

# Land Development Policies and Pricing Manual

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# Land Development Policies and Pricing Manual

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# Land Development Policies and Pricing Manual

## 1 About this manual

### 1.1 Introduction

This manual contains information about South East Water's policies, fees and charges applicable for water, recycled water and sewerage services for land development projects which conforms with the South East Water 2018 Price Determination and any Guideline issued by the Essential Services Commission.

It details cost recovery, construction, quality assurance and audit policy for land development activities.

The policies in this manual refer to standard subdivisional developments.

This manual should be read in conjunction with the Development Agreement, issued by South East Water with each land development project.

A copy of the Development Agreement can be obtained at [www.southeastwater.com.au](http://www.southeastwater.com.au)

### 1.2 Scope

The policies in this manual refer to standard development projects and **apply to approximately 90 per cent of development proposals**. Where these policies are inappropriate for a particular development, South East Water will determine the requirements for that development on a case-by-case basis.

Any requirements, conditions, contributions or fees not listed in this manual will be included in the Development Agreement on a case-by-case basis.

### 1.3 Intended audience

This manual has been written for all engineering consultants, contractors, surveyors, developers, landowners, local councils and South East Water personnel involved with the land development industry.

### 1.4 Related reference material

The references section of this document provides guidelines and supports the information contained in this manual. The lists are not exhaustive and developers, engineering consultants and contractors should ensure they have access to, obtain, or research the references applicable to each project.

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## 1.6 Definitions

12 (1) Easement	An easement shown by dimensions on the property title plan, specifying what and to whom an acquired right or privilege is given which conforms to section 12 (1) of the Subdivision Act 1988.
12 (2) Easement	An easement for the benefit of lots necessary to provide passage or provision of water supply, recycled water or sewerage over land or buildings in a subdivision. The easement is specified in words, not dimensions, on a plan of subdivision and conforms to section 12 (2) of the Subdivision Act 1988.
Acceptance of Works Certificate	A letter issued by South East Water once it is satisfied that the Development Works have been satisfactory completed and has the meaning given in Clause 1.1 of Schedule 2 to the Development Agreement. This signifies the beginning of the end of defects liability period. On a case by case basis, a partial Acceptance of Works may be issued by South East Water for a project component of works (eg. Sewer or Water)
Accreditation Deeds	The Consultant Accreditation Deed and the Contractor Accreditation Deed which govern the process by which suppliers are accredited by South East Water.
Accredited Consultant	A consultant approved in accordance with South East Water's Accreditation Deeds.
Accredited Contractor	A contractor approved in accordance with South East Water's Accreditation Deeds.
Approved Products List	The list of products approved by South East Water to be used in the Development Works. This list is available at <a href="http://www.southeastwater.com.au">www.southeastwater.com.au</a> as updated from time to time.
Approved Unconditional Undertaking	The form of unconditional undertaking set out in Schedule 3 of the Development Agreement and can be used for the works warranty bond and bonding outstanding Development Works.
As-constructed Information	The survey information describing the type, size and location of the newly completed Development Works.

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Audit	A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives and has the meaning given in Clause 1.1 of the Accreditation Deeds.
Asset	A South East Water water main, recycled water main, sewer pipeline or associated structure (e.g. pump station or water tank).
Boundary Realignment	A minor boundary amendment to a Plan of Subdivision that does not increase the number of lots.
Breathing zone	A hemisphere of 300 millimetres radius extending in front of a person's face measured from the mid-point of an imaginary straight line joining the ears. <sup>1</sup>
Catchment	An area of land serviced by a particular sewerage system.
Certificate of Completion	A letter issued by South East Water at the successful completion of the end of defects liability period and has the meaning given in Clause 1.1 of Schedule 2 to the Development Agreement. This signifies the beginning of the two (2) year warranty period.
Certification Referral	The referral of the plan of subdivision by the Responsible Authority to South East Water for comment.
Commencement Date	The date that South East Water executes the Development Agreement.
Combined/Encroaching Private Sewerage Drain	Privately owned and maintained sanitary drains servicing one or more properties laid outside the curtilage of the properties being serviced by that drain.
Confined Space Entry (CSE)	Entry to a confined space occurs when a part of the body enters the space and there is a risk the person may be overcome or incapacitated by the conditions within the space. <sup>2</sup>
Connection Point	The intersection of South East Water's asset and the private service for a lot.
Consent to Statement of Compliance	A notice issued by South East Water to the appropriate Responsible Authority that it consents to issuing of a Statement of Compliance under section 21 of the Subdivision Act 1998 with respect to the Development.
Consolidation (of lots)	The combination of two or more lots to create one lot.
Construction Auditor (Consultant)	The person who has adequate training and experience (as stated in the Accreditation Deed). The Construction Auditor will undertake construction auditing in accordance with the audit schedule to obtain confidence that allocated Development Works are carried out and

<sup>1</sup> Regulation 5 (Definitions) of the OHS Regulations 2017 (Victoria)

<sup>2</sup> Note in paragraph 7 of the WorkSafe Victoria Compliance Code Confined Spaces



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	completed in accordance with the relevant design codes/ or South East Water's requirements relating to construction of the Development Works.
Construction Requirements	Any construction requirements specified by South East Water in clause 10 of the Development Agreement and Schedule 4 to the Development Agreement.
Construction Supervisor	The foreman or construction manager who has adequate training and experience (as listed in 'Key Personnel' as defined in clause 1.1 of the Accreditation Deeds) to carry out duties in a competent manner and give onsite training and instruction to employees under that persons control. The Construction Supervisor will properly supervise all construction activities for the Development Works.
Construction Verification Form	The form that is required to be lodged under clause 3.3 of Schedule 4 of the Development Agreement by the consultant verifying that the Development Works have been constructed in accordance with the Development Agreement requirements.
Consultant	Has the same meaning as <i>Accredited Consultant</i> .
Contractor	Includes the Water Contractor and Sewer Contractor and has the same meaning as <i>Accredited Contractor</i> .
Day	Calendar day.
Defects Liability Period	The period from the date of issuing an Acceptance of Works Certificate until a Certificate of Completion is issued and has the meaning given in Clause 7 of the Development Agreement and Clause 1.1 of Schedule 2 to the Development Agreement.
Design Documents	The drawings, specifications and other information, samples, models, patterns and the like required by the Development Agreement and created (and including, where the context so requires, those to be created by the Consultant or Contractor) for the construction of the Development Works.
Design Requirements	Any design requirements specified by South East Water in Schedule 4 of the Development Agreement.
Design Verification Form	The form that is required to be lodged under clause 3.3 of Schedule 4 of the Development Agreement by the consultant verifying that the Development Works have been designed in accordance with the Development Agreement's requirements.
Developed Lot	A lot on which buildings, paving, driveways and the like have been constructed and connected to South East Water assets.
Developer	The person/ company entitled to execute a transfer of the land. The developer may be the land owner, developer or the subdivision owner.
Developer's	The Developer's Representative as appointed under the Development

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Representative	Agreement.
Development	The land development project undertaken by the Developer as described in Development Agreement.
Development Agreement	The deed entered into by the parties, by execution of the Development Agreement.
Development Works	The works to be designed and constructed under the Development Agreement for the supply of water, recycled water (where applicable) and sewerage assets and infrastructure to service each lot, and includes any works undertaken in response to a notice issued by South East Water during the Defects Liability and warranty Periods.
Development Works Application	The application by the Developer to South East Water to undertake the Development Works.
Discharge	The volume of fluid per unit time flowing from a pipe.
Dual Occupancy	Two dwellings on one lot.
Easement	Has the meaning described under 12 (1) and 12 (2) easements above.
Eduction	The process of pumping out sewage and transferring it to a point of disposal. Eduction is usually carried out because the permanent outlet is still under construction.
Encumbrance	Anything within the scope of South East Water activities affecting a property that would not be disclosed by a search at Land Victoria.
End of Defects Liability Period Verification Form	The form that is required to be lodged by the consultant at the completion of the defects liability period as described in Clause 3.3 of Schedule 4 to the Development Agreement.
EPA	Environment Protection Authority
ESC	Essential Services Commission
Fronted by (water/ recycled water main and/ or sewer)	To have a water main abutting the property boundary that provides for a legal water/ recycled water tapping and/ or sewer connection.
Formal Instrument	The formal instrument executed by the parties regarding the Development Works.
Gravity Control	A sewer deep enough to enable sewerage to be discharged under gravity flow.
Intensive Audit	Audits undertaken due to the unsatisfactory performance of a consultant or contractor. The performance is measured by assessing a consultant's or contractor's conformance with the quality system and South East Water requirements.
Internal Services	Water/ recycled water pipes or sewers owned and operated by private lot owners. See also <i>Private Service</i> .

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Issue	An issue identified in an audit where a root cause and corrective action required is to be provided to resolve the matter. Preventative action may also be requested to ensure similar issues do not occur for future projects.
Key Personnel	Personnel, subcontractors or agents of an Accredited Contractor and/ or Accredited Consultant who have gained training and skills and hold qualifications and permits to carry out specified key roles of the Accredited Contractor and/ or Accredited Consultant undertaking land development works or services.
Live Asset	Any pipe or other infrastructure which, at the relevant time: (a) is carrying water, recycled water or sewage: and (b) is in operation, and has not been isolated from other Live Assets by means of a plug, break, other blocking device or otherwise in accordance with South East Water's confined space entry procedure.
Lot	An area within the Development that is capable of being separately metered for, sewer, water or recycled water supply purposes.
Main	Any pipe vested in, belonging to, or under the control of South East Water and used for conveying sewage, drinking water or recycled water, also known as the sewerage, water or recycled water main.
Maintenance Structure	A generic term that covers the following types of structures: <ul style="list-style-type: none"> <li>• Maintenance Hole (formerly known as a Manhole) – greater than 1,000 mm diameter</li> <li>• Maintenance Chamber – between 450 and 1,000 mm diameter</li> <li>• Maintenance Shaft – between 300 and 450 mm diameter</li> <li>• Inspection Shaft - between 150 and 300 mm diameter.</li> </ul>
MRWA/ WITS Survey Manual	Also known as the <i>Water Industry Technical Standards Survey Specifications</i> and is the manual that sets out the standards for the format of as-constructed information forwarded to South East Water.
Multi-Unit Development	More than two dwellings on one lot.
New Customer Contributions (NCC's)	Are applied on a per lot basis, and may be levied on any connection of a new customer that is separately titled or is, or can be, individually metered.  In recognition of the amount of capacity required to service each connection where a new non-residential lot is created, that is 50mm water connection or greater, the NCC's (water, sewer and recycled water) payable will be the multiple of the applicable NCC and the number of equivalent 20mm connections.
Non-works	Where construction of South East Water's reticulated water, recycled water and sewer system is not required in order to service a

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	development. For example, some sewer branches and water/ recycled water tapplings are considered to be non-works.
Offer Letter	The 'Offer Letter' as defined by clause 1.1 of Schedule 2 of the Development Agreement.
OH&S	Occupational health and safety
Original Parent Property	The property title on which the development occurs.
Out-of-sequence Development	A development that requires connecting works through future subdividable land.
Owners Corporation	The entity that is created as part of a plan of subdivision in accordance with the <i>Owners Corporations Act 2006</i> . The Owners Corporation is responsible for the maintenance and administration of any common property and/ or common services. For example, the Owners Corporation is responsible for any private water/ recycled water or sewers within the plan of subdivision.
Owner	Has the same meaning as <i>Developer</i> .
Parent Lot	The lot that existed immediately prior to initial subdivision. See also <i>Original Parent Property</i> .
Plan of Subdivision	The plan of subdivision relating to the Development.
Pre-construction Verification Form	The form that is required to be lodged by the consultant prior to the construction supplying details involving the construction of the Development Works and specifying the proposed commencement of works.
Price Determination	The ESC's price determination for South East Water applicable at the commencement date, as amended from time to time within the period of the determination.
Private Services	Has the same meaning as <i>Internal Services</i> .
Recycled Water	Treated effluent typically to a Class 'A' standard.
Reserve	Land that is set aside for public use. Reserves include general public open space, nature reserves, tree reserves, parks, public gardens, recreation reserves, sporting reserves, drainage reserves and sewerage reserves.
Reticulated Assets	Has the meaning detailed in Clause <a href="#">2.3.1</a> of this manual.
Responsible Authority	A responsible authority under the <i>Planning and Environment Act 1987 (Victoria)</i> .
Schedule	A schedule to the Development Agreement.
Shared Assets	Has the meaning detailed in the <a href="#">Contributions policy</a> section of this manual.

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Shared Works	The Shared Assets and the Temporary Shared Works.
Stage Lot	An area of land that will be subdivided into further lots. Also known as a super lot.
Super Lot	An area of land that is intended to be subdivided into further lots. Also known as a stage lot. A super lot must be defined on a plan of subdivision so that it cannot be developed without further subdivision or referral of the plan to South East Water for approval.
Tapping	The connection of the internal water service to South East Water's water and/ or recycled water main.
Temporary Reticulation Works	Has the meaning detailed in the <a href="#">Contributions policy</a> section of this manual.
Temporary Shared Works	Has the meaning detailed in the <a href="#">Contributions policy</a> section of this manual.
Town Planning Permit	The permit required under the <i>Planning and Environment Act 1987 (Victoria)</i> for a use or development of the land.
Two Lot Subdivision	The subdivision of one lot into two lots.
Unprotected edge	The edge of a surface from which there is a horizontal gap, void or space of more than 300 millimetres and which is not provided with a barrier to prevent a fall. <sup>3</sup>
Working day	a calendar day exclusive of: (a) Saturdays, Sundays, or any day that has been gazetted or proclaimed to be a public holiday in Victoria; and (b) any day on which banks in Victoria are closed for business.
Works Warranty Bond	The unconditional undertaking (bank guarantee) or cash deposit lodged by the Developer to cover faults during the Works Warranty Period and has the meaning given in Clause 1.1 of Schedule 2 to the Development Agreement.
Warranty Period	The two year period from the date a Certificate of Completion is issued and has the meaning given in Clause 1.1 of Schedule 2 to the Development Agreement.

