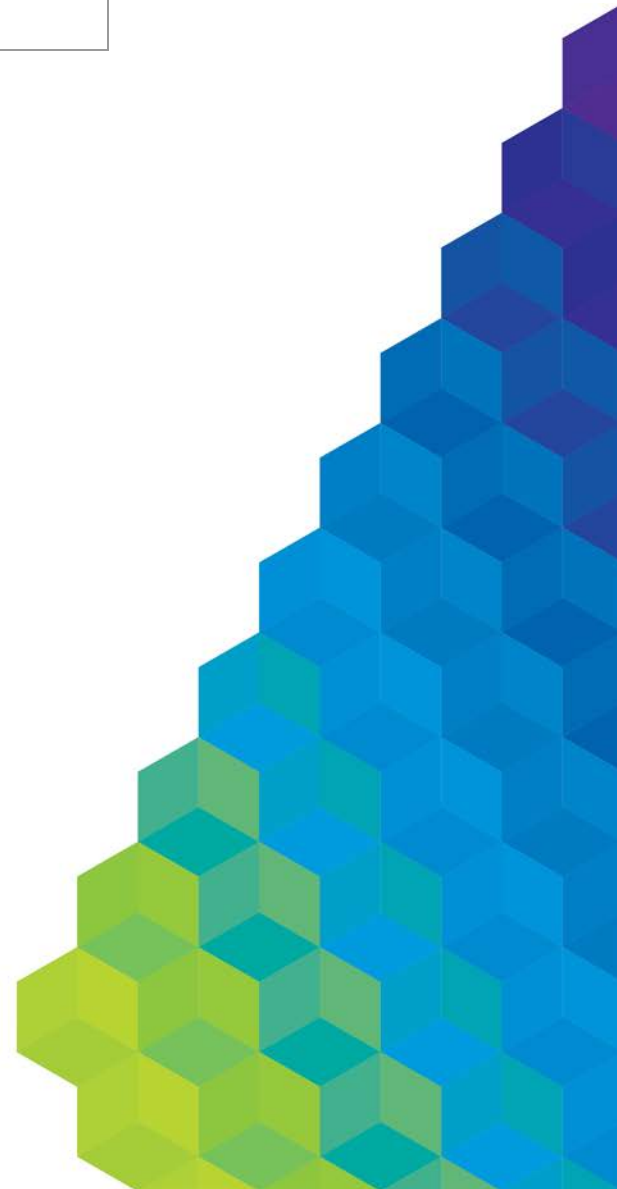


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# Technical Specification

## Laying Gas Service Conduits

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### 1 PURPOSE

During the development of new housing estates, conduits are often laid by the Developer's Contractor to aid the future installation of utility services to each property. This limits the amount of excavation required to install the utility services and avoids damage to road, nature strip and footpath surfaces.

The Purpose of this technical specification is to outline AusNet Services requirements for laying a conduit for the future installation of a gas service pipe by AusNet Services authorised personnel.

### 2 SCOPE

This technical specification details the required conduit location, depth, pipe material and backfill material. It also outlines the means of marking the conduits location so that it can be found when the gas service pipe is to be installed.

### 3 ABBREVIATIONS AND DEFINITIONS

Term	Definition
<b>B.O.K</b>	Back of Kerb
<b>Gas service</b>	A pipe that carries gas from a main to one or more consumer meters or equivalent points of supply
<b>Insertion</b>	The operation of placing a gas pipe into an existing pipe or conduit
<b>Must, Shall, Will</b>	Indicates a requirement
<b>OD</b>	Outside diameter
<b>PE</b>	<i>Polyethylene</i>
<b>PN</b>	<i>Nominal working pressure designated in bar but normally referenced in MPa</i>
<b>PVC</b>	<i>Polyvinyl Chloride</i>
<b>Should</b>	Indicates a recommendation

### 4 GAS CONDUIT MATERIAL SPECIFICATION

The gas conduit material specification shall be as per the following:

1. PVC **Yellow** pipe to *AS/NZS 1477 PVC pipes and fittings for pressure applications*. 50mm OD minimum; OR
2. PVC **White** pipe to *AS/NZS 1477 PVC pipes and fittings for pressure applications*, Series 1 with a minimum class rating of PN9. 50mm OD minimum;

### 5 SHARED (COMMON) TRENCH WITH WATER UTILITY

Gas services may be laid in a shared (common) trench with the water service, when agreed with Water Utility and compliant with:

1. The minimum separation distance of the gas conduit pipe from other utility assets (table 7.1);
2. The minimum depth of cover. Refer section 8

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### 6 GAS CONDUIT LOCATION

The conduit pipe shall be laid as per the following requirements:

**For Properties the same side of the road as the gas main:**

From the back of curb (B.O.K) at the gas main location to 0.5m inside the property boundary

**For Properties on the opposite side of the road from the gas main:**

From property boundary on the opposite side of the road to 0.5m inside the property boundary

Where practical, the gas service conduit should be laid parallel to the water service on the left hand side at an offset of 300mm (refer table 7.1). Where this would place the gas conduit in a driveway or outside the property boundary, the gas service conduit should be laid on the right hand side of the water service.

