

Landscaping and Fencing

Fences, driveways, paving, retaining walls, landscaping & other garden features

To be read in conjunction with General Requirements: A guide to building on properties containing (or in close proximity to) Canberra's water and sewerage networks

Disclaimer

This Guide was prepared for Icon Water. It is provided for general reference only and is not intended as a legal guide or substitute for legal or other professional advice. Each set of factual circumstances will vary and must be considered individually. The Guide content is correct as at 1 October 2014. Referenced source documents and industry practices will be amended or otherwise vary from time to time so care must be taken to confirm currency at the relevant time.

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About this guide

This guide is designed to be used in conjunction with the information contained in the guide *General Building Requirements: A guide to building on properties containing (or in close proximity to) Canberra's water and sewerage networks.*

Contact us for information and advice.

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Protection of water and sewer fittings – garden areas

Icon Water require access to operate and maintain essential water and sewerage equipment located on the verge and inside the boundaries of most Canberra properties. Fire hydrants, meter boxes, water valves, maintenance holes (manholes) and sanitary drainage (boundary) access shafts need to be accessible (day and night). A one metre radius safe work area must be kept free of obstruction (fences, retaining walls, trees, shrubs and debris).

Maintenance access through retaining walls

Retaining structures must be designed to ensure Icon Water's water and sewer networks can continue to be safely accessed, operated, repaired and replaced. Emergency and maintenance access passages must not be obstructed.

Where a retaining wall obstructs maintenance or emergency access to the pipe protection envelope of a sewer or water network, a ramp or stair constructed of materials capable of bearing the weight of excavation machinery is required over or through the wall. Figure 14 shows an example of this.

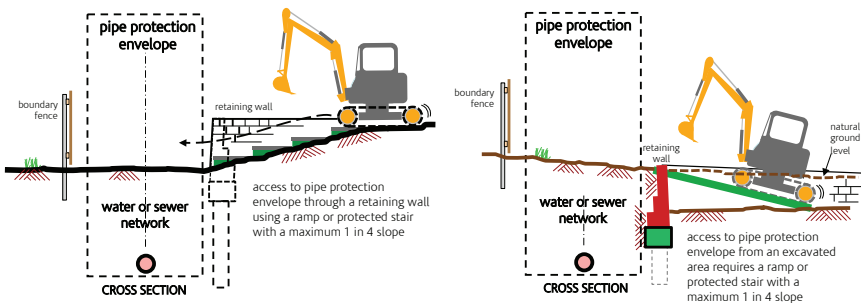


Figure 14 Ramped access

Lightweight fences

Lightweight timber paling or sheet metal boundary fences are generally permitted to cross the zone of influence of a sewer or water network where maintenance access to the pipe protection envelope is guaranteed from both sides of the fence. Posts are not to be located directly over a network asset. Figure 15 shows an example of this.

