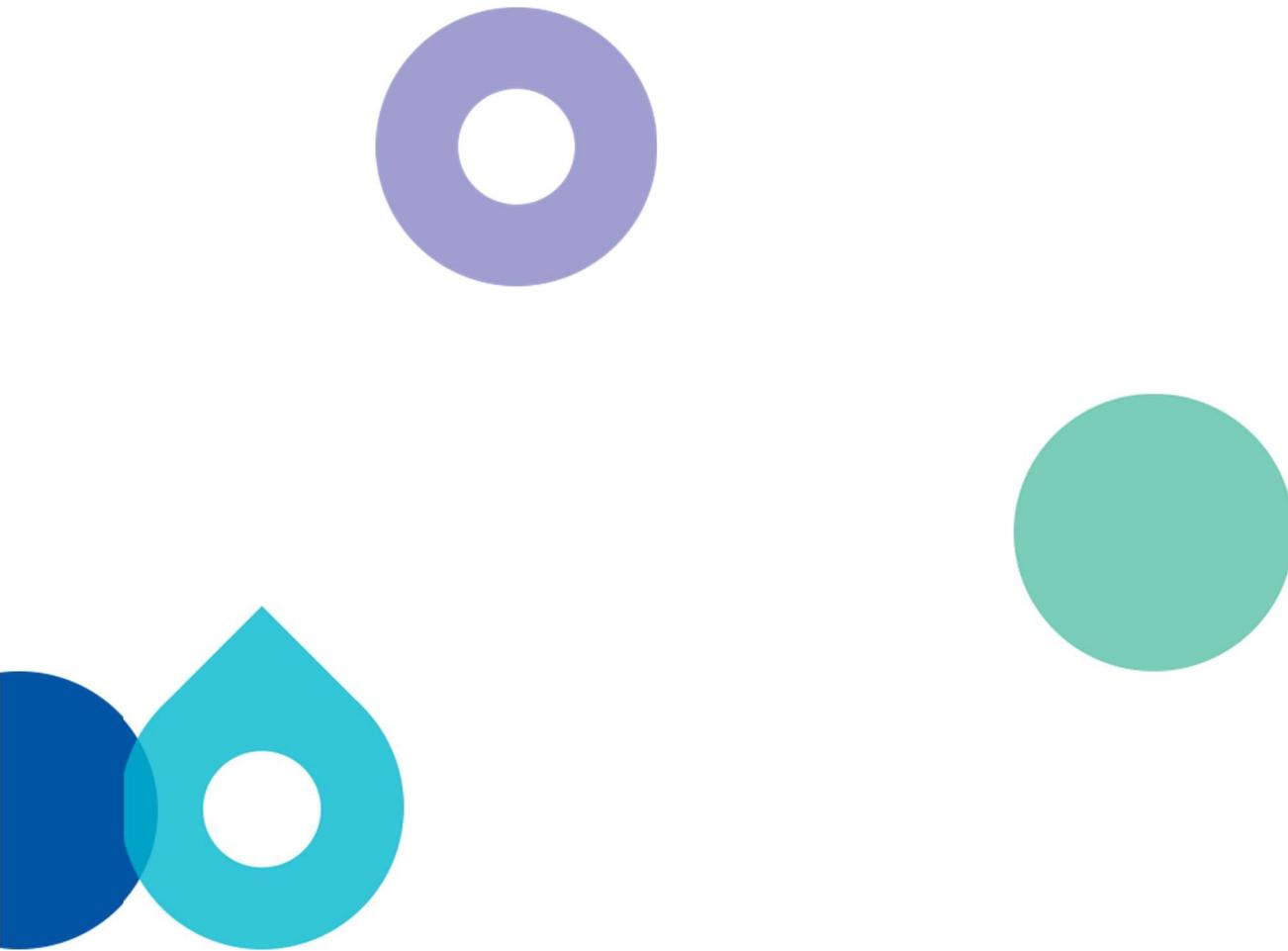




# **Asset adjustment and protection manual**

## **Managing new development process**



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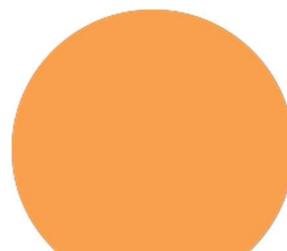
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# 1 Introduction

Developing new land and consolidating urban space is a major part of the continued economic growth of the Sydney region. As part of this, the 'Government', either federal, state or local, are planning new transport infrastructure to move population and goods around the region. Additionally, new home sites are being built to accommodate the future needs of a growing city.