<sup>3</sup> Regulation 5 (Definitions) of the OHS Regulations 2017 (Victoria)

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## 1.7 Disputes

South East Water endeavours to treat all its customers in a fair and reasonable manner. If a difference or dispute arises between two or more of the parties under or in relation to this document or its subject matter, they agree to seek, in good faith, to resolve the matter by negotiations between them.

When a difference or dispute is made about a matter specified in the notice contact should be made in the first instance to the Group Manager Land Development, South East Water for an explanation and resolution.

If a satisfactory outcome is not derived a dispute resolution process is detailed in Clause 25 of the Development Agreement.

## 1.8 Business approach

This section lists the business, environmental and occupational health and safety principles by which South East Water operates. Consultants, contractors and developers should consider these principles when conducting their business.

## 1.9 Business Principles

South East Water adheres to the following business principles.

- Management of water, recycled water and sewerage services to the land development industry within our licence area is a discrete business of South East Water.
- Management and application of policies for the provision of water, recycled water and sewerage services to the land development industry is consistent throughout all areas of South East Water.
- South East Water provides all land development customers with the same fundamental level of service for comparable products.
- Arrangements with the land development industry that vary from established policy must not financially disadvantage South East Water or services to other customers.
- South East Water requires the development and implementation of quality systems for the manufacture, supply and construction of assets.
- South East Water recognises that it is a partner in an industry comprising responsible authorities and planners, landowners or developers, consultants, contractors and suppliers.
- South East Water is implementing impartial, equitable, simple and practical land development policies and procedures that promote good performance and efficiency.
- South East Water's land development standards provide environmentally sustainable development and quality asset management.

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## 1.10 Quality systems and standards

South East Water will achieve these principles through the commitment of our staff, and the use of our quality and environmental management systems.

- Our *Quality System* has been certified by Quality Assurance Services (Certified No.QEC6835) and is maintained in accordance with the ISO 9001 – 2016 Standard.
- Our *Environment Management System*, which is integrated into our Quality System, has also been certified by Quality Assurance Services (Certified No. C0054) and is maintained in accordance with the ISO 14001 Standard.
- Our *Occupational Health & Safety Management System* has also been certified by Quality Assurance Services (Certified No. OHS00052) and is maintained in accordance with the AS/ NZS 4801 - 2001 Standard.
- Our *Hazards And Critical Control Point (HACCP)* system for the supply of drinking water, which is integrated into our Quality System, has also been certified by Quality Assurance Services (Licence No. HCV00191) and is maintained in accordance with the HACCP Standard.
- South East Water operates under a *Licence for Water and Sewerage*, reporting to the Essential Services Commission. Resolution of customer complaints is facilitated by the Energy and Water Ombudsman (Victoria) Limited and the Victorian Civil Administrative Tribunal.

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## 2 POLICY

### 2.1 Subdivisional servicing policy

This policy describes the provision of South East Water sewerage, water and recycled water services to land developments. The owners of all developments must arrange for the design, construction and survey of the works in accordance with the Development Agreement and South East Water's policy requirements.

All works must be designed and constructed in accordance with the Occupational Health and Safety legislation, and the State Environment Protection Policy requirements.

#### 2.1.1 Residential subdivisions (without an owners corporation)

As a referral authority, South East Water will respond to the responsible authority that the provision of water, recycled water (where mandated) and sewerage services to new residential developments is based on the following criteria:

Subdivisions with an abutting water, recycled water or sewer asset must provide each lot with water and sewerage facilities regardless of the proposed lot size.

Should a subdivision not abut a water, recycled water or sewer asset, South East Water will assess, according to the criteria outlined below, whether it must be provided with water, recycled water or sewer facilities.

Assets must be constructed from boundary to boundary of the parent lot and must cater for the capacity of future water supply zones and sewer catchments, as directed by South East Water.

Should a subdivision not be provided with sewer it must comply with the *State Environment Protection Policy (Waters of Victoria)*.

##### 2.1.1.1 Up to 0.4 hectare lot subdivision (residential)

Subdivided lots up to 0.4 hectares in area must be provided with reticulated water, recycled water (within mandated recycled water areas) and sewerage.

Exceptions may be considered for:

- subdivisions that are remote from the water supply, recycled water and sewerage system;
- specified super lots or stage lots of a subdivision deemed able to be further subdivided.

South East Water may consider withdrawing the condition that reticulated sewerage be provided if:

- a) the relevant Council advises South East Water in writing that:

*"it is satisfied that, in the long term, all domestic sewerage can be adequately treated"*



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*and retained within the boundaries of each lot without danger to public health or the environment, in accordance with the State Environment Protection Policy (Waters of Victoria)”; and*

- b) the owner, the relevant Council and South East Water enter into an agreement under section 173 of the *Planning and Environment Act 1987 (Victoria)*.

In such cases, South East Water will place an encumbrance on its information statement notifying owners and prospective purchasers that this property is not serviced by a South East Water reticulated sewer.

Should reticulated sewerage be required sometime in the future, the cost of extending it to the property will be the responsibility and liability of the individual property owner.

If South East Water provides reticulated sewerage to the land, the owner is required to pay the cost of extending and connecting it, including new customer contribution levies and other charges applicable at the time of connection.

A section 173 Agreement may be entered into with the proviso that, if South East Water provides, agrees to provide, or is legally required to provide reticulated sewerage services to the land, whether pursuant to any agreement, or backlog or other program or scheme or otherwise, the owner will pay the cost of extending and connecting the reticulated sewer and associated works to the land, including pay the cost of any works, and pay the new customer contribution charge and other charges applicable from time to time.

The agreement must be noted on title to advise future purchasers of their contingent obligations and liability.

## **2.1.1.2 0.4 to 1.0 hectare lot subdivision (residential)**

Subdivided lots between 0.4 and 1.0 hectares in area are to be provided with reticulated water, recycled water (within mandated recycled water areas) and sewerage.

### **Water**

Exceptions may be considered for:

- subdivisions that are remote from the water supply system;
- specified super lots or stage lots of a subdivision deemed able to be further subdivided; and
- subdivisions in areas that have been declared by special resolutions to be non-water supply areas.

### **Recycled Water**

Exceptions may be considered for:

- subdivisions that are remote from the recycled water supply system;
- specified super lots or stage lots of a subdivision deemed able to be further subdivided; and

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- subdivisions in areas that have been declared by special resolutions to be non-water supply areas.

## Sewer

Subdivided lots between 0.4 and 1.0 hectares in area are to be provided with a reticulated sewerage service depending on:

- the number of lots in a subdivision;
- the nature of surrounding lots;
- the potential for further development under present land zonings;
- the distance to the nearest sewer that has the capacity and depth to service the development;
- the topography of the land; and
- the geotechnical land reports.

South East Water may consider withdrawing the condition that reticulated sewerage be provided if:

- a) the relevant Council advises South East Water in writing that:

*“it is satisfied that, in the long term, all domestic sewerage can be adequately treated and retained within the boundaries of each lot without danger to public health or the environment, in accordance with the State Environment Protection Policy (Waters of Victoria)”*; and

- b) the owner, the relevant Council and South East Water enter into an agreement under section 173 of the *Planning and Environment Act 1987 (Victoria)*.

In such cases, South East Water will place an encumbrance on its information statement notifying owners and prospective purchasers that this property is not serviced by a South East Water reticulated sewer.

Should reticulated sewerage be required sometime in the future, the cost of extending it to the property will be the responsibility and liability of the individual property owner.

If South East Water provides reticulated sewerage to the land, the owner is required to pay the cost of extending and connecting it, including new customer contribution levies and other charges applicable at the time of connection.

A section 173 Agreement may be entered into with the proviso that, if South East Water provides, agrees to provide, or is legally required to provide reticulated sewerage services to the land, whether pursuant to any agreement, or backlog or other program or scheme or otherwise, the owner will pay the cost of extending and connecting the reticulated sewer and associated works to the land, including pay the cost of any works, and pay the new customer contribution charge and other charges applicable from time to time.

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## 2.1.1.3 1.0 to 4.0 hectare lot subdivision (residential)

Subdivided lots between 1.0 and 4.0 hectares in area may be provided with reticulated water, recycled water (within mandated recycled water areas) but not necessarily with reticulated sewerage.

### Water

Subdivided lots of 1.0 to 4.0 hectares will generally require the provision of a reticulated water supply depending on the:

- number of lots in a subdivision;
- nature of surrounding lots;
- potential for further development under present land zonings; and
- distance to the nearest reticulated water supply system.

Exceptions may be considered for:

- subdivisions that are remote from the water supply system;
- specified super lots or stage lots of a subdivision deemed able to be further subdivided; and
- subdivisions in areas that have been declared by special resolutions to be non-water supply areas.

### Recycled Water

Subdivided lots of 1.0 to 4.0 hectares will generally require the provision of a reticulated recycled water supply (within mandated recycled water areas) depending on the:

- number of lots in a subdivision;
- nature of surrounding lots;
- potential for further development under present land zonings; and
- distance to the nearest reticulated recycled water supply system.

Exceptions may be considered for:

- subdivisions that are remote from the recycled water supply system;
- specified super lots or stage lots of a subdivision deemed able to be further subdivided; and
- subdivisions in areas that have been declared by special resolutions to be non-water supply areas.

### Sewer

For subdivision lots greater than 1.0 hectares in area, South East Water does not usually require a reticulated sewerage service be provided for the issue of a planning permit for subdivision, unless this is requested by council.

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## 2.1.1.4 Greater than 4.0 hectare lot subdivision (residential)

South East Water will generally not require the provision of a reticulated water, recycled water and sewerage service for the issue of a planning permit for subdivision lots greater than 4.0 hectares.

### Water

Where the development is already fronted by a water main, South East Water requires that a reticulated water supply be provided for the issue of a planning permit for subdivision.

Where the development is not yet fronted by a water main, a reticulated water supply is not usually required.

### Recycled Water

Where the development is already fronted by a recycled water main, South East Water requires that a reticulated recycled water supply be provided for the issue of a planning permit for subdivision.

Where the development is not yet fronted by a recycled water main, a reticulated recycled water supply is not usually required.

### Sewer

For subdivision lots greater than 4.0 hectares, South East Water does not usually require a reticulated sewerage service to be provided for the issue of a planning permit for subdivision, unless requested by council.

## 2.1.2 Industrial and commercial subdivisions

Generally, all industrial and commercial subdivisions must be provided with a reticulated water supply, recycled water (if within a designated recycled water area) and sewerage service.

Subdivisions with an abutting water, recycled water or sewer asset must provide each lot with water and sewerage facilities regardless of the proposed lot size.

Assets must be constructed from boundary to boundary of the parent lot and must cater for the capacity of future water supply zones and sewer catchments, as directed by South East Water.

South East Water may consider removing this requirement if the subdivision is remote from existing assets and can meet EPA requirements.

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## 2.1.3 General Subdivisions and boundary realignment

### 2 residential lots

For boundary realignments, where private water supply, recycled water and sewerage services cross property boundaries, a 12 (2) easement for the provision of those services must be established on the Plan of Subdivision. Otherwise, separate connections to each lot will be required.

### Greater than 2 residential lots

Where the development area exceeds two lots and each lot is not separately connected to South East Water's assets, the requirement is either:

- an owners corporation subdivision, or
- reticulated services with separate connections to each lot.

### Industrial and commercial

Where the development is industrial or commercial, an owners corporation subdivision, or reticulated services with separate connections to each lot will be required.

## 2.1.4 Subdivisions with an owners corporation (residential not high rise)

### Owners corporation developments

Unless otherwise required, developers have the choice of either:

- installing common infrastructure to *AS/NZS 3500 and Victorian Plumbing Regulations (2018)*, with the owners corporation owning, operating and maintaining the works, or
- installing common infrastructure to MRWA standards with South East Water owning, operating and maintaining the assets. Individual customers within specific owner's corporation sizes will therefore be provided with the same service specified in the Customer Contract.

### Owners Corporation developments up to 2 units

Common infrastructure must be installed to *AS/NZS 3500 and Victorian Plumbing Regulations (2018)* with the Owners Corporation owning, operating and maintaining the works.

This will apply to all 2-lot developments with common infrastructure but will not take precedence over other servicing requirements such as installation of South East Water assets to service future development or provision of individual connections where the units are fronted/ abutted by a South East Water asset.

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## **Developments fronted by a water, recycled water main and/ or sewer**

Developments fronted/ abutted by a water main, recycled water main and/ or sewer are usually serviced by a single tapping and sewer connection point. The Owners Corporation is responsible for the maintenance, operation and replacement of the private water, recycled water supply and sewerage services except where water, recycled water mains and/ or sewers need to be installed within the subdivision to service other developments. In these cases, the developer must install a water, recycled water main and/ or sewer to be vested in South East Water.

Assets must be constructed from boundary to boundary of the parent lot and must cater for the capacity of future water supply zones and sewer catchments, as directed by South East Water.

Requests for individual tappings and sewer connection points are assessed on a case by case basis.

## **Developments not fronted by a water, recycled water main and/ or sewer**

Where a reticulated service is a condition of the Planning Permit, the developer must extend a water main, recycled water main or sewer to front the parent lot.

Assets must be constructed from boundary to boundary of the parent lot and must cater for the capacity of future water supply zones and sewer catchments, as directed by South East Water.

Internal services are usually provided for in the same way as for *Developments fronted by a water main, recycled water main and/ or sewer*.

## **Subdivision of existing serviced developments**

Existing developments can include ground level and multi-storey units. South East Water does not require the provision of a reticulated water, recycled water and sewerage service for the issuing of a planning permit for the subdivision of existing serviced developments where these developments are serviced to current standards.

The Owners Corporation is responsible for the maintenance, operation and replacement of internal services.

If necessary, an easement needs to be established for the provision of a common service. The easement needs to comply with Section 12 (2) of the Subdivision Act 1988.

Where lots are connected by internal private services, an Owners Corporation is compulsory and will be responsible for maintaining, operating and replacing these services. Otherwise, separate connections to each lot will be required.

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## 2.1.5 Residential two-lot and dual occupancy development

Where a reticulated supply is a condition of the Planning Permit, the water main, recycled water main or sewer must be extended to front each lot.