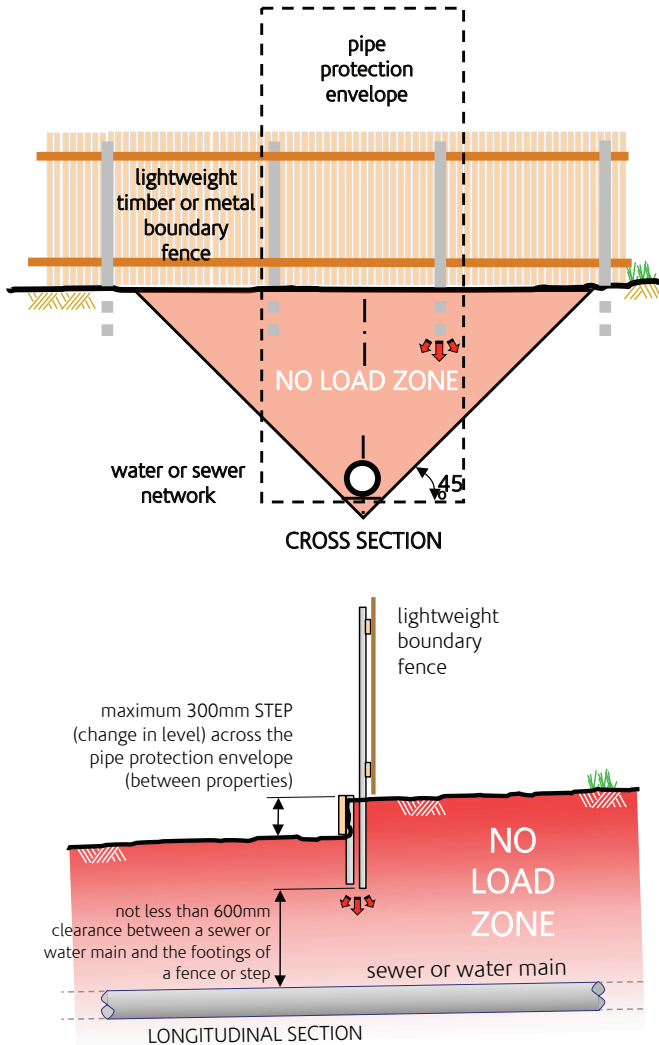


Figure 15 Lightweight fence requirements

Masonry fences

Heavyweight (masonry) fences or barriers may be approved to cross a pipe protection envelope of a sewer or water network when, in the opinion of Icon Water, the structure complies with pipe protection envelope, zone of influence, maintenance access, foundation stability and spoil setback requirements. Gates, bridging beams or special footing designs may be required. Figures 16 and 17 show examples of this.

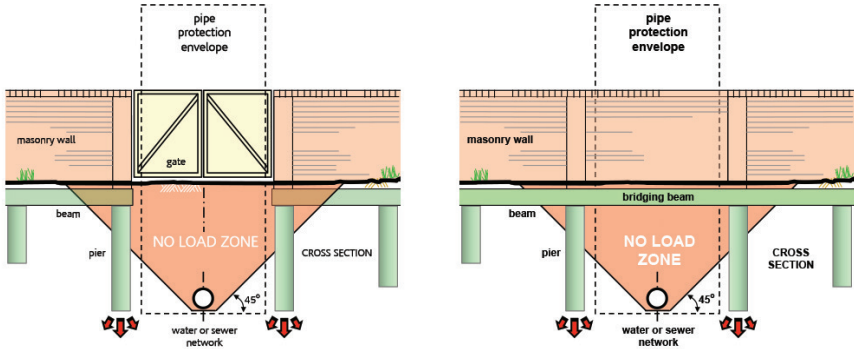


Figure 16 Masonry fence footings design

Bridging is usually only acceptable where maintenance access to the pipe protection envelope is guaranteed from both sides of the fence.

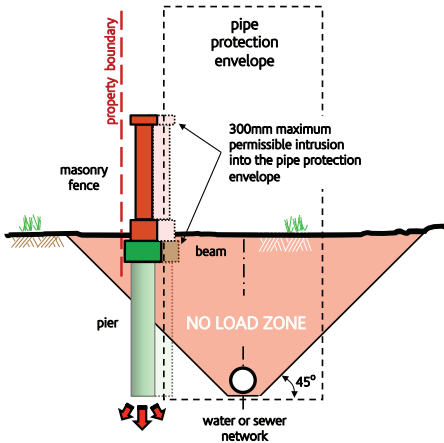


Figure 17 Masonry fence footings outside PPE

Some minor intrusion into the pipe protection envelope may be permitted where the pipe protection envelope abuts the property boundary. This is to be approved in writing, by, and at the discretion of Icon Water.

Retaining wall

Retaining structures may be approved in writing by Icon Water to run in close proximity or bridge across a pipe protection envelope of a sewer or water network where in the opinion of Icon Water, the structure complies with pipe protection envelope, zone of Influence, maintenance access, foundation stability and spoil setback requirements. Figure 18 shows an example of this.