Depending on your project's needs, you may need to adjust, amplify or protect our systems to ensure that the services used by our customers are maintained.

This manual explains how our assets can be adjusted and or protected to meet your project needs. It details the process, related policies, forms, and fees.

This manual also helps you understand the value service and infrastructure providers, that is, the 'providers' who design and construct pipe work, add to the process.

# 2 Process

## 2.1 Overview

The 'Managing new development process' is made up of a group of tasks that must be completed to extend, adjust, amplify or protect our systems during development or other construction activity. The following table lists the tasks within the process phases which may be required depending on your need. These may need to be done by you, your service provider or us.

Phase	Description
Concept	High level review of project, potential assets impacted identified, planning approvals assessed
Define	A water service coordinator is appointed, the formal application is made, system capability assessment undertaken, and a Letter of requirements issued
Design	An approved designer prepares plans for us to review, based on approved standards and the conditions in the Letter of requirements
Delivery	Procurement, construction, shutdowns, connections and inspections.
Finalisation	Explains what is required to complete the works, including fees, documents and quality control reviews

(Click on the phase name to go to the section)



These phases are explained in more detail within this document, including links to other information that may be of use on our web page.

## 2.2 Concept planning

When you're first considering a project you can review our network layout using [Dial before you dig](#). This will give you an initial idea of the potential impact our networks may have on your project.

Sometimes, it may be advisable to talk to us about your project before starting detailed design and planning work, to see what our assets may be in the area of your project and what conditions need to be met, so these can be included in your design.

Email [assetservices@sydneywater.com.au](mailto:assetservices@sydneywater.com.au) to seek advice and/or organise a meeting with us.

Information that would be useful in understanding the project at this phase would be:

- [connecting your property to our assets](#)
- [building over or next to assets](#)
- [adjusting or protecting our assets.](#)

Additionally, you may need our input into your planning approvals from a stakeholder point of view. We can provide advice on our systems and what conditions you need to consider.

## 2.3 Define

### 2.3.1 Lodging your application

Submit your applications to us electronically through the e-Developer system. You must engage a licensed [water servicing coordinator \(WSC\)](#) to do this for you.

The WSC will act on your behalf in all dealings with us. They'll charge for this service, so make sure you discuss prices before you finalise their engagement. Each coordinator's pricing structure is different.

To see a list of WSCs, visit the [Provider](#) page in the Plumbing, building & developing section of our website.

### 2.3.2 Information needed with your application

So, we can process your application, you must supply a copy of:

- details of your proposed works, including plans showing the extent
- your delivery program
- how the project relates to our systems
- engineering details and proposed design solutions.

### 2.3.3 Letter of requirements

After we assess the application information, we'll issue a Letter of requirements. The Letter of requirements explains any requirements that you must meet as part of our identified works. The letter is based on our assessment of how your proposal may affect our water, wastewater, recycled water and stormwater systems.

You have 12 months from when we issue the letter to meet our requirements, or you'll need to submit a new application and pay another application fee.

### 2.3.4 Timeframe

We'll generally issue the Letter of requirements within 30 days of receiving your application. For more complex cases, it may take up to 60 days. We'll send the notice to your WSC electronically.

After you receive the letter, discuss the requirements with your WSC. You can find out what you need to do next and what the [WSC](#) role will be.

### 2.3.5 Types of requirements

The table and comments below summarise the most common requirements in a Letter of requirements.