Section 12(2) or 12(1) easements will only apply to 2-lot residential Plans of Subdivisions where both lots share a common sewer or water connection to a South East Water asset. Any further subdivision will require a separate connection point, an extension of the reticulation to service all lots in the subdivision, or creation of an Owners Corporation for all lots.

### Section 12 (2) easements

Section 12(2) easements may only be utilised for 2 lot subdivisions that won't be further subdivided. If a 12(2) easement is detailed in a Plan of Subdivision, developers may have a joint private service for which they are responsible.

Section 12 (2) easements can only apply to developments where connections to South East Water's assets have been completed or permission for connection is not required.

Further subdivisions of 2-lot residential developments will require a separate connection point, an extension of the reticulation to service all lots in the subdivision, or creation of an Owners Corporation for all lots.

### Section 12 (1) easements

Section 12(1) easements for private property (sewer) drains and private water mains may only be utilised for 2 lot subdivisions.

Section 12 (1) easements must be registered on the Plan of Subdivision in favour of lot(s), allowing future lot developers to connect private property drains to a South East Water asset.

Alternatively, separate connections to all lots in the subdivision may be made, which may involve extension of a South East Water asset to WSAA standards.

Further subdivisions of 2-lot residential developments will require a separate connection point, an extension of the reticulation to service all lots in the subdivision, or creation of an Owners Corporation for all lots.

## 2.1.6 Redevelopment and changes to subdivision

Where existing water, recycled water main and/ or sewer needs to be realigned or abandoned due to the redevelopment or changes to the subdivision of land, the owners must pay all costs associated with such works.

## 2.1.7 Private services

### Property Boundaries

In other than Owner's Corporation or residential two-lot and dual occupancy developments, where a private water, recycled water and/ or sewer service crosses property boundaries, the

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service needs to be disconnected at the property boundary and new tapplings and/ or sewer connection points may be required. This is not necessary within residential 2 lot section 12(2) easements and Owner's Corporation developments.

## **Developments on existing combined/encroaching services**

Where a development is to be constructed on an existing combined/encroaching service (e.g. sewer combined drain, encroaching sewer drain), South East Water requires the developer to establish a separate connection point directly to a South East Water asset and to prevent private drains crossing title boundaries.

This may require an extension of a South East Water reticulated asset or a separate connection point, and the disconnection and subsequent reconnection of properties previously affected by the combined/encroaching service.

The cost of this work will generally be borne by the developer. However, if the new works remove additional properties off the combined/encroaching drain, South East Water may contribute to the costs.

## **Water**

Private (trunk) services are temporary water connections that may be utilised to service properties that are remote from South East Water's water reticulation, but are connected to the water system via a private pipeline.

Developers arrange for the extension of a private service at their own expense under a separate agreement with South East Water. A new customer contribution must be paid upon connection of a private service to a South East Water asset.

South East Water does not maintain or guarantee the service of properties connected to a private service, and does not guarantee the water pressure or water quality at the property boundary. Water pressure and quality can only be guaranteed at the point of connection to a South East Water asset.

A water meter will be installed at point of connection to a South East Water asset and another at the property boundary to measure water consumption.

The new customer contribution for this type of service is based on the number of connections made from the private service.

Private water services are temporary and are required to connect to South East Water's reticulation water supply system when it becomes available and pay any relevant contributions.

## **Recycled Water**

Private water lines are generally only available for 2-lot residential developments utilising section 12 (2) of the *Subdivision Act 1988*.

A new customer contribution may be required to be paid upon connection of a private service to a South East Water asset.



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South East Water does not maintain private services and does not guarantee the service of properties connected by a private service as this can only be guaranteed at the point of connection to a South East Water asset.

## Sewer

Private sewer lines are generally only available for 2-lot residential developments utilising section 12 (2) of the *Subdivision Act 1988*.

Private pump systems may be permitted for single title developments where gravity control of the lot cannot be achieved.

Developers arrange for the extension of a private service at their own expense under a separate agreement with South East Water. A new customer contribution must be paid upon connection of a private service to a South East Water asset.

South East Water does not maintain private services and does not guarantee the service of properties connected by a private service as this can only be guaranteed at the point of connection to a South East Water asset.

## 2.2 Planning permit policy

South East Water's Planning Referral responses to Council in accordance with Section 56 of the Planning and Environment Act 1987 generally requires that any developer of subject land, must enter into an agreement with South East Water to provide water, recycled water and sewer services and meet all requirements to South East Water's satisfaction.

Details of the financial, servicing and special conditions that the developer must meet are described in the Development Agreement.

Developers must meet all of these conditions before South East Water will issue its *consent to the issuing of a Statement of Compliance* to Council, as required by section 57 of the *Subdivision (Procedures) Regulations 1989*.

## 2.3 Contributions policy

The Essential Services Commission (ESC) has specified the manner in which water businesses levy new customer contributions for the period 1 July 2018 to 30 June 2023 and any guidelines issued by the ESC from time to time.

### 2.3.1 Responsibilities

South East Water and developers provide services in accordance with Essential Services Commission's Guidelines as detailed below:

- South East Water is responsible for providing **shared assets and temporary shared works**
- Developers are responsible for providing **reticulation assets and temporary**

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**reticulation works** (these assets are generally known as ‘gifted assets’)

- Developers are responsible for the **financing costs** associated with bringing forward the provision of shared assets and temporary shared works calculated in accordance with Clause [2.3.3](#) of this Manual.
- Developers are responsible for the cost of connecting their development to the South East Water’s shared assets.
- Developers are responsible for the installation and financing of dedicated assets to service their development.

**Definitions – (refer to Essential Services Commission web site for more comprehensive details)** <http://www.esc.vic.gov.au/water>

## Shared assets

Shared assets and associated assets are water (drinking and recycled water assets) and associated asset greater than 150mm in diameter and sewerage assets and associated assets greater than 225mm in diameter and do not include:

- reticulation assets and
- headworks and tailworks.

Headworks and tailworks are infrastructure assets that are owned by a water and sewerage wholesaler (Melbourne Water Corporation) and may include major water supply reservoirs, a raw sewage transfer pump stations, and major waste water purification plants and disposal systems.

## Temporary shared works

Temporary works are not part of South East Water’s current permanent strategic planning for servicing a sewer catchment or water zone.

Temporary shared works are works that are generally provided in relation to services for more than one development and do not include temporary reticulation assets.

Where a developer requires connection before permanent assets can be provided, the water business may require the developer to pay for the most cost efficient servicing solution for providing temporary shared distribution assets or temporary reticulation assets in accordance with the pricing principles for miscellaneous services. This may include provision for the cost of maintenance and other ancillary costs until permanent assets are provided, but in any event for no more than 15 years after installation of the temporary assets.

## Reticulation assets

Reticulation assets include water (drinking and recycled water) assets that are 150mm or less in diameter and sewerage assets that are 225mm or less in diameter, and all associated

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assets including:

- Water or recycled pump stations (where the pump discharges into a water or recycled water main of 150mm or less in diameter);
- Pressure reducing valves (where connected to water or recycled water main of 150mm or less in diameter);
- Water & recycled water tanks (where the outlet main is 150mm or less in diameter);
- Sewer Pump Stations, emergency storage and rising mains (where the gravity sewer inlet to the sewer pump station is less than or equal to 225mm in diameter); and
- Sewer pressure mains where the receiving gravity sewer main is less than or equal to 225mm in diameter.

## Temporary reticulation works

Temporary reticulation works are water or recycled water main that is 150mm or less in diameter and a sewerage main that is 225mm or less in diameter, and all associated assets that relate to these size assets are generally considered to be temporary reticulation works.

The developer is responsible for providing reticulation works at their cost.

## 2.3.2 New customer contributions (NCC)

South East Water may levy NCC by:

- applying an approved **scheduled charge** (See Prices and Charges on South East Water's Website ([www.southeastwater.com.au](http://www.southeastwater.com.au))); or
- seeking a charge in addition to the approved scheduled charge (**Incremental Financing Cost**).

New customer contributions are charged on an allotment basis where a per lot charge means a charge for any connection that is separately titled or is, or can be individually metered.

For new developments or subdivisions, a separate charge can be applied to each prescribed service that is provided to each newly created lot. Where an existing lot has not previously received a prescribed service, a scheduled charge can be applied to that lot in relation to each new prescribed service.

In recognition of the amount of capacity required to service each connection where a new non-residential lot is created, that is 50mm water connection or greater, the NCC's (water, sewer and recycled water) payable will be the multiple of the applicable NCC and the number of equivalent 20mm connections.

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## Credits

*In the case of a lot or lots that have been previously serviced, but the number of lots increases after development, the scheduled charge may be applied to the total number of lots after development (taking into account their size), less the original number of lots (taking into account their size). If the result of this calculation is a scheduled charge less than zero, no refund is payable by the water business. For non-residential customers, NCC's for increased services (above 50mm) will only apply to the incremental change between the two meters.*

Credits cannot be transferred from one property to another. They are generally assessed at current contribution rates.

## Exemptions

There are no exemptions from new customer contributions or associated fees.

However, for lots defined on the Plan of Subdivision as stage or super lots that are deemed to be further subdividable, the new customer contributions may be deferred until the subdivision takes place or an application to connect to water and sewer is received.

If drinking water, recycled water or sewer service is requested after the subdivision has occurred, the new customer contributions must be paid at the current rate.

Contributions are not payable for land set aside for public reserves, retarding basins and the widening of main roads that do not require a drinking water, recycled water or sewerage service at the time of the subdivision.

### 2.3.3 Incremental Financing Cost

An Incremental Financing Cost charge will apply if there is a financing costs associated with South East Water bringing forward the provision of shared assets and/ or temporary shared works.

South East Water has delegated authority to levy Scheduled and Incremental Financing Cost charges from the Essential Services Commission (ESC), the economic regulator of the Victorian Water Industry.

In some circumstances, development proposals require the installation of Shared Assets that South East Water had programmed to construct at a future date. The ESC guidelines also determine that South East Water may levy a charge in addition to the Scheduled Charge that will cover the financing costs associated with bringing forward the provision of Shared Assets. This is referred to as an Incremental Financing Cost charge.

South East Water may assess the project timing against the pricing principles contained in clause 4.3 of its Water Price Determination issued by the ESC and may apply an Incremental Financing Cost charge as detailed in Schedule 7 of the Development Agreement.

If you are not satisfied with South East Water's assessment of the Incremental Financing Cost charge please contact our Land Development Branch. You are also able to appeal the Incremental Financing Cost charge assessment directly to the ESC.

The guideline and other relevant information on our role in regulating New Customer

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Contributions, including a copy of South East Water's Price Determination, is available on the Commission's website, <http://www.esc.vic.gov.au/water>

The process for applying for an Incremental Financing Cost charge is set out in Section 4 of South East Water Determination 1 July 2018 – 30 June 2023, Section 4.3 *Pricing principles New Customer Contributions (NCC)*.

## 2.3.4 Pricing Principles

### 2.3.4.1 Pricing principles New Customer Contributions (NCC)

#### Core pricing principles

NCC, including standard or negotiated NCC, will be calculated by applying the following core NCC pricing principles.

Standard and negotiated NCC will:

- have regard to the incremental infrastructure and associated costs in one or more of the statutory cost categories attributable to a given connection;
- have regard to the incremental future revenues that will be earned from customers at that connection;
- be greater than the avoidable cost of that connection and less than the standalone cost of that connection.

Notes:

1. Given that NCC are to be based on the net incremental cost of connection (i.e. incremental costs net of incremental benefits), in this context, the costs referred to in the efficient pricing bound are the net costs, specifically the avoidable net cost of connection and standalone net cost of connection.
2. Where the connection arrangement requires assets to be gifted, the value of gifted assets will be excluded for the purposes of calculating net costs.
3. Incremental costs may include financing costs associated with constructing an asset sooner than planned.

#### NCC Application

NCC's are applied on a per lot basis, and may be levied on any connection of a new customer that is separately titled or is, or can be, individually metered.

In recognition of the amount of capacity required to service each connection where a new non-residential lot is created, that is 50mm water connection or greater, the NCC's (water, sewer and recycled water) payable will be the multiple of the applicable NCC and the number of equivalent 20mm connections.

#### Incremental financing costs

Incremental financing costs (IFC) should be calculated using this formula:

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$IFC = (1 - [1 / (1+r)^n]) \times \text{cost of capital being provided sooner than planned}$

where:

r = estimated pre-tax WACC (ie: 4.97%)

n = the number of years the asset is required sooner than planned.

## Gifted Assets

South East Water can require developers to provide and gift to South East Water specified assets as a condition of connection, provided that South East Water:

- makes clear to potential developers which assets a developer will be responsible for providing and gifting, and which will be provided by South East Water;
- confirms that negotiation of any non-standard connection and associated charges will be undertaken in accordance with South East Water's (published) negotiating framework; and
- the value of gifted assets will be excluded for the purposes of calculating net costs.

When connecting to South East Water's water (drinking and recycled water) and sewerage networks, the developer must provide the reticulation assets that are required to service their development and connect to South East Water's network. South East Water is responsible for providing shared distribution assets.

Reticulation assets are water (drinking and recycled water) assets and associated assets that are 150mm or less in diameter and sewerage assets and associated assets that are 225mm or less in diameter.

Shared distribution assets and associated assets are water (drinking and recycled water) assets and associated assets greater than 150mm in diameter and sewerage assets and associated assets greater than 225mm in diameter and do not include:

- reticulation assets; or
- headworks and tailworks.

### 2.3.4.2 Backlog sewerage scheme

If a customer requires connection under the backlog sewerage scheme sooner than scheduled, then South East Water may charge an amount to recover any incremental financing costs incurred by it. This amount is to be calculated using the formula shown under section "Incremental financing costs".

### 2.3.4.3 Pricing principles for accelerated backlog sewerage connections

South East Water has made special arrangements for the construction and progressive connection of properties to its sewers in its Mornington Peninsula backlog sewerage area. Forecast connection dates have been determined in consultation with the Mornington

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Peninsula Shire, the Environment Protection Authority and community members.