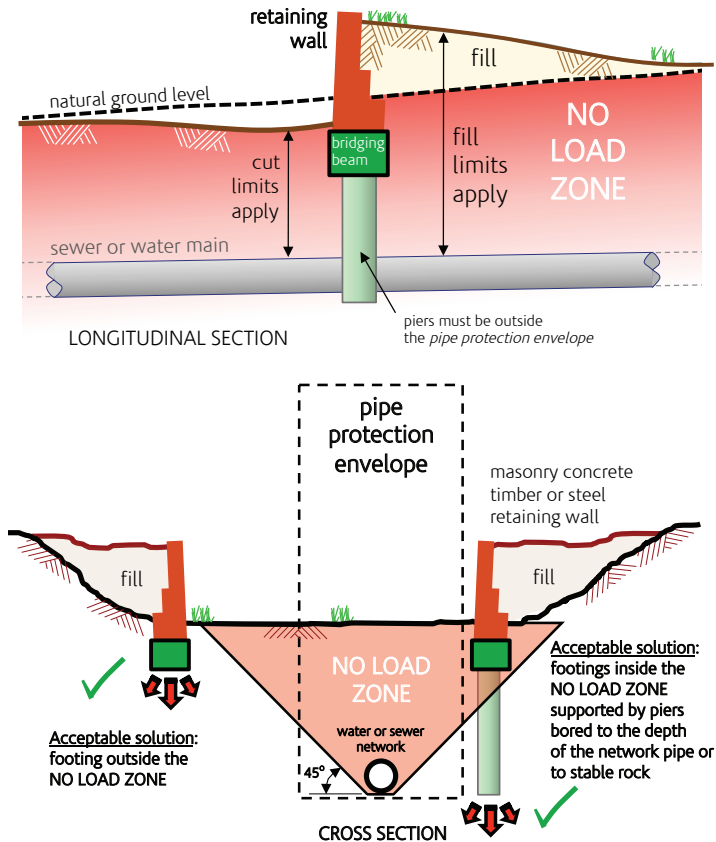


Figure 18 Retaining wall footing design

Paving

Icon Water will generally approve pedestrian and trafficable pavements such as cobble stone, brick or concrete pavers (laid on sand or scalplings) and bituminous pavement (laid on compacted road base) inside the pipe protection envelope of a water or sewer network, subject to the following conditions:

- Reinforced concrete slabs no thicker than 100mm must be laid with grooved joints along the longitudinal edge of the pipe protection envelope and a maximum spacing of 3m along the envelope to facilitate ease of replacement
- Reinforced concrete slabs greater than 100mm in thickness must be designed (in consultation with Icon Water) in panels which bridge across the pipe protection envelope and are fitted with lugs to facilitate the lifting of these panels when access is required. Weight limits will apply
- Concrete slabs and permanent structures must be separated by joints to permit the removal of slabs without damage to adjacent structures.

Icon Water will generally replace pavements, removed for the purpose of repairing or replacing water or sewer infrastructure, where:

- Pavements are made from concrete cobble-stones, brick, bituminous cement, reinforced concrete or other similarly priced materials readily available from local suppliers
- Concrete slabs are no more than 100mm thick
- Damaged pavement panels are reinstated up to but not beyond the construction joint of the adjoining undamaged panel or 3 metres beyond a damaged edge, whichever is the lesser dimension
- Ornamental finishes are mandated by planning authorities (e.g. stamped, stencilled, exposed aggregate or acid-etched, driveways, etc.) however material, colour or pattern matching is not guaranteed for superseded products
- The landholder may be required to contribute to replacement costs which exceed these conditions. When given reasonable notice, the landholder is responsible to remove, or pay Icon Water to remove, pavement which fails to comply with the conditions listed above.

Ponding over surface fittings

Alterations to surface levels is to be undertaken in a manner to prevent stormwater run-off ponding around sewer maintenance holes (manholes), water valves, hydrants and meters. The ingress of stormwater into the sewer network is not permitted as it significantly increases Icon Water operational costs which in turn are passed onto consumers. Figure 19 gives an example of how to prevent this.

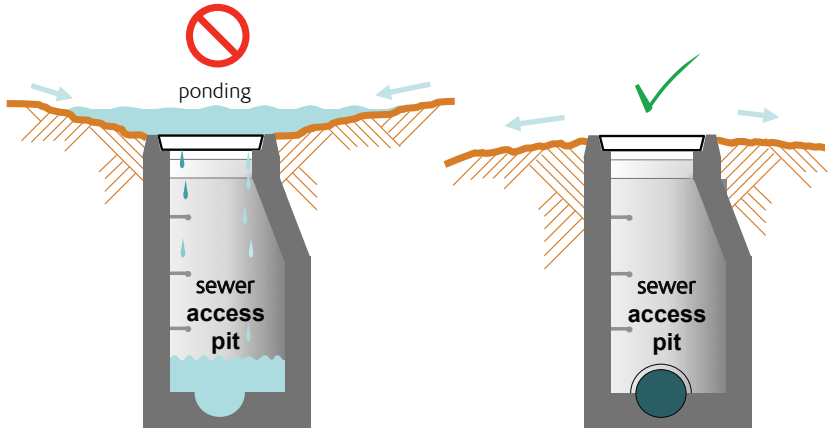


Figure 19 Prevention of ponding over sewer maintenance hole (manhole)

Trip hazards

Care must be taken to prevent the creation of trip hazards when removing topsoil around surface fittings. Figure 20 shows an example of a trip hazard.