Requirement	Circumstances where this applies
Adjustment	Your project design requires our assets to be moved to an alternate location.
Amplification	To meet future demand requirements from growth across our area of operations, additional capacity in our system may be required. When works are being adjusted, we may ask you to increase the size as well.
Protection	Your project design allows our assets to remain in location, but we require you to protect the asset to ensure it is not affected by the project.
Sign an agreement	You need to work on our system, so you must enter into an <a href="#">agreement</a> with us.
Bonding	You may be required to lodge a monetary <a href="#">bond</a> if you need to adjust our assets. This is to make sure funds are available to reinstate services if you're not able to complete the works.
Funding	Based on our <a href="#">Funding infrastructure to service growth policy</a> .
Other	Additional information determined on a case-by-case basis.

#### Comments:

Depending on your project, you may require additional approvals, which we'll detail in the Letter of requirements. These may include 'building over asset approvals', which detail the requirements for



a building close to our assets. We may nominate special requirements, such as dilapidation survey, protection work and other conditions.

You must get our approval before you can build near or over our stormwater system or connect and discharge into it. We'll tell you everything you need to know about this in our notice. To find out more, go to the [Plumbing, building & developing](#) section of our website.

## 2.4 Design

### 2.4.1 Agreement

You'll need to maintain or engage the listed providers to design and build the works:

- WSC
- designer
- constructor.

You and your providers must enter into an agreement with us, before you start designing and constructing the works. This agreement is known as the *Developer works deed* and covers the standard terms for working on our systems.

### 2.4.2 Engage a water servicing coordinator

First, decide whether you want to retain your WSC for the rest of the application as the key portal to us. If you don't, you must select another coordinator from the list on our website to manage the design and construction of the works. For all the details of what they do, visit the [Provider](#) page in the Plumbing, building & developing section of our website.

### 2.4.3 Engage a designer

You'll then need to engage a designer. Depending on the type of works you propose, some WSCs may be able to supply this service, or they'll help you select a designer from our listed providers on our website.

To see full details of what the designer and constructor do for you, visit the [Provider](#) page in the Plumbing, building & developing section of our website.

Depending on the nature of the project you may also need to engage specialist consultants for structural, geotechnical, civil, mechanical or electrical investigations. Your designer will be able to tell you if this is required.

All specialist assessment shall be done by Chartered Professional Engineers of the Institution of Engineers Australia with the appropriate relevant expertise and experience.

### 2.4.4 Signing of agreements

You and your listed providers must sign the *Developer works deed* sent out with the Requirement Letter.



**You're responsible for all aspects of the design and construction of the works.** This is set down in the Developer works deed - Schedule 1: Standard Terms document.

To see this document, visit the [Developer deeds and standard terms](#) page in the Plumbing, building & developing section of our website. This document also sets out our and your listed provider's responsibilities.

You must read and understand both the deed and the standard terms, before you sign the deed. Your WSC can help you get all the signatures.

If you haven't yet engaged a constructor, the constructor can sign later. We'll send a Deed Poll document to your WSC before you start construction. Your WSC will arrange for the constructor to sign the Deed Poll.

#### **2.4.5 Designing the works**

Before constructions starts, the WSC must lodge a design package with us, based on the relevant codes and standards. The designer prepares this design for the WSC to submit to us together with any documents and forms that support the design.

Supporting documents may include:

- asset location confirmation
- geotechnical information
- structural assessments
- survey data
- loading impacts
- asset clearance
- asset protection option assessment
- on-site constraints.

We'll work with the designer to determine the best result for all parties, as during the design phase the adjustment of our services may affect your project design and vice versa. Once we complete the review, we'll send the WSC a job-specific schedule letter telling them this. We'll also explain our costs and any other requirements for the rest of the process.

Talk to your WSC about other things you may need to do.

#### **Entering onto third party property**

Before you or your providers enter a third party's property (someone else's property other than your own) to design or construct any works, you must have written permission from the property owner or tenant.

This permission is obtained when they sign our *Permission to enter* form.



You must provide the signed *Permission to enter to Sydney Water* before construction starts.

Our policy and guidelines tell you more about your responsibilities. Your WSC can give you the form and explain more about this.

#### **2.4.6 Hydraulic modelling**

On some projects, due to the size and complexity of the works to be adjusted, You may need hydraulic modelling to help the designer to determine the locations of fittings, like stop valves for water systems and/or emergency storage sizing for wastewater systems.