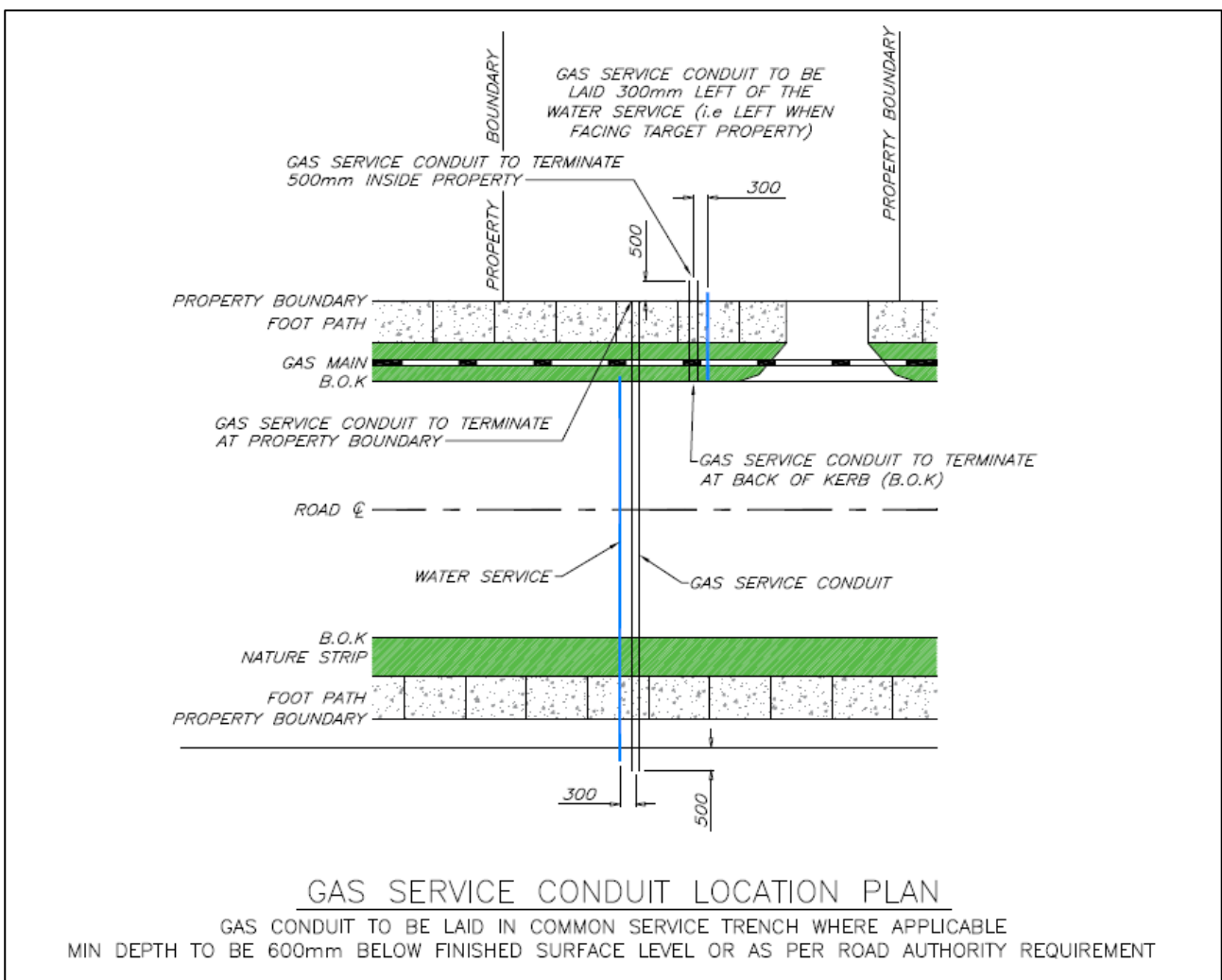


Figure 1 Gas Service Conduit Location

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### 7 MINIMUM SEPARATION DISTANCE FROM OTHER UTILITY ASSETS

The minimum separation distance of the gas conduit pipe from other utility assets shall be in accordance with table 7.1.