Affected properties will progressively be declared to be serviced properties for sewerage services under section 144 (1) (b) of the Water Act 1989, once South East Water is in a position to allow all properties in an area to be connected. At that stage, South East Water is authorised to impose the backlog sewerage tariff fee on relevant property owners, as referred to in paragraph 3.9 (a) of Schedule 3 of the Essential Services Commission 2018, South East Water Determination: 1 July 2018 – 30 June 2023.

However, if a property owner:

- a) wishes to bring forward the forecast connection date for a property that is not a serviced property for the purposes of sewerage; and
- b) has entered into an agreement with South East Water to participate in South East Water's accelerated backlog sewerage program for the Mornington Peninsula.

South East Water may impose an accelerated backlog sewerage development tariff fee on the property owner pursuant to section 259 (1) (b) of the Water Act, calculated in accordance with the following formula:

$$ADT = 1 - \left[ \frac{1}{(1+r)^n} \right]$$

*Equation 1: accelerated backlog sewerage development tariff fee formula*

**ADT** is the accelerated backlog sewerage development tariff fee expressed as a percentage and applied to net incremental costs calculated with reference to the principles set in clause 4.3 of schedule 4;

**r** is the estimated pre-tax weighted average cost of capital (i.e. 4.97%); and

**n** is the number of years by which the connection to the backlog sewerage works have been brought forward.

## 2.4 Subdivision requirements policy

Each subdivision plan needs to be individually assessed to determine the necessary requirements. To satisfy South East Water's planning permit conditions the developer may be required to satisfy any or all of the following requirements.

### 2.4.1 Works

The owner of the subdivision will enter into an agreement with South East Water for the design, construction, survey and supply of the as-constructed details of works necessary to supply each lot within a subdivision. Water, recycled water (where applicable) mains and sewers must also be designed and sized to take into account any future extension to service land that is external to the subdivision.

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Conditions for the construction of any works will be set out in the Development Agreement.

## 2.4.2 Fees and contributions

Fees and contributions are to be paid by the subdivision owner.

Fees and contributions will be calculated in accordance with Section 3 of this manual under Pricing and in accordance with the South East Water's 2018 Price Determination.

## 2.4.3 Provision of easements

Owners must provide easements over all proposed and existing water, recycled water mains and sewers not located within road reserves on the formal plans of subdivision at no cost to South East Water.

These easements need to comply with Section 12 (1) of the Subdivision Act 1988 and be specified on the subdivision plan as being for the use of South East Water.

Where owners retain a common private service, an easement needs to be shown on the subdivision plan in accordance with Section 12 (2) or 12(1) of the Subdivision Act 1988.

## 2.4.4 Protection of the environment

The owner needs to ensure that the planning, design, construction, operation and maintenance of all developments identifies and protects areas of environmental and heritage significance.

## 2.5 Process cost recovery policy

South East Water recovers process costs for specific activities by charging a fee to residential, commercial and industrial development owners. Fees are subject to review by the Essential Services Commission.

### 2.5.1 Non-works application

A non-works application applies for connection to existing services which are already available to the property, and requiring no extension to the water, recycled water or sewer reticulation system.

The non-works Notice of Agreement sets out contributions which need to be paid prior to connection. It may also include requirements relating to the construction of minor works, such as tapping into water and recycled water mains or construction of house connection branches to sewers.

This type of application usually applies to two-lot residential subdivisions, dual occupancy developments, commercial buildings, industrial buildings, multi-unit development and subdivisions with a owners corporation, but will also apply to small non-owners corporation



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subdivisions which have existing services available to each lot in the subdivision.

A completed non-works application is required to be lodged via South East Water's PropertyConnect® system ([www.southeastwater.com.au/propertyconnect](http://www.southeastwater.com.au/propertyconnect)) in order for a non-works Notice of Agreement to be processed.

See Prices and Charges on South East Water's Website ([www.southeastwater.com.au](http://www.southeastwater.com.au)) for the current non-works application fee.

## 2.5.2 Development works application

A development works application applies when an extension of South East Water's reticulated water, recycled water mains and/ or sewers is required to service a property.

A Development Works Application will need to be lodged seeking South East Water's approval to undertake the necessary works.

This type of application usually applies to developments other than two-lot residential subdivisions or subdivisions with an owner's corporation, but will also apply to non-subdivisional developments or subdivisions with an owner's corporation where services are required to be extended to and through the property.

The Developer is required to engage a consulting engineer which is an Accredited Consultant to undertake engineering and audit services for the Land Development Industry who will undertake the design and audit services of the necessary works.

The Developer will also be required to engage a water contractor and/ or a sewer contractor from South East Water's 'Accredited Contractor List' - to Undertake Construction Works and Services for the Land Development Industry who will undertake the construction of the necessary works.

All conditions and fees applicable for the development, including the respective rights and obligations of each of the parties will be set out in the Development Agreement. The Development Agreement will be executed by the Developer and South East Water who become parties to the Development Agreement. The relationship between the parties is set out under clause 1 of the Development Agreement.

A completed development works application is required to be lodged via South East Water's PropertyConnect® system ([www.southeastwater.com.au/propertyconnect](http://www.southeastwater.com.au/propertyconnect)) in order for a Development Agreement to be processed.

See Prices and Charges on South East Water's Website ([www.southeastwater.com.au](http://www.southeastwater.com.au)) for the current Development works application fee.

## 2.5.3 Random audits

South East Water may carry out random audits of the various activities undertaken during the design, construction and survey of the works.

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## 2.5.4 Intensive audits

In an intensive audit, South East Water will adopt a role of quality control and inspect the works at predetermined points. Intensive audits of works will be implemented where South East Water no longer has confidence in the Consultant's or Contractor's quality assurance and/or safety system meeting the specified requirements.

Intensive audits will normally only cover those aspects of the agreement where the quality and/or safety cannot be assured. For example, South East Water may implement an intensive audit of only the construction, if the design processes are functioning correctly.

Where non-conformance is widespread or significant enough to affect the quality of the entire agreement, South East Water will implement intensive auditing of all aspects of the works.

If South East Water determines that an intensive audit is required of the design, construction or survey of the Development Works, the appropriate party must pay an intensive audit fee.

The intensive audit fee is detailed in Prices and Charges on South East Water's Website ([www.southeastwater.com.au](http://www.southeastwater.com.au)).

## 2.5.5 Preliminary Servicing Advice (Feasibility)

Preliminary servicing advice is available to developers to determine the potential infrastructure works associated with developing land and capacity of existing facilities based on proposed lot count. Any request for hydraulic information will require lodgement of a plumbing application for assessment.

The information provided consists of a formal written response and will generally include plans showing the location of existing assets, high level servicing strategies and high level advice on whether the existing services can cater for a proposed development.

To seek preliminary servicing advice, an application is required to be lodged via South East Water's PropertyConnect® system ([www.southeastwater.com.au/propertyconnect](http://www.southeastwater.com.au/propertyconnect)).

## 2.5.6 Pressure and flow information

Pressure and flow information is used in the design of fire hydrant and fire sprinkler service installations.

Pressure and flow information can be applied for via South East Water's PropertyConnect® system ([www.southeastwater.com.au/propertyconnect](http://www.southeastwater.com.au/propertyconnect)). The fees associated with Pressure and flow information applications are detailed in Prices and Charges on South East Water's Website ([www.southeastwater.com.au](http://www.southeastwater.com.au)).

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## 2.5.7 Build over easements

An application to build or retain a structure over works and/ or easements is required under the following scenarios:

- Building of a structure over an existing easement in favour of South East Water
- Building of a structure and/ or placing any fill, within 1.0m laterally of any South East Water asset.

A completed application to build or retain a structure over works and/ or easements is required to be lodged via South East Water's PropertyConnect® system ([www.southeastwater.com.au/propertyconnect](http://www.southeastwater.com.au/propertyconnect)) in order for South East Water to assess the request.

The fee associated with the above application is detailed in Prices and Charges on South East Water's Website ([www.southeastwater.com.au](http://www.southeastwater.com.au))

## 2.5.8 Plumbing applications

A plumbing application is required whenever works are being undertaken on internal services, including the installation of water/ recycled water meters.

All works on internal services are carried out in accordance with AS/NZS 3500 and Victorian Plumbing Regulations (2018) and a plumbing application, separate from the Development Works Application is required to be lodged via South East Water's PropertyConnect® system ([www.southeastwater.com.au/propertyconnect](http://www.southeastwater.com.au/propertyconnect)).

The fees associated with the plumbing application is detailed in Prices and Charges on South East Water's Website ([www.southeastwater.com.au](http://www.southeastwater.com.au))

## 2.6 Reimbursement policy

This section describes the arrangements for reimbursements associated with a development works application for the construction of Shared assets.

Specific reimbursement details are detailed in Schedule 7 of the Development Agreement.

A reimbursement is payable by South East Water when Shared assets are required to be constructed.

South East Water will reimburse the owner the construction costs of the Shared assets. These costs are calculated using either an estimated construction rate determined by South East Water based on recent similar construction works or are based on the lowest conforming water or sewer tender from accredited contractors. A survey, design and project management allowance of up to 8% of the construction cost may also be included in the reimbursement amount.

Upon completion of the works the contract amount will be required to be resubmitted with any variations included, signed by the contractor to South East Water on which the final

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amount to be refunded will be assessed. South East Water may increase or decrease the estimated amount at this time.

Where the estimated reimbursement is based on the lowest conforming water or sewer tender from accredited contractors, the amount will be advised to the developer once tenders have been received. Tenders will be assessed by South East Water and the reimbursement amount will not include provisional sums. Any variations to the tender amount are required to be approved by South East Water prior to the works proceeding to ensure they are considered for reimbursement.

Where South East Water's reimbursement amount is based on the lowest conforming tender from accredited contractors, the developer/ consultant will be required submit a minimum of 3 tenders to South East Water for assessment and for major projects call for public tenders (via appropriate newspaper advertisement). The following conditions will generally apply:

- a) The developer/ consultant will undertake the design, contract document preparation, tendering, evaluation of tenders and project management for the construction of the Shared assets.
- b) For major projects South East Water will request several Verification (hold) points apply help ensure a successful project outcome:
  - 1 Functional Design
  - 2 Design
  - 3 Construction Tenders
  - 4 Pre-Construction
  - 5 Construction
  - 6 As-Constructed Survey and
  - 7 End of Defects liability period

Public tenders are to be lodged at South East Water's e-Tender box which will then be forwarded to the developer/ consultant. The developer/ consultant will undertake an assessment of the tenders and make a recommendation on their preferred contractor.

## 2.7 Financial and servicing requirements policy

This policy describes the Development Agreement requirements for owners who need to construct water, recycled water supply and sewerage services for a subdivision or when a service to a property is required.

Specific servicing requirements will be detailed in Schedule 7 of the Development Agreement.

### 2.7.1 Special works

Special works such as a water storage tank, a local treatment plant, pumping station, rising main, sewerage flow control facility, local booster disinfection plant, or a local sewage pre-

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treatment system may be required for a satisfactory supply to a development. Owners must install and meet the total cost of the required special works as well as the required water, recycled water mains and sewers, when these special works are not upsized to support other developments.

Where special works are upsized to service more than one development, these works will be treated as shared distribution assets and will be subject to reimbursement in accordance with clause [2.6](#).

## 2.7.2 Operation and maintenance costs

### Temporary works

Where temporary works (eg: pump station) are gifted to South East Water, an operation and maintenance fee is charged and is required to be lodged as a lump sum payment.

The charge is based on an amount that will support the annual average costs of maintaining and operating works until the permanent system is installed.

South East Water will determine the operation and maintenance fee based on similar sized works within our existing system.

Any sewer education costs are borne by the developer.

## 2.7.3 Maintenance

The developer must pay all maintenance costs incurred by South East Water up until the works are issued with a Certificate of Completion.

## 2.8 Design policy

The responsibilities of the Developer, Consultant, Contractors and South East Water in relation to the design of the Development Works are set out in the Development Agreement and Accreditation Deeds.

Developers can only appoint accredited consultants to carry out the design of the Development Works from South East Water's 'Accredited Consultants List'.

South East Water encourages the developer and consultant to offer creative and innovative solutions relating to the concept, design and construction, of water/ recycled water supply and sewerage infrastructure assets which are based on sound engineering principles and provide effective and economic alternatives over the life of the asset.

The design is expected to provide the best value "whole of life" option that provides surety of ongoing effective and efficient performance of the system.

The consultant must specify the standard or engineering concept that has been used to design the works.

Works are to be designed and constructed in accordance with the relevant Water Services Association of Australia (WSAA) standard drawings, specifications, design manuals,

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supplementary documentation and South East Water Addendums. Should a particular design issue not be covered by any of these documents Water Industry Technical Standards (WITS) documents may be used with the permission of South East Water.

The design must include any special design parameters provided by South East Water in the Development Agreement for particular works. For sewerage works, unless otherwise specified in the Development Agreement, the design must also provide:

- sufficient capacity for the catchment upstream of the development
- gravity control of the catchment upstream of the development.
- assets must be constructed from boundary to boundary of the parent lot and must cater for the capacity of future water supply zones and sewer catchments, as directed by South East Water.
- where appropriate soil investigation or geotechnical reports to justify embedment and backfill details.

The owner must obtain the approval of South East Water if they intend to provide any lot with only limited gravity control. Lots approved for limited gravity control are required to have the area of control identified on the design drawings.

The consultant is responsible for co-ordinating the design of the works with any other authority works, operations and services. This responsibility extends to co-ordination with councils, other authorities and individuals that may have a direct or indirect interest in the construction and location of the proposed water supply, recycled water or sewerage works. Any requirements affecting the construction methods must be included on the design drawings.

Unless otherwise specified in the Development Agreement or subsequently approved by South East Water, all materials used in the Development Works must be specified in the Approved Products lists.

Any special conditions in relation to the design of the Development Works will be set out in the Offer Letter.

## 2.9 Construction policy

The responsibilities of the Developer, Consultant, Contractors and South East Water in relation to the construction of the Development Works are set out in the Development Agreement and Accreditation Deeds. A summary list of these responsibilities is available at [www.southeastwater.com.au](http://www.southeastwater.com.au)

Developers can only appoint accredited consultants and contractors to carry out Audit activities and construction of the Development Works from South East Water's 'Accredited Contractor List'.

