

## Asset adjustment and protection manual

Managing new development process



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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 the project's needs, Sydney Water's systems may be required to be adjusted, amplified or protected to so the services used by our customers are maintained.

This manual provides comprehensive information about how Sydney Water's 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 comprises a group of tasks that need to be completed when Sydney Water systems need to be extended, adjusted, amplified or protected because of development or other construction activity. The following table lists the tasks within the process phases, undertaken by you, your service provider or Sydney Water, which may be required depending on your need.

Phase	Description
<a href="#">Concept</a>	High level review of project, potential assets impacted identified, planning approvals assessed
<a href="#">Define</a>	A water service coordinator is appointed, the formal application is made, system capability assessment undertaken and a Letter of requirements issued
<a href="#">Design</a>	An approved designer prepares plans for Sydney Water review, based on approved standards and the conditions in the Letter of requirements
<a href="#">Delivery</a>	Procurement, construction, shutdowns, connections and inspections
<a href="#">Finalisation</a>	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 are first considering a project you can review our network layout via the Dial before You Dig portal. 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 Sydney Water about your project before beginning detailed design and planning work, to see what Sydney Water assets may be in the area of your project and what conditions need to be met, so these can be included in your design.

You can seek advice and organise a meeting with Sydney Water by sending us a message via the [Asset Services](#) email found on the Plumbing, building & developing section of our website.

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

- project background and description
- project timeframes
- concept options.

Additionally you may be requiring Sydney Water input into Planning Approvals you are undertaking from a stakeholder point of view. Sydney Water can provide advice on our systems and what conditions will need to be considered as part of your work.

## 2.3 Define

### 2.3.1 Lodging your application

Applications must be submitted to Sydney Water electronically through the e-Developer system. You must engage a licensed [water servicing coordinator](#) to do this for you.

The coordinator will act on your behalf in all dealings with Sydney Water. They will 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 coordinators, 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 Sydney Water's systems
- engineering details and proposed design solutions.

### 2.3.3 Letter of requirements

After Sydney Water assesses the application information a Letter of requirements will be issued. The Letter of requirements sets down any requirements that you must meet as part of the Sydney Water identified works. The letter is based on our assessment of how your proposal may affect our water, wastewater, recycled water and stormwater systems.

Once the letter is issued, you have 12 months to meet the requirements, otherwise you must submit a new application and pay another application fee.

### 2.3.4 Timeframe

Sydney Water will generally issue the Letter of requirements within 30 days of receiving your application. For more complex cases, it may take up to 60 days. The notice will be sent electronically to your water servicing coordinator.

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

### 2.3.5 Types of requirements

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

Requirement	Circumstances where this applies
<b>Adjustment</b>	Your project design requires Sydney Water's assets to be moved to an alternate location.
<b>Amplification</b>	To meet future demand requirements from growth across the Sydney Water area of operations, additional capacity in our system may be required. When works are being adjusted we may request them to be increased in size as well.
<b>Protection</b>	Your project design allows Sydney Water's assets to remain in location, however protection of the asset will be required to ensure it is not impacted on by the project.
<b>Sign an agreement</b>	You need to work on our system, therefore you must enter into an <a href="#">agreement</a> with us (see section 2.4.3).
<b>Bonding</b>	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 are not able to complete the works.
<b>Funding</b>	Based on our <a href="#">Funding Infrastructure to Service Growth Policy</a> .
<b>Other</b>	Additional information determined on a case by case basis.

#### Comments:

- Depending on your project, you may require additional approvals, which we will detail in the letter of requirements. These may include Building over asset approvals which detail the requirements for a building next to our assets.
- Sydney Water 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 will 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.

## 2.3 Design

### 2.3.1 Agreement

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

- water servicing coordinator
- designer
- constructor

You and your providers must enter into an agreement with Sydney Water, 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 Sydney Water's systems.

### 2.3.2 Engage a water servicing coordinator

First, decide whether you want to retain your water servicing coordinator for the rest of the application as the key portal to Sydney Water. 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.

### 2.3.3 Engage a designer

You will then need to engage a designer. Depending on the type of works you propose, some water servicing coordinators may be able to supply this service. Select them from our listed providers on our website. Your water servicing coordinator can assist you with this.

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 to undertake structural, geotechnical, civil, mechanical or electrical investigations on your behalf. Your designer will be able to advise if this is required.

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

### 2.3.4 Signing of agreements

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

**You are 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 Sydney Water's and your listed provider's responsibilities.

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

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

### 2.3.5 Designing the works

A design package must be lodged with Sydney Water before construction starts, based on the relevant codes and standards. The designer prepares this design for the coordinator to submit to Sydney Water together with any documents and forms they need to support the design.

Supporting documentation may include; asset location confirmation, geotechnical information, structural assessments, survey data, loading impacts, asset clearance, asset protection option assessment and onsite constraints.

We will 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 will send the coordinator a Job Specific Schedule letter telling them this. We will also explain our costs and any other requirements for the rest of the process.

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

#### Entering onto third party property

Before you or your providers enter a third party's property - that is, someone else's property other than your own - to design or construct **any** works, you must first have the written permission of the property owner or the tenant.

This permission is obtained when they sign our Permission to enter form. The signed Permission to enter form **must** be given to Sydney Water **before** construction starts.

