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<u>SECTION</u>	<u>C</u>	<u>GENERAL INFORMATION</u>
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**GENERAL INFORMATION**

**UNDERGROUND SERVICES**

Prior to commencing any excavation the following organisations shall be notified :-

- (1) Telstra, Optus and other telecommunications carriers.
- (2) ETSA and other power carriers
- (3) The local council or corporation
- (4) The GAS Company (if applicable)

Before commencing work all underground services shall be located and identified on site.

All damage incurred during construction shall be reported immediately to the appropriate authority.

**PROTECTION OF EXISTING TREES / VEGETATION**

The easement schedule on the section sheet shall be examined for any "conditions" attached to the right of entry. All existing trees and shrubs adjacent to the sewer line shall be carefully supported and protected from damage. Specific construction methods such as tunnelling or boring may be identified to protect a delicate or valuable environment.

Before clearing any trees or shrubs along the route, approval must be obtained from the local council or corporation and in the case of private land, consent must be obtained from the owner.

**DEWATERING**

Where ground water or natural run-off is likely to flow into the trenching system, the excavation must be kept free from water for the duration of construction by an appropriate dewatering procedure.

The purpose of dewatering is to :-

- (1) Establish stable ground conditions.
- (2) To make working conditions in an excavation more acceptable.
- (3) To provide a suitable floor on which pipes or a structure can be founded.

The three basic methods of removing or preventing water from entering excavations are as follows :-

**Surface Dewatering**

Where only a small quantity of ground water is encountered the trench bottom can be stabilised by means of 20mm aggregate or the installation of underdrains leading to a sump.

**Well Point Dewatering**

Where excessive ground water is encountered a well point system of dewatering shall be used. The well points shall always be in advance of and lagging behind the pipe laying.

**Large Drainage Sumps**

The nature of the ground in wet areas may be such as to clog the filter screens of the well point heads. Drainage can sometimes be achieved by digging a pit or pits extending in depth below the level of the proposed excavation. Water which collects in these pits can be pumped to a disposal point clear of the construction site.

During the dewatering process :-

- all excess ground water must be disposed of appropriately and safely away from the excavation.
- no water from the dewatering process or any other water is to be discharged into the sewerage system.
- care must be taken to ensure the safety of adjacent buildings, structures and services.

In disposing of the excess ground water, the constructors must be aware of their obligations under the Environmental Protection Act 1993.

In cases of extreme water infiltration, specialist geo- technical advice may be required.

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Chg		Amendment -	Des		SOUTH AUSTRALIAN WATER CORPORATION	SEWER CONSTRUCTION MANUAL PAGE C1 GENERAL INFORMATION UNDERGROUND SERVICES, PROTECTION OF EXISTING TREES / ENVIRONMENT AND DEWATERING	Not to Scale
Drn			Drn				
Ckd			Exm	GR			
Unit Ldr			Unit Ldr				
			Signed <b>R M JONES</b> for Executive Manager 14 / 6 / 96				
			ENGINEERING GROUP				
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**GENERAL INFORMATION (continued)**

**SHORING OF EXCAVATIONS**

All excavations are to provide a safe working environment for employees and the general public. This is achieved by the implementation of appropriate safety precautions such as shoring and battering.

Details of the minimum shoring requirements are set out in the booklet :-  
"TRENCHING AND GROUND SUPPORT SYSTEMS" produced by the South Australian Water Corporation.

All shoring of excavations are to be carried out in accordance with :-  
REGULATIONS under the OCCUPATIONAL HEALTH, SAFETY and WELFARE ACT 1986 including Construction Safety Regulations 1995.

When removing the shoring system care must be taken to ensure that no damage or displacement occurs to the pipes and fittings laid.

It may be deemed safer to leave timber shoring in place at backfill stage. This is acceptable, however, the sheeting shall not remain within 1.2 metres of the surface without written permission.

It is recommended that the personnel involved in excavations and shoring of, attend an approved competency based Trenching and Ground Support Systems Course.

**USE OF EXPLOSIVES**

The use, storage and transportation of explosives is to be carried out in accordance with :-

- Regulations under the Occupational Health, Safety and Welfare Act.
- Australian Standard AS 2187.
- Mines and Works Act.
- Explosives Act.

Trenches excavated in rock with explosives shall be continued beyond the approved end of the sewer by a distance of 1.5 metres.

Similarly, connection trenches in rock shall be excavated 1.0 metre beyond the connection riser of the inspection opening. Connection trenches being excavated in rock by explosives shall be fully excavated in conjunction with the sewer trench.

Pipes shall not be laid or manholes built within 10.0 metres of any trench being excavated by the use of explosives.

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Chg		Amendment -	Des		Signed <b>R M JONES</b> for Executive Manager 14 / 6 / 96 ENGINEERING GROUP		SEWER CONSTRUCTION MANUAL PAGE C2 GENERAL INFORMATION SHORING OF EXCAVATIONS AND USE OF EXPLOSIVES	Not to Scale
Drn			Drn					
Ckd			Exm	GR				
Unit Ldr			Unit Ldr					
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