Any special conditions in relation to construction of the Development Works will be set out in the Offer Letter.

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## 2.9.1 Work on Live Sewer Assets

A **live sewer asset** is an asset that either carries sewage or is connected unplugged to an asset that carries sewage. An asset is unplugged when there is no plug, break or other blocking device between the asset and a live asset.

Working on live sewer assets includes opening a maintenance structure cover, inserting tools into a maintenance structure or sewer shaft, or entering a maintenance structure or sewer shaft. Working on live sewer assets poses particular risks, including:

- Limited entry and exit from the asset;
- May contain a harmful atmosphere;
- May pose a risk of fall from heights when greater than 2 metres deep.

Working on live sewer assets can be extremely hazardous and potentially life threatening. Accordingly, South East Water only authorises its own trained staff or approved contractors, consultants or surveyors to conduct work on live sewer assets. South East Water's mandatory occupational health and safety requirements prior to being allowed to work on live sewer assets are that all persons who conduct the works have the following:

- Current confined space competency based training provided by a registered training organisation (RTO), appropriate for their scope of works;
- Suitable safety and personal protective equipment (PPE), maintained in proper working order;
- Awareness of appropriate fall from heights preventative measures.

In order to be authorised to undertake works on a live sewer asset, an external contractor, consultant or surveyor must have provided South East Water with:

- Copies of current confined space training for all persons intended to conduct the works;
- A minimum of 2 working days written notice - normally provided by lodging a 'Live sewer request' using South East Water's Manage Developer Works system. South East Water will respond with an authority number within 2 working days with advice of any conditions or refusal of permission, as appropriate.

No less than **1 hour before** conducting the authorised live sewer works, the contractor, consultant or surveyor must ring South East Water on **BH: 1300 493 680 or AH: 132 812** and quote the authority number to be given an Asset Entry Number (AEN). After the expected time duration of the works, the contractor, consultant or surveyor must ring South East Water back to cancel or extend the Asset Entry Number, as appropriate. Asset Entry Numbers must be closed off on a daily basis.

Note: South East Water will **NOT issue an Asset Entry Number** for any persons who have not provided a copy of their current confined space training. It is incumbent on the contractor,

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consultant or surveyor to ensure their current records are provided to South East Water.

## Confined Space Entry (CSE) - Resourcing

Where there is **one person** in the confined space there shall be no less than **two persons who are part of the work party, outside** the space and who are appropriately trained and capable of initiating the emergency procedures (rescue plan) if required.

Where there is **more than one person** in a confined space, the specific **emergency procedures (rescue plan) shall determine the number of persons** required outside the space.

## Prevention of Falls

Where possible, openings more than 300 mm should be avoided to prevent persons being in close proximity to an *unprotected edge*<sup>4</sup> or to a hole, trench, shaft or pit that is of sufficient dimensions to allow a person to fall into the hole, trench, shaft or pit.<sup>5</sup>

Where it is not possible to comply with this, controls in line with the hierarchy for prevention of falls shall be implemented so far as is reasonably practicable.<sup>6</sup>

For example, signs, barricades and the application of a suitably rated temporary platform over the opening may be appropriate.

## Atmosphere

Activities that involve Confined Space Entry require full CSE training and continuous atmospheric monitoring with an appropriate and correctly calibrated gas detector.

For activities that do not involve Confined Space Entry although may present the risk of a person being overcome or incapacitated by the conditions within a confined space - for example, if a person is kneeling next to a sewer maintenance access point - continuous atmospheric monitoring with an appropriate and correctly calibrated gas detector shall be provided. The gas detector should be positioned within or as close to the person's *breathing zone* as possible.

**Failure to comply** with requirements in regard to working on live sewer assets will be regarded extremely seriously by South East Water, and would be **grounds for termination or suspension** of an Accredited Contractor or Accredited Consultant's accreditation in accordance with the Accreditation Deeds.

Relevant guidance is set out in the following South East Water documents:

- AM 2035 Lifting of Sewer Maintenance Structure Covers Procedure
- AM 2426 Asset Entry Procedure

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<sup>4</sup> Regulation 43 (e) of the OHS Regulations 2017 (Victoria)

<sup>5</sup> Regulation 43 (f) of the OHS Regulations 2017 (Victoria)

<sup>6</sup> Regulation 44 of the OHS Regulations 2017 (Victoria)



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- BS 1955 Confined Space Entry Procedure

Once sewer development works are live:

- a. No entry is permitted to the sewer without authorisation from South East Water;
- b. No maintenance structure cover may be lifted without authorisation from South East Water;
- c. The same notification requirements apply as if the request is for opening a live sewerage maintenance structure cover. This includes seeking authorisation for access following South East Water acceptance of the live sewer request.

The obligations above apply regardless of the stage of the works. For example, it applies whether or not works have been vested in South East Water or an Acceptance of Works Certificate has been issued.

## 2.9.2 Isolation of live assets

In some situations, South East Water may agree to isolate a section of the asset by plugging or removing the proposed connection point from the live asset.

The developer is then responsible for:

- providing a safe work site in accordance with OHS legislation;
- constructing works up to the point of connection;
- excavating and shoring the area surrounding the connection point;
- notifying South East Water that the works are ready for connection;
- making the connection after approval has been granted by South East Water; and
- back-filling and restoring the area after completion of the connection.

## 2.9.3 Work on live assets – Water/ recycled water supply connections

Connection to existing water/ recycled mains will generally be carried out by the owner's contractor under the supervision of South East Water, after the mains have been isolated.

The contractor must give South East Water:

- 5 working days notice of the proposed connection – this allows South East Water to facilitate the connection by arranging the necessary shutdowns of existing mains.

When connecting to larger size water/ recycled water mains by tapping under pressure, work may be carried out by South East Water at its discretion. In this instance excavation and materials must be provided by the contractor.

Notification of connection to South East Water's water/ recycled water mains must be given by lodging a 'Live water' request using South East Water's Manage Developer Works system.

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A connection fee recovers the cost of shutting down the main, notifying the affected property owners, supervision of the connection and flushing and recharging the main. The connection fee does not cover the tapping for individual lots. Water supply connection fees are detailed in Prices and Charges on South East Water's website ([www.southeastwater.com.au](http://www.southeastwater.com.au)).

In the case that South East Water conducts the connection; any charges are based on actual cost. The estimated fees must be paid no later than 5 working days before commencement of construction. The actual amount will be determined when the account is finalised.

## 2.9.4 Supply of fittings

The developer is responsible for the supply of all fittings required for the connection of the works with South East Water's live assets.

## 2.9.5 Cost recovery

The developer must pay South East Water, or an approved contractor who meets South East Water's requirements, for all costs incurred for connections into South East Water's live assets.

## 2.9.6 Boundary sewers and water/ recycled water mains servicing both sides of the street

If the Development Works include water/ recycled water mains or sewers that are not considered shared assets and will also supply or service other land, the owner may consider entering into a cost-sharing agreement with the adjacent owners.

South East Water will not be involved in any cost-sharing arrangements.

## 2.9.7 Temporary works

South East Water may allow the owner to install temporary assets in accordance with the ESC guidelines.

Where a developer requires connection before permanent assets can be provided, the water business may require the developer to pay for the most cost efficient servicing solution for providing temporary shared distribution assets or temporary reticulation assets in accordance with the pricing principles for miscellaneous services.

This may include provision for the cost of maintenance and other ancillary costs until permanent assets are provided.

Before requiring a developer to pay for temporary reticulation assets, the water business must inform the developer of what permanent assets will be provided and when this is expected to occur.

### **Temporary works are subject to the following conditions:**

- All works must be constructed in accordance with relevant standard drawings and specifications and approved by South East Water.

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- The developer must obtain written notification of the development intentions of owners of nearby land so that the temporary works can be appropriately sized, and the number of temporary works can be limited.
- Any cost sharing arrangements must be made between the owners who will benefit from the temporary works. South East Water will not be involved in any cost sharing arrangements.
- The developer must advise South East Water of the names, addresses and the property title details of all owners who have agreed to share costs.
- Only the owners who have agreed to share costs will be permitted to use the temporary works. Other owners in the vicinity, who develop their land at a later date, must install their own temporary works at that time.
- The owners who use the temporary works must pay the operation and maintenance costs of the temporary works for up to five (5) years. This includes any cost associated with the abandonment or removal of the temporary works.
- The owners who use the temporary works must provide land for these works. South East Water will lease this land for a nominal amount of \$1 per year until permanent works are installed.

## 2.9.8 Alteration to existing South East Water assets

If existing South East Water assets require alteration as a result of the development, the owner must pay the actual cost of this work. Only people authorised by South East Water are permitted to carry out the work.

## 2.9.9 Hydrant use and cross contamination

The contractor must obtain written consent from South East Water for the use of water required for construction purposes. An application for permit to access fire hydrants and fireplugs form can be downloaded from [www.southeastwater.com.au](http://www.southeastwater.com.au)

The use of drinking water for construction purposes will subject to the conditions imposed by any water restrictions current at the time of construction.

Depending on where and how hoses used to draw water are stored, whether a standpipe is used to draw water only, or in other applications, will influence the risks associated with cross contamination.

In this regard South East Water requires that all contractors, who draw water from above or below ground hydrants (fire plugs) to address the issue of cross contamination by using a high hazard backflow prevention device.

The contractor's nominated representative is to provide evidence that the device has passed the annual test prior to the commencement of works.

The contractor's nominated representative is to provide this information at least 5 working days prior to the commencement of works.

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Class A and Class C recycled water is also available for construction purposes. More information regarding the use of Class A and Class C recycled water can be downloaded from [www.southeastwater.com.au](http://www.southeastwater.com.au)

## 2.9.10 Chlorination and water quality testing of mains

As part of our commitment to Hazard Analysis and Critical Control Point (HACCP) principles, South East Water requires water quality testing for newly constructed water mains. The water quality from new mains must comply with South East Water's licence requirements before they are put into service, i.e. it must be safe, clear and free from objectionable taste and odour.

All new water mains less than 225mm diameter will have to be tested to ensure compliance with MRWA Specification No. 04-02-2.1. Water mains of 225mm diameter and greater will need to be disinfected also in accordance with MRWA Specification No. 04-02-2.1. MRWA Specification No. 04-02-2.1 can be obtained by searching 'MRWA Specification' from the Melbourne Retail Water Agencies Web Portal at [www.mrwa.com.au](http://www.mrwa.com.au)

The consultant/ contractor must:

- Arrange for chlorination directly with disinfection contractor approved by South East Water.
- Arrange water quality sampling and testing directly with a laboratory accredited under the Memorandum of Understanding between the National Association of Testing Authorities, Australia (NATA) and the Department of Human Services (DHS).
- Provide all temporary pipe work and fittings needed for any chlorination works
- Provide South East Water with test results prior to arranging any shutdowns that are needed.
- Give South East Water at least 5 working days notice to arrange any shutdowns that are needed (and only if above test results have a 'pass' result).

Testing of water mains for pressure, swabbing and chlorination may require South East Water to operate the water valves on the existing reticulated water supply system. Accordingly, 'Live water' requests will be required to be submitted to South East Water in accordance with their notification requirements.

The above conditions must be satisfied prior to South East Water issuing an Acceptance of Works Certificate.

## 2.9.11 Water shut off period

The Contractor must endeavour to minimise the duration of any planned water supply interruptions affecting customers.

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## 2.9.12 Requirements for backfilling trenches

Backfill and compaction of soils in excavations associated with the construction of water/ recycled water supply and sewerage assets to be carried out in accordance with MRWA Specification No. 04-03.2. This specification also applies to fill associated with assets constructed by tunnels, drives, shafts, bores and other trenchless technologies.

A copy of MRWA Specification No. 04-03.2 can be obtained by searching 'MRWA Specification' from the Melbourne Retail Water Agencies Web Portal at [www.mrwa.com.au](http://www.mrwa.com.au)

## 2.9.13 Working on asbestos mains

Water mains pipes may be constructed of asbestos cement (AC) or the external coating of mild steel pipe may have coal tar enamel that could contain asbestos.

South East Water require any contractors undertaking works on these mains to:

- Develop and submit a safe work method statement (SWMS) for the specific works to South East Water at least 5 working days prior to commencement.
- Hold a license where required of the applicable Class to remove asbestos.
- Carry out works in accordance with Part 4.4 - Asbestos of the OH&S Regulations 2017.

## 2.10 Quality policy

The South East Water Quality Policy places a high emphasis on quality assurance. As detailed in clause 2.1 of the Development Agreement, Developers must engage only consultants and contractors that are accredited to design, project manage and/ or construct the specific category of Development Works.

A list of accredited consultants and contractors is available from [www.southeastwater.com.au](http://www.southeastwater.com.au)

## 2.11 Audit policy

South East Water may audit any activity that affects the Development Works. The Developer/ Consultant/ Contractor are entirely responsible for the quality of the Developer Works and for the health and safety of employees during the Development Works.

South East Water will retain the right to audit quality and Occupational Health and Safety (OH&S). Consultants must accept and facilitate the role of South East Water as a quality and OH&S auditor. Audits may be conducted in the consultant's office, on the project site, or at South East Water offices.

South East Water may audit the consultant's or contractor's:

- quality system
- safety system

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- environmental system
- design
- construction
- survey

Continued non-conformances or failures of the consultant's or the contractor's systems detailed above may lead to re-classification, intensive audits, suspension or termination of a consultant or contractor from the 'Accredited Consultants List' or 'Contractors Accreditation List'.

Each project may be subject to an audit. The audit frequency will be determined after South East Water's assesses the risk for each activity. This is affected by the:

- performance of the consultant/ contractor
- past performance of the consultant/ contractor
- design complexities
- construction complexities
- value of Development Works, including future replacement costs
- effect of proposed Development Works on current or future works
- consequences of failure
- cost and difficulty of conducting repairs.

## 2.12 Trade waste policy

South East Water sewers can accept only limited amounts of trade waste in addition to normal domestic waste. The developer must not take the issue of the Development Agreement by South East Water as a commitment that we will accept trade waste discharges into sewers.