The WSC may also need the hydraulic modelling consultant's services to determine the requirements for developing the flow management plan (see section 2.4.9).

The designer, in consultation with us, will be able to confirm when this is required and who can do the work.

#### **2.4.7 Paying for the works and charges**

Generally, you pay for the full cost of the works, but we may pay for some. We'll tell you if we'll make a payment, either in our Letter of requirements or in our job-specific schedule letter to the WSC about the design, as it may not become clear until the design is progressing and the extent of works are known.

We'll base our decision on our [Funding infrastructure to service growth policy](#) . If payments are appropriate, a pre-tender estimate of the value of the works will need to be completed and submitted to us.

#### **2.4.8 Bonding the works**

We'll also require you to lodge a bond when you work on or will impact one of our existing assets. Read our [Bonding of works policy and guidelines](#) for details.

#### **2.4.9 Flow management plan**

Your WSC will need to prepare a flow management plan that meets our requirements and is submitted for approval when applicable. It specifies minimum requirements for safe isolation and/or flow management of hydraulic assets in order to control the risk of flooding or engulfment.

#### **2.4.10 Inspection and testing plan**

Your WSC, in conjunction with the designer and constructor, will need to prepare an Inspection and testing plan for use during construction and commissioning. This will need to be submitted to us for review. It will also inform the project manager and constructor of what is required for quality control during the delivery of the works.



## 2.5 Delivery

### 2.5.1 Engage a constructor

You'll need to engage an accredited constructor to do the work. A list of constructors is available on the [Provider](#) page of our website.

Your WSC can help you prepare a scope of works and tender brief documents, so you can seek costs from a range of constructors.

If we're paying for any of the works, you must follow our procurement guidelines. To find out more, talk to your WSC.

### 2.5.2 Constructing the works

The WSC manages all aspects of construction. They'll ensure that all quality assurance documents and procedures are complete and that the works meet our requirements.

For the full details of what each provider does, visit the [Provider](#) page in the Plumbing, building & developing section of our website.

### 2.5.3 Variations

During the construction of the projects, issues may arise that require the constructor to seek a variation to the design plan. The constructor must submit all variations to us for approval before they can be done.

### 2.5.4 System shutdowns/connections

To connect to our live system, system shutdowns will need to be arranged. We're required to provide advanced information to affected customers of shutdowns in their areas. The flow management plan will assist in determining the affected customers. The constructor in conjunction with the WSC will need to program these shutdowns. See the [Provider](#) instructions for timeframes.

Where multiple shutdowns may occur in an area, we require a program of the shutdowns for review, so we can advise on the best ways to minimise the effect on our customers and reduce the time for the project completion.

### 2.5.5 Testing

All major works require testing before we will take ownership of the mains. Refer to provider instructions for requirements.

### 2.5.6 Disinfection

When working on water or recycled water mains, the constructor will need to employ a Field tester before charging any asset. The WSC will need to notify us of the main to be used to supply the water for charging and the date and time it is to be used. Refer to the [Provider](#) instructions for requirements.



After the main is charged, we will undertake a disinfection and chemical analysis at the client's cost. The tests will be repeated, at the client's cost, until the results pass our standards, refer to the [Provider](#) page for more information on timings and method.

### 2.5.7 Large projects

Sometimes during large projects, you may need to adjust our assets over two parts, to match your project construction program, as our works will need to be moved/protected before your project can proceed. These may be an extended period apart depending on the staging and timing of your project.

**Part 1:** Adjust underground assets to maintain a supply service to our customers

**Part 2:** Adjust all fittings to finalised surface levels to meet operating and maintenance requirements

### 2.5.8 Operating and maintenance

While you're working on our assets, we need to maintain access to them in the case of an emergency or for operational reasons. This may mean coming onto your construction site at any time.

### 2.5.9 Easements/Land transfer

If you need to create an easement over one of our water or wastewater pipes, or transfer land to us, you must use our instructions and forms. To see the easement/land forms or guidelines, visit the [Provider](#) page in the Plumbing, building & developing section of our website.