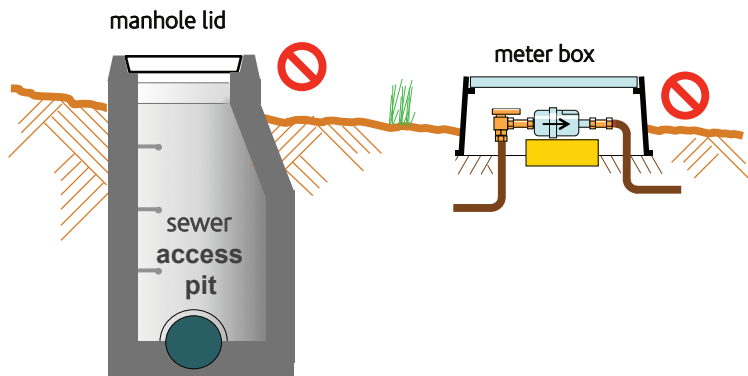


Figure 20 Potential trip hazards involving sewer and water assets

Protection of surface fittings in driveways

Sewer manholes and water meter pits are not permitted to be located in driveways, unless authorised in writing by Icon Water, when permitted, they must be fitted with trafficable lids fitted by Icon Water at the landholders cost. The rim and lid must be flush with the surface (trip-free) as shown in Figure 21.

Water valves and fire hydrants are not permitted in driveways or trafficable areas where vehicles may park.

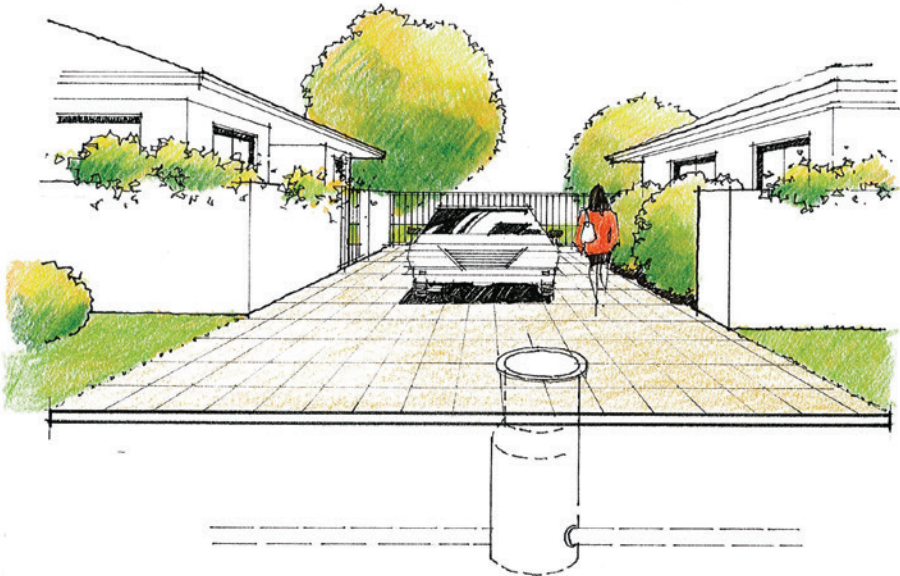


Figure 21 Sewer maintenance hole (manhole) in driveway

Trees and shrubs near water and sewer pipes

Trees and large shrubs should be planted so that the mature canopy does not encroach into or over the pipe protection envelope of a sewer or water network as shown in Figure 22.