Trade waste discharges must comply with South East Water's quality and quantity standards. Owners of businesses operating in the development must apply to South East Water for approval to discharge trade waste. South East Water will supply details of its quality and quantity standards for trade waste at this time.

The owner must notify South East Water if any prospective purchasers intend to discharge trade waste from the development.

A copy of South East Water's Trade Waste Policy and Guidelines and Trade Waste application forms can be downloaded from [www.southeastwater.com.au](http://www.southeastwater.com.au)

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## 3 PRICING

### 3.1 Price determination

The prices contained within the Land Development Policies and Pricing Manual comply with the prices approved in South East Water's 2018 Price Determination or are set in compliance with the pricing principles outlined in South East Water's 2018 Price Determination.

The ESC regulates urban water pricing independently of government and are responsible for the economic regulation of Victoria's, water essential services. It aims to protect the community's interests in relation to cost, reliability and quality of supply, while ensuring a sustainable and competitive utility sector into the future.

A full list of South East Water's tariffs and charges are available from [www.southeastwater.com.au](http://www.southeastwater.com.au) or by calling South East Water on 131 694.

### 3.2 South East Water NCC Negotiating Framework

#### 3.2.1 Application of Negotiation Framework

This Negotiating Framework forms a part of South East Water's 2018 Price Determination for the 2018- 2023 regulatory period.

#### 3.2.2 Purpose

This Negotiating Framework sets out procedural and information requirements relevant to services to which developer charges (New Customer Contributions) apply, as defined in the Water Industry Regulatory Order (WIRO). New Customer Contributions (NCC) are levied when new connections are made to the Water Corporations water, sewerage and recycled water networks. The framework requires South East Water and any Connection Applicant to negotiate in good faith to agree the price (where the scheduled NCC charge does not apply), standards and conditions of services to be provided. It also provides for transparent information to enable the Connection Applicant to understand the reasons for decisions made by South East Water.

The requirements set out in this negotiating framework are in addition to any requirements or obligations contained in or imposed under the *Water Act 1989*, the *Planning & Environment Act 1987* (including under any planning scheme or permission), the *Subdivision Act 1988*, subordinate regulation under the described legislation, or any other relevant legislation or instrument.

In the case of inconsistency between South East Water's *2018 Price Determination* and this negotiating framework, the South East Water *2018 Price Determination* will prevail.

This Negotiating Framework does not alter the rights of a Connection Applicant to seek a review of a South East Water decision by the Victorian Civil and Administrative Tribunal (VCAT).

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## 3.2.3 Who this negotiating framework applies to

This Negotiating Framework applies to South East Water in dealing with any property owner - generally a property developer – that is a Connection Applicant who requests connection to South East Water’s works in accordance with section 145 of the *Water Act 1989* (“Application”). This Negotiation Framework also applies to any Connection Applicant requesting connection to South East Water’s work.

It also applies to South East Water in responding to such requests from a Connection Applicant.

## 3.2.4 No obligation to provide service, good faith obligation

Nothing in this negotiating framework imposes an obligation on South East Water to allow the Connection Applicant to connect to South East Water’s works or provide services to the Connection Applicant.

South East Water can refuse its consent, consent, or consent subject to any terms and conditions that South East Water thinks fit, as provided under section 145(3) of the *Water Act*.

However, South East Water and the Connection Applicant must negotiate in good faith the price (where the scheduled NCC charge does not apply), terms and conditions for services sought by the Connection Applicant.

## 3.2.5 Timeframes

South East Water and the Connection Applicant will use their reasonable endeavours to achieve the following timeframes:

- a) Agree the milestones, information requirements and any other relevant issues within fifteen [15] business days of South East Water’s receipt of an Application. An Application, under Section 145 of the *Water Act 1989*, for connection means a servicing request made to South East Water, the details of which are provided in Section 2.5 of the *Land Development Policies and Pricing Manual*;
- b) Respond to the Application giving details of the terms and conditions to allow connection:
  - within one hundred and twenty (120) business days where a Standardised or Negotiated NCC Charge applies.
- c) Adhere to any timetable established for negotiations and progress negotiations in an expeditious manner; and

Finalise negotiations within one hundred and twenty (120) business days of the initial Application, where applicable.



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## 3.2.6 Commencing, progressing and finalising negotiations

The table below provides an indicative timeframe regarding the process of NCC negotiations. As mentioned above, dependant on the location and specific requirements of the development, either a standardised or a negotiated NCC will be applicable. The timeframes for these two charges will differ. It is likely that a Standardised NCC Charge which requires limited design and modelling to be undertaken by South East Water and/ or the Connection Applicant may take a shorter period of time than more complex applications made by the Connection Applicant. The timeline is presented below.

Step	Actions	Timing NCC Charge (non works) (Working Days from Application date)	Timing NCC Charge (less complex or complex) (Working Days from Application date)
1	<p><b>Application (Section 145) for service requirements and costings of connection</b></p> <p>Application fee paid</p>	Application date	Application date
2	<p><b>Negotiation Discussion</b></p> <p><b>Parties discuss:</b></p> <ul style="list-style-type: none"> <li>the nature of the services required;</li> <li>any additional information to be provided by the Connection Applicant; and</li> <li>notification and consultation with other persons potentially affected</li> </ul> <p><b>Parties agree to timeframes for negotiation and consultation and milestones if different to these indicative timeframes</b></p>	+ 15	+ 15
3	<p><b>Connection Applicant provides additional information</b></p> <p>Connection Applicant provides additional information to South East Water if requested.</p> <p>This includes:</p> <ul style="list-style-type: none"> <li><b>Original completed application;</b></li> <li><b>Additional information (if required)</b></li> </ul>	Up to 35	Up to 35
4	<p><b>South East Water Investigation completed</b></p> <p>This could include:</p> <ul style="list-style-type: none"> <li>Where required, consultation with others potentially affected.</li> <li>Additional designs &amp; modelling</li> </ul>	Generally not applicable	Up to 90
5	<p><b>Offer</b></p> <p>South East Water makes offer, including:</p> <ul style="list-style-type: none"> <li>terms and conditions of connection;</li> <li>NCC (i.e. developer charge) to apply; and</li> </ul>	Up to 40	Up to 120

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- such Offer will (unless otherwise specified) expire 3 months from being made.

*Table 1: Indicative timeframes for negotiating connection*

## 3.2.7 Provision of Information by Connection Applicant

The Connection Applicant must provide sufficient information to enable South East Water to assess the Application and determine the service requirements and costings for the development. The information generally required by South East Water is detailed in the application for Notice of Agreement and Application for Development Agreement ([www.southeastwater.com.au](http://www.southeastwater.com.au)).

The level of information required by South East Water, and the detail of its response, will vary depending on the complexity and size of the development. As stated above, additional information may be sought by South East Water in the event of a negotiated NCC being sought.

## 3.2.8 Provision of information by South East Water

After consideration of application for connection requests South East Water may provide a Notice of Agreement/ Development Agreement. This will include specific requirements for the particular development and also include various standard conditions, reference to other relevant documents and other information including charges and fees to achieve connection to South East Water's assets. This includes New Customer Contributions.

The NCCs are provided by South East Water pursuant to the South East Water *2018 Price Determination*.

## 3.2.9 Pricing Principles

South East Water's NCC charges will:

- have regard to the incremental infrastructure and associated costs in one or more of the statutory cost categories attributable to a given connection;
- have regard to the incremental future revenues that will be earned from customers at that connection; and
- be greater than the avoidable cost of that connection and less than the standalone cost of that connection; and
- Where:
  - an innovative connection solutions or Integrated Water Cycle Management solutions that causes substantive material changes in South East Water's distribution infrastructure requirements; or
  - South East Water assess that a non-standard NCC is more appropriate for a specific development or development area (e.g. extension to the Urban Growth Boundary or major redevelopment of existing areas [e.g. Fishermans

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Bend redevelopment])

South East Water may apply a non-standard NCC, calculated with reference to clause (a) – (c).

In setting charges, South East Water will also comply with:

- a) the regulatory principles set out in clause 14 of the Water Industry Regulation Order (WIRO); and
- b) Specific pricing principles approved by the Essential Services Commission as part of South East Water's *2018 Price Determination* applying at the relevant time.

## 3.2.10 Consultation with affected parties

If South East Water considers that persons other than the Connection Applicant may be affected by proposed connection services, then:

- subject to legal confidentiality requirements, South East Water may share any necessary information with others potentially affected to assess impacts
- parties will allow sufficient time for reasonable consultation with affected parties to occur.

## 3.2.11 Payment of South East Water's Costs

All developments of land requiring new or upgraded connection to South East Water's system will incur associated fees and charges payable to South East Water.

Fees and charges levied by South East Water are subject to approval processes under the *Water Act 1989* and/ or as approved by the Essential Services Commission. Details about the fees and charges can be found in Prices and charges on South East Water's website ([www.southeastwater.com.au](http://www.southeastwater.com.au)).

Should the particular Application require a Negotiated NCC Charge, rather than the Standardised NCC this will arise from the relevant negotiation, subject to the Regulatory Instruments in place at the time.

## 3.2.12 Termination of negotiations

The Connection Applicant may elect not to continue with its Application and may end the negotiations by giving South East Water written notice of its decision to do so.

South East Water may terminate a negotiation under this Negotiating Framework by giving the Connection Applicant written notice of its decision to do so where:

- South East Water believes on reasonable grounds that the Connection Applicant is not conducting the negotiation in good faith;
- South East Water reasonably believes that the Connection Applicant and the particular development will not be able to receive a service from South East Water;
- Where the Connection Applicant has provided false or misleading information to

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South East Water; or

An act of insolvency occurs in relation to the Connection Applicant.

## 3.2.13 Dispute Resolution

The Accreditation Deeds and the Development Agreement set out the process for dispute resolution at clauses 29 and 25 respectively.

In the event of a dispute between parties, any party wishing to progress the dispute must deliver by hand or certified mail to the other party, a written notice of dispute, which adequately identifies and provides details of the dispute (**notice of dispute**) (pursuant to clause 29.3 of the Accreditation Deeds and clause 25.2 of the Development Agreement).

Following delivery of the notice of dispute the parties must meet as required by clause 29.4 of the Accreditation Deeds and clause 25.3 of the Development Agreement.

If those meetings are not successful in resolving the dispute then the parties are required to attend formal mediation in accordance with clause 29.5 of the Accreditation Deeds and clause 25.4 of the Development Agreement.

South East Water notes that the Connection Applicant has particular rights to seek a review in the Victorian Civil and Administrative Tribunal (“VCAT”) of the terms and conditions of connection and the NCC charge applied. These VCAT review rights, including various time lines, rights and process are set out in the *Water Act 1989* and the *VCAT Act 1998*.<sup>7</sup>

## 3.2.14 Giving notices

The address for correspondence and notices to South East Water is:

South East Water Corporation

PO Box 2268

Seaford, VIC 3198

A notice must be:

- a) in writing and signed by a person duly authorised by the sender;
- b) hand delivered or sent by prepaid post or email to the recipient's address for Notices specified in the Information Table, as varied by any Notice given by the recipient to the sender; and
- c) if given or received under any Regulatory Instruments or other statute of regulation must be given under the requirements of that relevant instrument, or other statute or regulation.

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<sup>7</sup> Victorian Civil and Administrative Tribunal Act 1998 (Victoria)

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## 3.2.15 Terms and abbreviations

Applicant	The servicing request to South East Water for connection pursuant to Section 145 of the <i>Water Act 1989</i> .
South East Water	A water corporation established pursuant to Part 6 of the <i>Water Act 1989</i> .
Connection Applicant	The person making application to connect to the South East Water system.
Land Development Policies and Pricing Manual	South East Water's Land Development Manual, which outlines policies and guidelines for customers to connect to water and sewerage services, available at <a href="http://www.southeastwater.com.au">www.southeastwater.com.au</a>
Standardised NCC Charge	This is the standardised charge for Connection Applicants wishing to connect to the South East Water network(s).
Non Standard NCC Charge	This charge, derived from the NCC principles developed by South East Water will apply where the Standardised NCC Charge is not applicable due to the nature and/or locality of the development or where an innovative connection solution or Integrated Water Cycle Management solution leads to substantive material change in South East Water's distribution infrastructure requirements with the Connection Applicant or South East Water assess that a non-standard NCC is more appropriate for the development.
South East Water 2018 Price Determination	A Price Determination issued by the Essential Services Commission under Section 33 of the <i>Essential Services Commission Act 2001</i> , Pursuant to clause 8 of the <i>Water Industry Regulatory Order 2012</i> .

## 3.3 New customer contributions (NCC)

New customer contributions are described in the definitions section of this manual and are set out in Prices and charges on South East Water's website ([www.southeastwater.com.au](http://www.southeastwater.com.au)).

In recognition of the amount of capacity required to service each connection where a new non-residential lot is created, that is 50mm water connection or greater, the NCC's (water, sewer and recycled water) payable will be the multiple of the applicable NCC and the number of equivalent 20mm connections. Refer to Table 2 for the Meter size relationships to maximum possible delivery volumes.

Meter Diameter mm	Pi Value	Pipe Area (Area = $\pi r^2$ ) Sq. mm	Ratio to 20mm Meter
20	3.141592654	314.1592654	1
50	3.141592654	1963.495409	6.25

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80	3.141592654	5026.548246	16
100	3.141592654	7853.981635	25
120	3.141592654	11309.73355	36
150	3.141592654	17671.45868	56.25
200	3.141592654	31415.92654	100

*Table 2: Meter Size Relationships to Maximum Possible Delivery Volumes*

Note: Larger meter size ratios to 20mm meters will be adopted based on the above formula.

### 3.3.1 Credits

For new lots, when an NCC credit is applicable, a credit will be applied based on the larger of the serviced lot created and if in the areas of Casey and Cardinia, the applicable NCC rate.

For non-residential customers, NCC's for increased services (above 50mm) will only apply to the incremental change between the existing and new meter, adopting the 'Ratio' table provided above.

As an example, the ratio of an 80mm Service is 16, with a 100mm Service ratio being 25, therefore a difference in ratio of 9 is applicable. Subsequently a charge of 9 x NCC will be applicable (geographic – Note if 300m<sup>2</sup> or less, then Other Areas rate apply).