## 2.6 Finalisation

Before completing the works, the WSC will need to arrange a final inspection of works and prepare a Project completion package to submit to Sydney Water, see the [Provider](#) page for more information.

We'll check to see if you've met all requirements in the Letter of requirements. Where you were required to affect our assets, we'll check that everything has been completed before taking ownership of the works.

We'll then tell you about any costs to be paid. These may include reviews for design, isolation and test plan and flow management, as well as costs for shutdowns and inspections.

After the costs have been paid, we'll refund any outstanding bonds.

## 3 Policies

The basis for all our adjustment requirements is our policies.



Where needed, we've added guidelines to a policy to help explain how we apply the policies within the process.

To look at the policy and guideline documents, visit the [Land development](#) page in the Plumbing, building & developing section of our website.

### 3.1 Policies

- [Property development connection requirements policy and guidelines](#) – details how your development must connect to our water and wastewater systems.
- [Funding infrastructure to service growth policy](#) – explains how works required for your development are funded.
- [Bonding of works policy and guidelines](#) – explains when we allow and require bonding
- [Entry onto third party property policy and guidelines](#) – explains what we require you to do to enter someone else's land, if you need to build minor, major or complex works.

## 4 Fees and charges

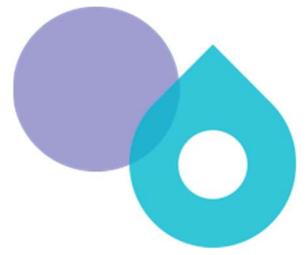
The following charges may directly relate to your application:

- Feasibility application
- Developer investigation fee
- Design and construct contract administration
- Operations area charges
- Water main adjustment application
- Wastewater (sewer) main adjustment application
- Disuse of sewer application
- Building plan approval.

For details about these and all other charges, visit the [Land development](#) page in the Plumbing, building & developing section of our website.

## 5 Instructions and forms

To see the instructions or forms, visit the [Provider](#) page in the Plumbing, building & developing section of our website.



## 6 Definitions

Term	Meaning
Advice letter	A letter issued by us about Feasibility applications, adjustments/deviations and building plan approval applications.
Application	Wastewater (sewer) main adjustment application, water main adjustment application or road closure application.
Bond	Money given to us before the developer meets our conditions. The money covers the cost of constructing the works and related fees and charges. It is usually in the form of a bank guarantee or cash.
Building plan approval	Application for approval of building/development plans to check if the proposed construction affects our pipes, structures or assets.
Deed poll	A deed executed by only one listed provider party, engaged after the <i>Developer works deed</i> is executed.
Design	The design prepared by the designer and included as part of the design package.
Designer	The listed provider who will design and specify classes of infrastructure for the developer works.
Developer	Someone who has hired a water servicing coordinator (WSC) to make an e-Developer application to adjust, deviate or extend an existing Sydney Water asset, this may include Federal/State/Local Government agencies or utilities.
Developer works deed	The deed for performing the developer works, including these standard terms, any other documents it refers to and any attachments.
e-Developer	Our web-based software that coordinators use to manage and distribute applications and related documents about developer activity.
HYDRA	Our computerised geographic information system.
Job-specific schedule letter	A letter issued by us releasing the design package and detailing any conditions for construction.
National codes	The codes and documents published by the Water Services Association of Australia and entitled respectively <i>Water Reticulation Code of Australia</i> and <i>Sewerage Code of Australia</i> , and other codes and documents as

	applied to providing water infrastructure and published from time-to-time by the Standards Association of Australia.
Letter of requirements	A letter issued by us stating requirements that must be met. These may include paying charges and constructing or protecting works.
Providers	Companies or people listed by us to design, construct or project manage applications and any works required. Also referred to as 'developer infrastructure providers'.
Standards	The Building Code of Australia, Australian Standards and National Codes by the Water Services Association of Australia. Also includes any other documents published or adopted by Sydney Water that set out requirements for designing, constructing, manufacturing and supplying works or products.
Water servicing coordinator (WSC)	The listed provider who will manage the design and construction of any water, wastewater or stormwater works and asset protection.
Works	As defined in Section 3(1) of the <i>Sydney Water Act 1994</i> .