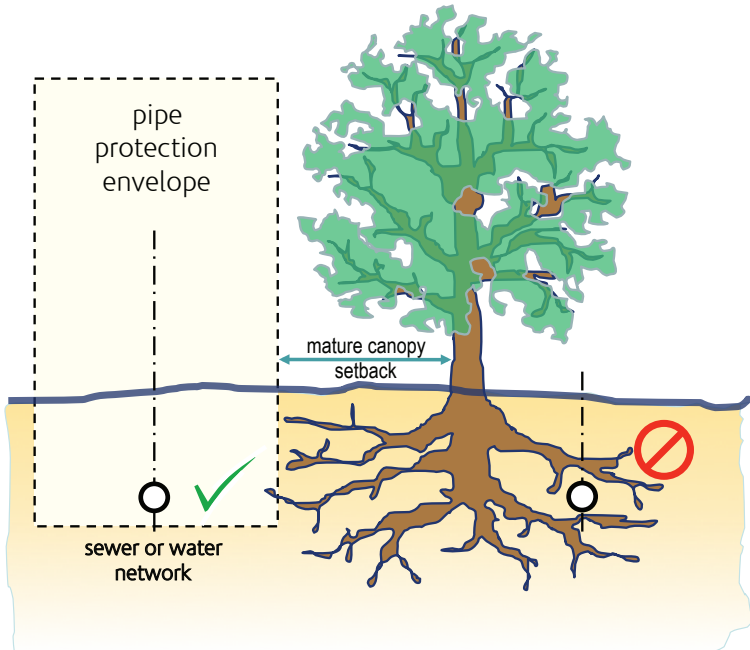


Figure 22 Tree canopy clear of pipe protection envelope

Consultation with a plant nursery may be necessary when choosing trees and shrubs. Some plant species have very invasive and wide spreading root systems. These varieties should not be planted in close proximity to water or sewer networks. The land holder may be required to remove trees and plants which obstruct access to Icon Water's assets.

Sewage surcharges – overland flow

As shown in Figure 23, utility sewer networks and private sanitary drainage systems are designed to relieve the buildup of sewage surcharge via utility maintenance holes (manholes) or discharging from private overflow relief gullies (ORG). These relief mechanisms decrease the likelihood of sewage flooding the interior of buildings if properly built and maintained.

The fall of land and placement of landscape features within a property must also be designed to ensure the overland flow path of sewage discharged from a sewer manhole or ORG does not pond in confined spaces, spill into habitable rooms, pools/ponds or flow into below ground car parks or basements. The overland flow path of a sewage discharge should be directed towards open spaces or roadways.

It is the landholder's responsibility to ensure sewer manhole covers and ORG are not obstructed or made inaccessible.

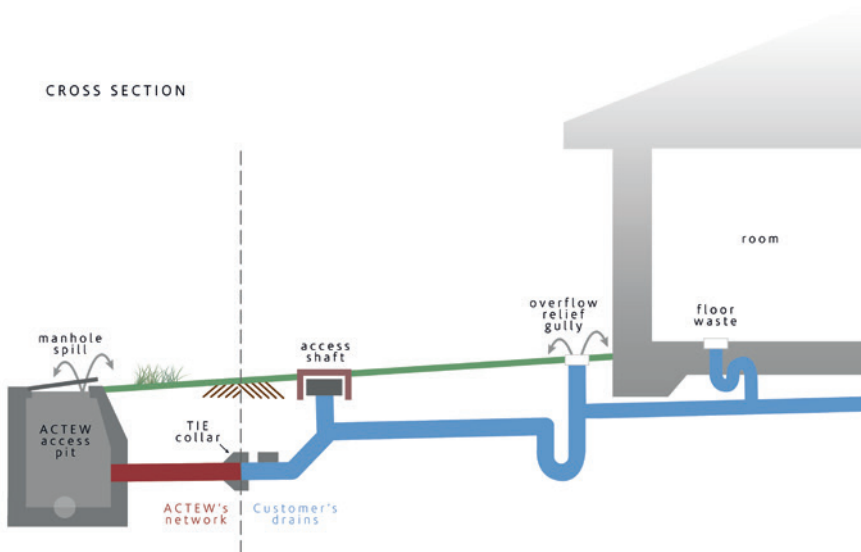


Figure 23 Discharge points for sewer surcharges

Contact details:

iconwater.com.au

Phone

Icon Water: (02) 6248 3111

Option 1 – Faults and emergencies (24 hour)

Option 2 – Account enquiries (8.00am – 6.00pm Monday to Friday)

Option 3 – General enquiries and complaints (8.30am – 5.00pm Monday to Friday)

Postal address

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talktous@iconwater.com.au

Dial-Before-You-Dig

Phone: 1100

Web address: www.1100.com.au

Language assistance

13 14 50

24 hours

如果您需要幫助，請打電話給下面的號碼。

¿Necesita un intérprete? Llame al número indicado abajo.

هل تحتاج إلى مترجم؟ اتصل بالرقم أدناه.

Trebate li pomoć tumača? Nazovite niže navedeni broj.

Nếu quý vị cần sự giúp đỡ, vui lòng gọi số bên dưới.

Se vi serve un interprete, telefonate al seguente numero.

Αν χρειάζεστε διερμηνέα, τηλεφωνείτε στον αριθμό παρακάτω.