For redeveloped sites, an NCC credit for the existing meter (50mm and above) will be given, if the new lot NCC total amount is equivalent to or exceeds the applicable existing meters NCC.

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## **3.4 Random audit**

South East Water carries out random monitoring, surveillance and audits of the various activities undertaken during design, construction and survey of the works.

Second Party Office Audits are undertaken to verify that quality management principles are being employed for works associated with the Land Development Industry. These costs are borne by South East Water.

## **3.5 Revised application Development Agreement fee**

A revised application will attract another full application fee. The original application fee will not be refunded.

## **3.6 Sewerage eduction**

The sewerage eduction cost is assessed on a case-by-case basis and is to be borne by the developer.

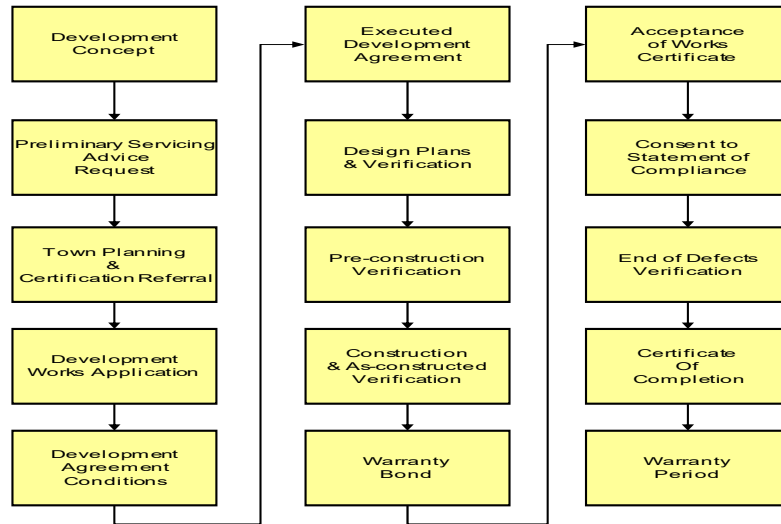
# Land Development Policies and Pricing Manual

## 4 Quality

### 4.1 Process overview

#### 4.1.1 Typical Process

The following flow chart is an overview of a typical process for land development works. Details relating to each process is as follows:



#### 4.1.2 Preliminary Service Advice Request

Preliminary Servicing Advice is typically requested at development concept stage or when a parcel of land is up for sale.

Information specified by South East Water at the Preliminary Servicing Advice stage is based on the lot count of the proposed development and will confirm the capacity of South East Water's system to cater for the proposed development. The demand on South East Water's systems can change rapidly. Although South East Water will take all reasonable care in preparing the information and conclusions, it will reserve the right to alter this information at any time and without giving notice of the fact. Hydraulic requirements will not be assessed as part of a Preliminary Servicing Advice request.

South East Water will not make any binding representations or commitments until the formal Development Agreement is executed. Before then, developers and/ or consultants cannot assume the Preliminary Servicing Advice information or conclusions to be binding on South East Water or make any commitments based on that assumption.

To seek preliminary servicing advice, an application is required to be lodged via South East Water's PropertyConnect® system ([www.southeastwater.com.au/propertyconnect](http://www.southeastwater.com.au/propertyconnect)).



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## 4.1.3 Town planning and certification referral

Where required the developer will submit their development proposal to the local planning authority, usually the local council, who will refer it to South East Water for comment.

South East Water will place formal conditions on the town planning permit. These conditions are generally generic and will require the developer to enter into an agreement with South East Water for the provision of water, recycled water (if applicable) and sewer services.

It is at the town planning permit stage that South East Water will advise the developer if recycled water is mandated for a particular area.

Subdivisional certifications are also referred to South East Water by the relevant council. South East Water will respond to the relevant council by:

- Consenting to the plan
- Objecting to the plan
- Requesting a specified alteration

Specified alterations are generally a requirement for easements and/or land to be set aside on the plan of subdivision to cover existing South East Water assets.

As the location of assets to be constructed for the development are not always known at the certification stage, South East Water reserves the right to request additional easements and/or land to be set aside as part of the Development Agreement.

## 4.1.4 Development Agreement application

The Development Agreement application is the formal request for approval to undertake the necessary Development Works to satisfy the requirements of South East Water's Town Planning conditions on the planning permit.

The application is required to be submitted via South East Water's PropertyConnect® system ([www.southeastwater.com.au/propertyconnect](http://www.southeastwater.com.au/propertyconnect)).

## 4.1.5 Development Agreement conditions

The Development Agreement will set out all of the conditions and fees applicable for the development, including the respective rights and obligations of each of the parties.

South East Water will issue the Offer Letter (financial contributions, design and construction requirements and any other required documentation). The developer/consultant is required to compile the Development Agreement (Offer Letter and schedules) via South East Water's Manage Developer Works system.

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## 4.1.6 Executed Development Agreement

Subject to the compiled Development Agreement documentation being satisfactory, South East Water will issue the Development Agreement to the Developer for signing via 'DocuSign's' digital signing platform ([www.docusign.com](http://www.docusign.com)). South East Water will then execute the Development Agreement. All construction works are to be completed within 12 months of the Development Agreement being executed.

No Development Works are to commence until the Development Agreement is executed by South East Water.

## 4.1.7 Design plans and verification

The Consultant, or the Developer if applicable, is required to lodge Design Verification and a full set of design drawings at least 10 days before the contractor proposes to commence construction of the development works (as outlined under clause 3.3(b) of Schedule 4 to the Development Agreement).

South East Water may choose to conduct an audit of the design and the Consultant, or the Developer if applicable, will be informed of any issues and/ or non-conformances that need to be addressed.

Notwithstanding the above, South East Water reserves the right to conduct design audits at any time during the life of the project.

## 4.1.8 Pre-construction verification

The Consultant, or the Developer if applicable, is required to lodge Pre-Construction Verification at least 7 days before the contractor proposes to commence construction of the Development Works (as outlined under clause 3.3(b) of Schedule 4 to the Development Agreement).

The water contractor and/ or a sewer contractor engaged by the Developer must be listed on South East Water's '*Accredited Contractor List*'.

The consultant will also provide an **audit schedule detailing the minimum number and timing of audits that will be carried out by the construction auditor** during the construction of the Development Works. This audit schedule must as a minimum meet the requirements detailed in Clause 9.1(g) of the Consultant Accreditation Deed and Section 4.4.6 of this document. **The audit schedule is required to be submitted to South East Water with the Pre Construction Verification.** This should be accompanied by:

- **a risk assessment** of the project and contractor; and
- **geotechnical** information (soil, ground conditions).

South East Water may choose to conduct a preconstruction audit and the Consultant/ Contractor will be informed of any issues that need to be addressed.

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## 4.1.9 Construction and as-constructed verification

At the completion of the Development Works the Consultant, or the Developer if applicable, is required to lodge the Construction and As-Constructed Verification (as outlined under clause 3.3(b) of Schedule 4 to the Development Agreement).

The following information is also required to be submitted at this time:

- A digital copy of the as-constructed information in either DGN or DXF format. The digital information is required to be formatted in accordance with the MRWA/ WITS Survey Manual.
- A PDF copy of the as-constructed information.
- Water quality test results and chlorination completion certificate in accordance with MRWA Specification No. 04-02-2.1.
- Compaction test results in accordance with MRWA Specification No. 04-03.2.
- Any other information that may be set out in the Verification Form and/ or Development Agreement under clause 16.

South East Water may choose to conduct audits during the construction of the Development Works and the consultant and/ or contractor will be informed of any issues and/ or non-conformances that need to be addressed.

## 4.1.10 Warranty bond

Requirements for the warranty bond are set out in the Development Agreement.

The warranty bond may be in the form of an approved unconditional undertaking or a cash deposit or such other form as required by South East Water.

An example of the wording for the unconditional undertaking is included in Schedule 3 of the Development Agreement (Approved Form of Undertaking). The unconditional undertaking is not to include an expiry or termination date.

## 4.1.11 Acceptance of works certificate

Once South East Water is satisfied that the Development Works have been satisfactorily completed, an Acceptance of Works Certificate will be issued.

Issuing of the Acceptance of Works Certificate is carried out in accordance with the South East Water's Administrative Process in Schedule 4 of the Development Agreement.

## 4.1.12 Consent to statement of compliance

South East Water will issue its Consent to Statement of Compliance once all conditions detailed in the Offer Letter are complied with and an Acceptance of Works Certificate has been issued for the Development Works.

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## 4.1.13 End of defects verification

At the completion of the end of defects liability period, the consultant will lodge an End of Defects Verification (as outlined under clause 3.3(b) of Schedule 4 to the Development Agreement).

As stated in Clause 1.1 of Schedule 2 to the Development Agreement, unless an alternative period has been specified, the end of defects period is the date on which the certificate of completion was issued.

South East Water may choose to conduct audits on the Development Works during the end of defects liability period and the consultant and/ or contractor will be informed of any issues and/ or non-conformances that need to be addressed.

## 4.1.14 Certificate of completion

South East Water will issue a 'Certificate of Completion' at the successful completion of the end of defects period in accordance with Clause 28.22 of the Development Agreement.

## 4.1.15 Warranty period

The warranty period extends for 24 months from the date South East Water issues the Certificate of Completion.

The responsibilities of the developer, and South East Water with regards to the development works during the warranty period are detailed in Clause 7.2 of the Development Agreement.

## 4.2 Minimum quality requirements

Developers may only use consultants and contractors who appear on South East Water's Accredited Consultants and Contractors Lists and who are accredited for the categories of work being performed.

The minimum quality requirements for consultants, contractors and their key personnel vary for each Development Works category.

The Development Work categories are as follows:

### Consultants

SD1 / SA1 Reticulation Sewer  $\leq$  DN280 and  $\leq$  5m in depth

SD2 / SA2 Branch/Main Sewer  $\geq$  DN280 or  $>$  5m in depth

SD3 / SA3 Reticulation Pressure Pipelines in Sewerage Systems  $<$  DN300 (Not Rising Main)

SD4 / SA4 Sewer Pumping Station (Prefabricated) & Sewer Rising Main

SD5 / SA5 Sewer Pumping Station (Cast-in-Situ) & Sewer Rising Main

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WD1 / WA1	Reticulation Water Mains $\leq$ DN280
WD2 / WD2	Distribution Water Main $>$ DN280
WD3 / WD3	Water Supply Pumping Stations & Pressure Control System
WD8 / WD8	Storage Structures
R1	Risk Overlay Ground Conditions
R2	Risk Overlay High Density
R3	Risk Overlay Major Crossing

## Contractors

SC1	Reticulation Sewer $\leq$ DN280 and $\leq$ 5m in depth
SC2	Branch/Main Sewer $\geq$ DN280 or $>$ 5m in depth
SC3	Reticulation Pressure Pipelines in Sewerage Systems $<$ DN300 (Not Rising Main)
SC4	Sewer Pumping Station (Prefabricated) & Sewer Rising Main
SC5	Sewer Pumping Station (Cast-in-Situ) & Sewer Rising Main
SC7	Any works undertaken on live sewer assets
WC1	Reticulation Water Mains $\leq$ DN280
WC2	Distribution Water Main $>$ DN280
WC3	Water Supply Pumping Stations & Pressure Control System
WC6	Steel Pipelines
WC8	Storage Structures
R1	Risk Overlay Ground Conditions
R2	Risk Overlay High Density
R3	Risk Overlay Major Crossing

### 4.2.1 Consultants

The minimum quality requirements for consultants are detailed in Schedule 4 of the Consultant Accreditation Deed.

These criteria set out the requirements for both the company and the key personnel within the company in relation to each of the specific categories of Development Work.

### 4.2.2 Contractors

The minimum quality requirements for contractors are detailed in Schedule 4 of the Contractor Accreditation Deed.

These criteria set out the requirements for both the company and the key personnel within

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the company in relation to each of the specific categories of Development Work. South East Water is to also be notified immediately of any changes to key personnel.

## 4.3 Audit

### 4.3.1 Audit requirements

Auditing is the process used to verify that an activity conforms to the requirements of the customer, the quality assurance system and quality system standard. There are three common types of audit:

- first party
- second party
- third party

#### First party audits

First party auditing is more commonly known as internal auditing. It is the monitoring by a company of its own quality system. First party auditing is essential to ensure effective operation of a quality system and is a requirement of ISO 9001 Quality.

#### Second party audits

Second party audits are conducted by customers on the supplier. These audits enable the customer to verify that the supplier can consistently meet the requirements, and may eliminate the need for detailed inspection and/ or testing of the product or service.

Audits conducted by South East Water on the engineering consultant and the contractor are second party audits.

#### Third party audits

Third party audits are conducted by organisations independent of both supplier and customer and are accredited by JAZ - ANZ.

Third party auditing reduces the need for second party auditing, saving time and money for both the supplier and customer.

### 4.3.2 Audit of consultants and contractors

Under the quality assurance strategy, South East Water will monitor the quality performance of consultants and contractors, involved in the design and construction of the Development Works. South East Water may conduct a range of second party auditing activities to ensure that these consultants and contractors consistently meet the specified requirements of the Accreditation Deed. Activities include:

- Quality system audit

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- Design audit
- Construction audit
- Testing audit
- Survey and As-constructed audits
- End of defects audit
- Office audit

With the exception of the quality system audit, all audits will be conducted without prior advice to the consultant/ contractor. The consultant/ contractor will be advised that an audit has been conducted only if the audit has revealed non-complying activities requiring corrective action.

Where occupational, health and safety related breaches are identified by South East Water, these will be escalated through the Developer's Representative and/ or Worksafe Victoria.

### 4.3.3 Quality system audits

Where South East Water audits a consultant's/ contractor's quality system, emphasis is given to:

- adherence to quality, environment and safety policy
- system and process review, for example management reviews, contract review, internal audits
- process and document control
- inspection and test activities
- control of non-conformances and observations
- corrective and preventive actions
- quality records
- construction audit schedules

South East Water will not normally conduct quality system audits on certified quality systems. However, South East Water reserves the right to do so:

- to establish confidence in a consultant/ contractor, or
- when non-compliance has been detected, or
- when a corrective or preventive action is outstanding and unresolved.

