# ASSET Observation & Protection



### Contents

- 3 Introduction
- 4 The role of an observer
- 5 Communication
- 6 What is an asset protection plan?
- 7 Pot-holing procedure
- 8 Tell-tale signs
- 9 Service markers
- 10 Quiz

### Introduction

Working in the vicinity of services is one of the most high risk activities undertaken on Winslow projects.

The definition of high risk work includes construction work on or near:

- pressurized gas distribution mains, or piping;
- chemical, fuel or refrigerant lines, and;
- energized electrical installations or services.

As well as the large costs involved to repair or replace these assets, they may also contain energy sources with potential for serious injuries or fatalities to construction personnel and others should they be damaged or contact made with them.

For these reasons, an observer is required to not only help guide the excavator operator, but also keep the utility assets safe from damage.





## The role of an observer

An observer serves as an extra set of eyes and ears for plant operators and individual workers at the site of an excavation as they monitor earthmoving processes and pay close attention to the presence of underground utilities and any surface obstructions that may be encountered.

The observer must remain at the task for the entire time the plant machinery is required to operate and may only observe for one item of plant machinery at any time.

### **Safety Practices for Observers**

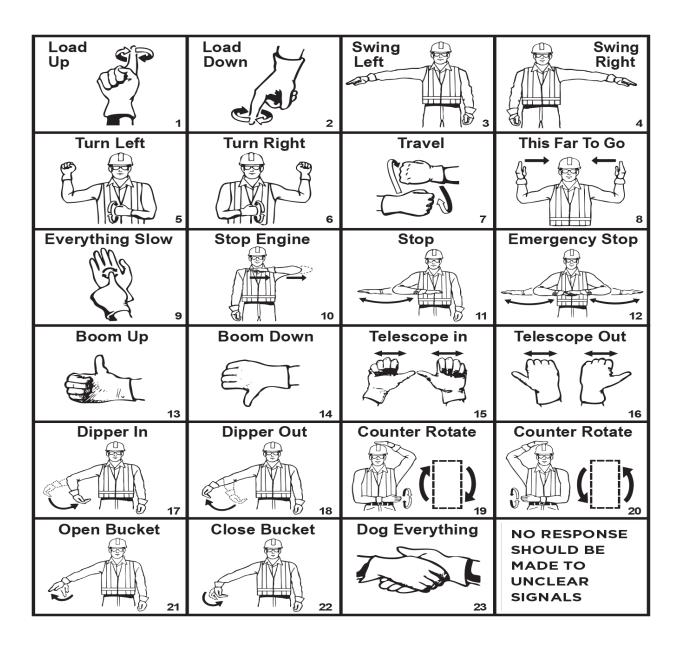
- Wear highly visible clothing & PPE
- Avoid walking into the path of a vehicle, moving equipment, or a swinging load
- Avoid walking behind heavy equipment while observing
- Scan a worksite for hazards and remove them before a job commences
- Focus on your job
- Do not use a phone, headphones, or other items that can be distracting while observing
- Agree on hand signals before you start an excavation
- Make sure you keep constant visual contact with the driver while the vehicle is in operation

If you need to leave the area for any reason, even for two minutes, you must:

- Let the operator know and ask them to stop excavating till you return.
- Advise your supervisor if you are not returning, for a replacement observer.

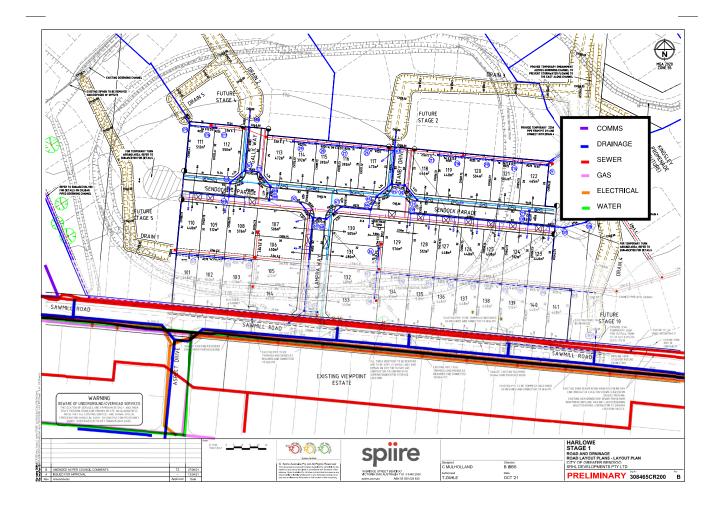
### Communication

The operator and the observer must decide on a way to communicate with each other. Often the best way is to use clear, standard hand signals. Here are some standard hand signals for working with excavators. Another common form of communication is by way of a two-way radio set.



# What is an asset protection plan?

View the Asset Protection Plan to ensure you have an understanding of where the Assets are. Ask your site Supervisor if the APP is up to date, sign the Permit To Works, walk the area prior in case any unexpected Services are present.



## Potholing procedure

Never assume that underground assets are positioned in the location as depicted on the plans or at the depth suggested. All buried assets must be validated before commencing excavation.

Potholing is the technique of locating buried assets by careful hand digging trial holes or by the use of other non-destructive techniques such as vacuum excavation, air excavation or water excavation.

Any work in the vicinity of a buried asset should be done in accordance with the Asset Owner's requirements and if applicable, any relevant legislation.

Potholing must be undertaken with reference to the Asset Protection Plan.

### **Hand digging**

- For hand digging, use round edge spades and shovels (push, do not throw at ground);
- Do not use sharp pointed tools such as picks or crowbars;
- All tools used should be non-conductive for safety reasons;
- Dig adjacent to the asset to expose it from the side rather than digging down on top;
- Where possible dig parallel to the line rather than across it.
- Pot-holing should be undertaken every 5-10 metres of the proposed excavation (chosen
- path) and at each asset crossing.

Careful digging is the only sure way to identify the depth and alignment of underground pipes and cables.



## Tell-tale signs

### **Change of ground conditions & Asset Warning Tape**

When conducting excavation operations, a change in soil type (strata types, sand or small aggregate), or the exposure of asset warning tape is a good indication that a service asset is located below it.

Ask the operator to stop, place the bucket down and manually dig (shovel) approximately 300mm down either side to see if you can find the asset.



## Service markers

When services are located during proving activities, they must be protected via means of barricading and markers (risers). Their position with an offset or a point of reference will be recorded on the Services Plan for the applicable zone.



### Service markers should:

- be a conduit installed above the service;
- no less than 1.0m of conduit should be visible above ground;
- be offset from the service such that contact with the marker does not cause damage to the service;
- contain markings to show the depth to the top of the buried service from a fixed point on the service marker (Usually the top);
- contain the correct coloured sticker to identify the type of service placed on a conduit riser. Use an orange conduit "if possible" for electrity.

Service markers are to be maintained for the duration of the job and are not to be removed without the Foreman's approval.

### Quiz

To start the quiz, use your smart phone camera or QR reader application.

Point your camera at the QR code to scan the QR code.

A notification will pop-up on the screen.

Tap the notification to open the website link.

Follow the onscreen prompts to complete the quiz.

Alternatively, click the link below to access the quiz.

http://learningassets.winslow.com.au/Asset\_Protection\_Quiz/