**Table 7.1 Minimum Separation Distance from Other Utility Assets**

Location	Min. separation distance (mm)
Service Pipe - Parallel to Other Utility Assets	300
Service Pipe - Crossing Other Utility Assets	150

### 8 MINIMUM DEPTH OF COVER

The gas service conduit shall be laid at a nominal depth of **600mm**. Where interference with other assets is identified the conduit can be laid to a maximum depth of 900mm to meet the clearance requirements in table 7.1.

### 9 CONSTRUCTION AND INSTALLATION REQUIREMENTS

#### 9.1 LAYING CONDUIT PIPE

The conduit location shall comply with section 6.

The conduit shall be laid in a straight line only and have no bends or other fittings, excluding straight couplings for joining pipe together.

The inside surface of the conduit shall be continuous and free from kinks to allow insertion of the gas service pipe.

Each end of the conduit prior to backfill shall be closed with end caps, plugs or seals to prevent entry of foreign matter, liquid or small animals/insects.

#### 9.2 JOINTING CONDUIT PIPE

The conduit pipe shall be joined together in accordance with the pipe manufacturer's installation instructions.

#### 9.3 BEDDING MATERIAL

No specific bedding material is required around the conduit pipe.

#### 9.4 BACKFILL MATERIAL

Backfill material shall be free of rocks, hard formations or point loads on the conduit pipe.

#### 9.5 LAYING GAS MARKER TAPE

AusNet Services approved gas marker tape (refer to section 11) shall be laid above the top of the conduit in all situations.

Gas marker tape shall be laid a minimum of 200mm above the top of the conduit as detailed below.

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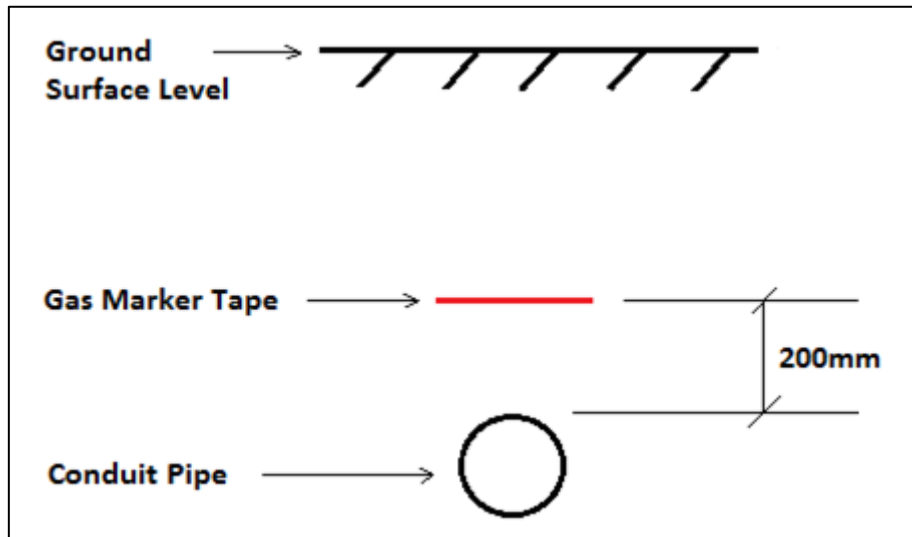


Figure 2 Marker Tape Depth

**10 LOCATING CONDUIT**

To ensure that the conduit can be located at a later date for service pipe insertion, the alignment of the conduit shall be marked on the curb with the letter “G”.

**11 APPROVED GAS MARKER TAPE**

Only marker tape approved for use by AusNet Services shall be used. The details of the approved marker tape is as follow:

Item	Size	Photo	Suppliers
Marker Tape Yellow PE Protective mesh. "Warning Buried Gas Main Below" AS 2648.1 Underground marking tape - Non-detectable tape	200mm x 0.25mm x 100m 200mm x 0.25mm x 200m		<b>Tapex</b> 200 Kingsgrove Road Kingsgrove NSW 2208 Ph: +61 2 9502 6000 Web: <a href="http://tapex.com.au">tapex.com.au</a> Email: <a href="mailto:sales@tapex.com.au">sales@tapex.com.au</a>  <b>Benton's Gas</b> 22 Castro Way Derrimut, Vic 3030 Ph: (03) 9361 6131

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**12 SCHEDULE OF REVISIONS**

Issue	Date	Author	Reviewed	Details of Change
1	8/07/2021	Mark Annetts	Anthony Bonacci Sam Pitruzzello Lauren Fetherston	Publishing of first issue of specification

**NOTE:** This document has been published on AusNet Services website. Please ensure that the website is updated with any revision made to this document.