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

### 2.3.6 Hydraulic modelling

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

Additionally, the water servicing coordinator may need the hydraulic modelling consultant's services to determine the requirements for developing the flow management plan (see section 2.3.9).

The designer in consultation with Sydney Water will be able to confirm when this is required and who can undertake the work.

### 2.3.7 Paying for the works and charges

Generally, you pay for the full cost of the works, but Sydney Water may pay for some. We will tell you if we will make a payment, either in our Letter of Requirements or in our Job Specific Schedule letter to the water servicing coordinator about the design, as it may not become clear until the design is progressing and the extent of works are known.

We will 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 Sydney Water. This will also assist during the delivery phase of the process, see section 2.4.1.



### 2.3.8 Bonding the works

We will 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.

### 2.3.9 Flow management plan

Your coordinator will need to prepare a flow management plan that meets Sydney Water's 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.

### 2.3.10 Inspection and testing plan

Your coordinator, 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.

## 2.4 Delivery

### 2.4.1 Engage a constructor

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

Your water servicing coordinator can assist in preparing a scope of works and tender brief documents for you to seek costs from a range of constructors.

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

### 2.4.2 Constructing the works

The water servicing coordinator manages all aspects of construction. They will ensure that all quality assurance documents and procedures are complete and that the work meets Sydney Water's requirements.

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

### 2.4.3 Variations

During the construction of the projects, issues may arise that require the constructor to seek a variation to the design plan. All variations must be submitted to Sydney Water for approval before being undertaken.

### 2.4.4 System shutdowns/connections

To connect to our live system, system shutdowns will need to be arranged. Sydney Water is 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 water servicing coordinator will need to program for these shutdowns to occur, see the [Provider](#) instructions for timeframes.

Where multiple shutdowns may occur in an area, Sydney Water requires 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.

#### 2.4.5 Testing

All major works require testing prior to Sydney Water taking ownership of the mains. Refer to provider instructions for requirements.

#### 2.4.6 Disinfection

When working on water or recycled water mains, the constructor will need to employ a Field tester prior to the charging of any asset. The water servicing coordinator will need to notify Sydney Water 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, Sydney Water 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 Sydney Water's standards, refer to the [Provider](#) page for more information on timings and method.

#### 2.4.7 Large projects

Sometimes during large projects the adjustment of our assets may be undertaken 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

#### 2.4.8 Operating and maintenance

While you are undertaking the works on our assets, we will 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.

#### 2.4.9 Easements/Land transfer

If you need to create an easement over one of our water or wastewater pipes, or transfer land to Sydney Water, 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.

### 2.5 Finalisation

Before completing the works, the water servicing coordinator 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.

Sydney Water will check to see if all requirements set out in the Letter of requirements have been met. Where you were required to affect our assets, Sydney Water will check that everything has been completed before taking ownership of the works.

We will 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 will refund any outstanding bonds.

## 3 Policies

The basis for all of Sydney Water's adjustment requirements is our policies. These are listed below.

Where needed, we have 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.

- *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 Sydney Water allows and requires bonding
- *Entry onto Third Party Property Policy and Guidelines*- explains what Sydney Water requires you to do to gain entry to 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
- 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
<b>Advice letter</b>	A letter issued by Sydney Water about Feasibility applications, adjustments/deviations and building plan approval applications.
<b>Application</b>	Sewer main adjustment application, Water main adjustment application or Road closure application.
<b>Application fee</b>	The IPART determined fees that apply to applications.
<b>Bond</b>	Money given to Sydney Water before the developer meets Sydney Water's 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.
<b>Building plan approval</b>	Application for approval of building/development plans to check if the proposed construction affects Sydney Water's pipes, structures or assets.
<b>Constructor</b>	The listed provider who will build the developer works.
<b>Coordinator</b>	See water servicing coordinator
<b>Deed poll</b>	A deed executed by only one listed provider party, engaged after the Developer works deed is executed.
<b>Design</b>	The design prepared by the designer and included as part of the design package.
<b>Designer</b>	The listed provider who will design, and specify classes of infrastructure for the developer works.
<b>Developer</b>	Someone who has hired a water servicing coordinator 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.
<b>Developer works deed</b>	The deed for performing the developer works, including these standard terms, any other documents it refers to and any attachments.
<b>e-Developer</b>	Sydney Water's web-based software that coordinators use to manage and distribute applications and related documents about developer activity.
<b>HYDRA</b>	Sydney Water's computerised geographic information system.
<b>Job specific schedule letter</b>	A letter issued by Sydney Water releasing the design package and detailing any conditions for construction.
<b>National codes</b>	The codes and documents published by the Water Services Association of Australia and entitled respectively Water Reticulation Code of Australia and Sewerage Code of Australia, and other codes and documents as applied to providing water infrastructure and published from time to time by the Standards Association of Australia.
<b>Letter of requirements</b>	A letter issued by Sydney Water stating requirements that must be met. Requirements may include paying charges and constructing or protecting works.
<b>Providers</b>	Companies or people listed by Sydney Water to design, construct or project manage applications and any works required. Also referred to as Developer infrastructure providers.
<b>Standards</b>	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.
<b>Water servicing coordinator</b>	The listed provider who will manage the design and construction of any water, wastewater or stormwater works and asset protection.
<b>Works</b>	As defined in Section 3(1) of the <i>Sydney Water Act 1994</i> .