

PART 5: SITE PREPARATION

PART 5: SITE PREPARATION

Section 5.1 - Procedure: Site Preparation

5.1.1 Introduction

This procedure has been developed to assist Departmental staff, contractors and entitlement holders with the preparation of sites prior to the installation of meters. The intention of this procedure is to outline what constitutes 'site preparation' and to address the key issues that must be taken into consideration by Departmental staff, contractors and entitlement holders in relation to the metering implementation process as a whole.

5.1.2 Rationale

Site preparation is critical to the meter installation process, representing the initial phase in the on-site implementation of water metering. It is imperative that site preparation is undertaken correctly as it has lasting influence on the success of the meter installation and operation phase, in terms of costs, logistics, time constraints, the accuracy and operational life of the meter.

The Department will investigate all feasible meter types and pipe configuration options to minimise or remove the need for extensive site preparation.

In order to minimise meter installation costs to the entitlement holder, it has been agreed that entitlement holders may undertake site preparation; this will promote equity in the sharing of overall meter installation costs.

Where site preparation is relatively uniform across a project area and it is deemed economical to do so, site preparation may be included in the installation contract.

5.1.3 Site preparation defined

In general, site preparation involves all activities that an entitlement holder or uncertified person could reasonably be expected to undertake prior to the contractor arriving onsite to install the meter. However, for practical purposes, factors such as workplace health and safety (WH&S) requirements, costs incurred, logistics and time constraints limit the extent of site preparation by the entitlement holder to:

Minor:

- Clearing of the site, including the clearing of vegetation and other objects that would obstruct the installation of the meter and associated pipework.
- Facilitation of site access, including the widening of access gates, tracks and the removal of fences on the property where applicable,

Major:

- Excavations not required to be undertaken by a certified contractor, including trenches and site drainage.
- Pipe reconfiguration to establish 10 and 5 pipe diameter clear lengths of pipe to facilitate the installation of the meter unit. Such pipe reconfiguration must ensure that existing meters and pipework remain operational.
- Installation of approved wells, covers, locks and signage.
- Exposure of existing buried meter installations, where such meters are reasonably accessible and the excavation does not pose a safety risk.
- Installation of an isolation switch adjacent to the meter where an electric pump can be started remotely.
- Installation of isolation valves in irrigation systems with rising mains, to facilitate safe installation of meters and minimise the dangers of exposure to pressurised water.

Any site preparation activities beyond the scope of the above will need to be assessed by the MPO.

Any site preparation activities requiring specialised skills and equipment should be undertaken by a competent contractor, at or close to the time the meter is installed, and at the cost of the entitlement holder.

5.1.4 Specifications for site preparation

Site preparation will be undertaken by the entitlement holder or contractor in consultation with the MPO. Costs, time and resource constraints will dictate the extent of site preparation and the work to be included in the meter installation contract. However, the party undertaking site preparation must comply with the following requirements:

Logistics—timing and coordination of site preparation by entitlement holder with meter installation undertaken by contractors

- Where the entitlement holder elects to clear, excavate and/or drain the site, the site must be in a satisfactory condition before installation of the meter commences, prior to the date specified under contract.
- Existing meters and pipework should remain operational as close as practicable to the installation date. No cutting of pipes will be undertaken until the meter is to be installed, other than reconfiguration of works described above.

Site access

- The entitlement holder must facilitate access to the property including the removal of fences/gates where necessary and the supply of keys for padlocked enclosures where applicable.

- The entitlement holder must adequately identify the location of the prepared site using signage, flagging tape or similar methods of identification, and/or by providing a plan of the property marked with the location of the site.

Workplace health and safety (WH&S) requirements

All site preparation activities undertaken by the entitlement holder or contractor must comply with WH&S requirements in accordance with the *Workplace Health and Safety Act 1995*, including:

- The provision of signage, reflective guideposts, lockable covers and safety fencing for wells, pits and trenches (where applicable) to prevent livestock, persons and vehicles from falling into excavated areas.
- All wells and pits must provide adequate ventilation and workspace around and under any pipework to enable fitting and servicing of the meter.

Excavation requirements

All excavations are subject to WH&S and NR&M requirements:

Where excavations are less than 1.5m deep, the meter installation contractor will undertake the excavation as part of the meter installation contract.

However, should the entitlement holder wish to install a pit (in lieu of an open excavation) for excavations between 0.6m and 1.5m deep, the entitlement holder is to ensure that the pit is adequately sized for WH&S requirements and maintenance purposes. The entitlement holder is to submit a plan of the pit to the MPO for approval prior to commencing excavation.

Where excavations of more than 1.5m deep are required an inspection well must be installed and the entitlement holder has responsibility for carrying out the excavation and construction of the well and ensuring WH&S requirements are met. For further details refer to Section 7.7 – *Specification: Installing Inspection Wells* and MIP 5 in Section 7.3 – *Specification: Meter Installation Plans*.

All excavations requiring the use of heavy vehicles, cranes or other equipment in close proximity to the excavated area must be in well-compacted soil and/or 2 vertical:1 horizontal batters used to prevent slumping of the excavated area.

All excavations must be drained to facilitate the installation of the meter unit and the required straight length of pipe (10 diameter lengths upstream of the meter and 5 pipe diameter lengths downstream of the meter, in addition to 400mm to accommodate the average meter body).

Mounds or berms must be constructed around wells and covers installed over well entrances to prevent flooding of the excavated area or well during wet weather.

Installation techniques will be chosen to provide control measures for minimising erosion, siltation, sediment deposition and contamination of runoff and water sources.

5.1.5 Entitlement holder's requirements

Site preparation may potentially impact upon the normal activities undertaken on the property. Where site preparation is part of the meter installation contract, contractors and MPOs must undertake the following requirements:

- Access to the property and site preparation activities must be arranged at a time convenient for the entitlement holder. See also *Section 3.1 – Procedure: Site Access*.
- The entitlement holder's requirements relating to site and vehicle cleanliness must be complied with. See also– *Section 3.3 – Procedure: Preventing Declared Weed Spread* – this procedure must also be complied with.
- Other reasonable requirements that the entitlement holder may consider necessary to avoid adverse impacts upon the land and day-to-day activities of the entitlement holder must be complied with.

5.1.6 Meter selection and location

The type of meter selected will be suitable to the conditions and require the least amount of site preparation to minimise overall costs. Meters will be located at ground level where feasible, to ensure access for ongoing maintenance and reading activities. Where this is not feasible, alternative configurations will be assessed to ensure cost efficient and operationally efficient site preparation, meter installation, reading and maintenance.

5.1.7 Contact prior to site preparation

Prior to commencing any site preparation activities, the entitlement holder and/or contractor may contact the MPO to discuss the proposed activities in order to ensure they will conform to NR&M requirements.