Quality system audits are generally conducted at the consultant's/ contractor's office.

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South East Water audits of the consultant's/ contractor's quality systems will be in accordance with the procedure outlined in *Australian Standard ISO 10011.1 – 1990 Guidelines for auditing quality systems Part 1: Auditing*.

## 4.3.4 Design audits

Design audits evaluate the consultant's design, and may include the following checks:

- accuracy
- completeness
- conformance to relevant standards and Development Agreement.

## 4.3.5 Construction audits

South East Water may conduct field audits of the construction phase of the Development Works.

South East Water's auditor may arrive on site unannounced and observe the construction process. The duration and scope of a field audit will vary depending on the construction work being conducted at that time.

The consultant's construction auditor will also be required to conduct appropriate construction audits in accordance with the submitted audit schedule to establish confidence in a contractor and the quality of the works being constructed, i.e. confirm that works are being constructed in accordance with the specified design plans and meet, WSAA, MRWA and South East Water construction standards.

## 4.3.6 Survey and as-constructed audits

South East Water will conduct audits of the as-constructed asset information after it has been verified by the consultant and submitted to South East Water.

There are two types of survey audit:

- Information presentation and format audit
- Field audit.

### Information presentation and format audit

This audit checks that the format and presentation of the as-constructed asset information is in accordance with South East Water requirements. This audit is conducted at South East Water offices and the accuracy of the information is not checked.

### Field audit

The field audit checks the accuracy of the submitted information.



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## 4.3.7 End of defects audits

South East Water may conduct field audits of the Development Works during, and at the completion of, the end of defects liability period.

Consultants and contractors are encouraged to arrange joint inspections of the Development Works at the completion of the end of defects liability period, prior to submitting the End of Defects Verification Form.

## 4.3.8 Audit register

South East Water may maintain the details and results of all audits carried out on both consultants and contractors on a confidential audit register.

These details will be used to:

- Assess the current quality performance of a consultant
- Assess the current quality performance of a contractor
- Determine whether a consultant or contractor has difficulty with particular aspects of the Development Works
- Determine the aspects of the Development Works that should be audited
- Schedule the time and date of each audit
- Determine the scope of each audit
- Record the results of the audit
- Determine the scope and extent of any corrective action required.

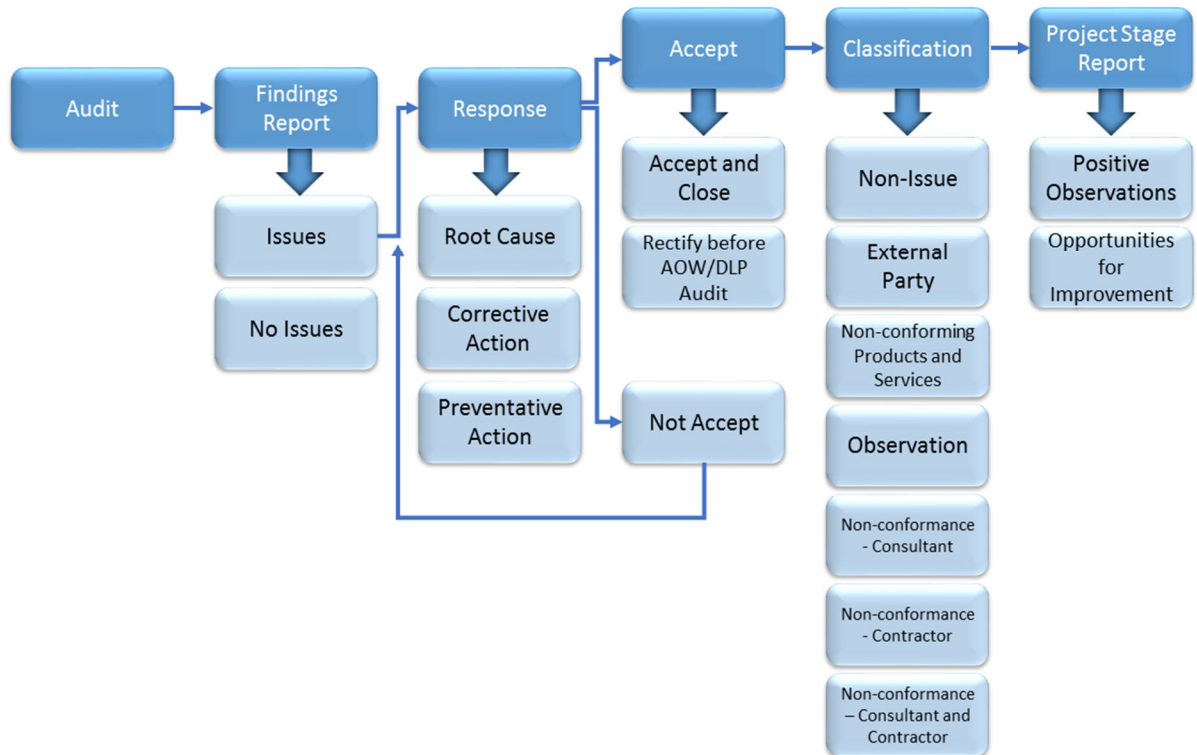
South East Water will use the data obtained from the audit register when preparing any performance reports on accredited consultants and contractors.

South East Water may provide the other retail water companies with performance reports on accredited consultants and contractors.

## 4.4 Non-conformances and Issues

During an audit, South East Water may detect that the consultant or contractor has not performed in accordance with the Accreditation Deeds or their quality system. This may be raised as an issue or a non-conformance.

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## 4.4.1 Findings Report

Once an audit is undertaken, a Findings Report will be generated by South East Water identifying any issues raised. These issues will be classified as follows:

- Non-Issue
- External Party
- Non-conforming Products and Services
- Observation

## 4.4.2 Non-conformance (NC)

A **Non-conformance** can be described as an activity or product which is in direct contravention of the standard or procedure that could have a significant effect on the quality of the product or service. A non-conformance involved a clear failure to fulfil specified requirements.

Responses to non-conformances are required by using the Resolve Non-conformance function to identify the root cause of the problem, implement Corrective and Preventative action taken to resolve the non-conformance, per the current process.

The Audit Report will show a summary of the number of non-conformances and issues observed.

A non-conformance involves a clear failure to fulfil specified requirements and may include:

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- Not complying with MRWA standards
- breach of regulations or deed agreement
- breach of Occupational Health and Safety Act
- breach of Occupational Health and Safety Regulations
- design fails to control the catchment
- grade of pipe found to be incorrect
- bedding insufficient
- End of Defects Liability Period exceeded
- Numerous or repeated errors.

Where, as result of an audit, a non-conformance is identified, South East Water records it and issues it to the consultant and/ or contractor for corrective action. A non-conformance **will** hold up Acceptance of Works certificate being issued.

## 4.4.3 Required actions

Notifications of issues and non-conformance require the recipient to record and process it in accordance with their quality system, where applicable, including:

- Identifying the **root cause** of the non-conformance
- effective **corrective action**
- written confirmation (including a copy of the completed non-conformance notice) of the effectiveness of the **investigations and rectification**
- Provide South East Water with written evidence that steps have been taken to prevent any reoccurrence (**preventative action**) of the non-conformance.

South East Water reserves the right to conduct verification reviews at the works site of the status of the rectification of observations or non-conformance.

## 4.4.4 South East Water response

Depending on the nature of non-conformance, South East Water may require additional inspections and/ or hold points, or conduct an audit of the consultant's and/ or contractor's quality management system where there is evidence that the system may be inadequate.

The scope of these audits normally extends only to those aspects of the Development Agreement where quality cannot be assured. For example, it may only cover the works construction and project management if there is evidence the design process function acceptably.

Where there is evidence that non-conformance is widespread and a quality system may be

# Land Development Policies and Pricing Manual

ineffective, the audit scope may be extended.

South East Water may also withhold the issuing of an Acceptance of Works Certificate until such time that it is satisfied that the consultant's and/ or contractor's quality system is functioning adequately.

## 4.4.5 Intensive audits

In an intensive audit, South East Water will adopt a role of quality control and inspect the works at predetermined points.

Intensive audits of works will be implemented where South East Water does not have confidence in the Consultant's or Contractor's quality assurance system meeting the specified requirements.

Intensive audits will normally only cover those aspects of the Development Agreement where the quality cannot be assured. For example, South East Water may implement an intensive audit of only the construction, if the design processes are functioning correctly.

Where non-conformance is widespread or significant enough to affect the quality of the entire agreement, South East Water will implement intensive auditing of all aspects of the works.

If South East Water determines that an intensive audit is required of the design, construction or survey of the Development Works, the appropriate party as determined by South East Water must pay an intensive audit fee.

Continued failures of the consultant and/ or contractors quality systems will be dealt with in accordance with the conditions of the Accreditation Deed This can include re-classification, suspension or termination of a consultant and/ or contractor.

## 4.4.6 Construction Audit Schedule (for Consultants)

The consultant is required to undertake a project specific Construction Audit Schedule for all Development Agreement works and submit it to South East Water with the Pre Construction Verification prior to works commencing.

The Consultant is required to carry out an **individual risk assessment** on all project works to determine the appropriate level of construction auditing and is to be attached to the Construction Audit Schedule. Consultants should also provide a site inspection checklist of what items are to be inspected by the Construction Auditor during a site construction audit.

A sample Construction Audit Schedule is shown as an Appendix to this document (Section 10.1). This Construction Audit Schedule is to be used as a **guide only**. The Consultant is responsible for developing project specific Construction Audit Schedules based on site and project specific conditions.

**Geotechnical** (ground, soil conditions) information may also be required to be carried out to determine the project risk and be submitted to South East Water.

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An audit as defined by *ISO 8402* is;

*'A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives'.*

The Developer is required to engage a Consultant and Construction Auditor who is required to be independent of the Contractor and cannot be the same entity as the Contractor. An auditor shall be objective, impartial and shall not audit their own work.

The Consultant is responsible to ensure the Construction Auditor carries out audits in accordance with the audit schedule or where the risk changes under a revised schedule.

The consultant must nominate a qualified Construction Auditor for each development works project. This person must meet the minimum requirements set out in the Development Agreement, Accreditation Deed and Consultant Pre-Qualification criteria documents.

Each Construction audit should incorporate mandatory Quality, Environmental, Occupational Health and Safety elements to be visually inspected on the work site. Construction audit checklists and diary entries should be retained by the Consultant as evidence of compliance with the project specific audit schedule.

# Land Development Policies and Pricing Manual

## 5 Land Tenure Guidelines

These guidelines will assist in determining appropriate protection for South East Water's assets and land development works outside the plan of subdivision. It is envisaged that they will apply in 95 percent of cases. Any projects that fall outside these guidelines are to be assessed on a case-by-case basis.

In unique circumstances the purchasing of land may be required. The need for this will be assessed on a case-by-case basis.

Under the guidelines, it is not necessary to obtain any form of land tenure for assets in roads and public highways owned by the Crown or councils.

**Excavations - The developer must ensure, as far as practicable, that excavations are contained to the easements shown on the certified Plan of Subdivision.**

Where part of any excavation is outside these limits, the developer must:

- widen the easement to contain the excavation, and/ or
- backfill the additional excavation in accordance with the requirements of South East Water and the local council.

### 5.1 Definitions

Private property	Property owned by a council (other than a municipal reserve), and property owned by other landowners (excluding South East Water, the Crown, the Commonwealth, utilities, government or public authorities, government instrumentalities, or government owned enterprises).
Municipal reserve	Council owned land which has been reserved as a municipal reserve, park or drainage reserve (not roads and public highways).
Other land	Land owned by the Crown (other than roads and public highways), Ministers on behalf of the Crown, the Commonwealth, utilities, government or public authorities, government instrumentalities, or government owned enterprises. Refer to the Corporate Lawyer for consideration of land tenure issues.
Subdivision	The division of land into two or more lots that can be sold or transferred separately, typically known as new estate development.
Land Development	New subdivisions.
Internal	New lots on a plan of subdivision. Easements are to be obtained in all cases when certifying a plan of subdivision. Easements sizes must be in accordance with the criteria below, with sewer location in accordance with WSA Code and South East Water Supplementary Manuals.
External	Connecting works external to the subdivision. Easements must be in accordance with the criteria below, with sewer location in accordance with WSA Code and South East Water Supplementary Manuals.

# Land Development Policies and Pricing Manual

## 5.1.1 Land Tenure Guidelines – Sewerage Assets

Sewer asset location is to be in accordance with WSAA Code and South East Water Supplementary Manuals.

### Sewer pipes and maintenance structures

Easement requirements over newly constructed assets are to be sized in accordance with MRWA Sewerage Standards Drawing MRWA-S-111. Easement requirements for existing assets are to be in accordance with the following tables.

Based on single pipe in easement.

Easements may only be shared with storm-water pipes with clearance as per the WSAA Code.

### Residential Zoning

Land Use	Size	Preferred Land Tenure Action
Private Property	< 300mm	<p>Minimum 2.0m easement (min 0.6m clearance from outside of pipe to easement/ title boundary).</p> <p>Maintenance structure located within easement.</p> <p>Easements are required along side boundaries unless the lot is greater than 4000 m<sup>2</sup>.</p> <p>Easements required along front and rear boundaries for lots less than 450 m<sup>2</sup>.</p> <p>Easements required where the sewer does not abut a title boundary for any size lot.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
	300 – 450mm	<p>Minimum 2.5m easement (min 1.0m clearance from outside of pipe to easement/ title boundary).</p> <p>Maintenance structure located within easement.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
	>450– 600mm	<p>Minimum 3.0m easement (min 1.0m clearance from outside of pipe to easement/ title boundary).</p> <p>Maintenance structure located within easement.</p>

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		Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.
	>600mm	<p><i>Redesign wherever possible outside of private property.</i> If proven not possible a 3.7m + DIA of pipe rounded to 0.5m easement with pipe to be centrally located.</p> <p>Maintenance structure located within easement.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>

## Commercial/ Industrial zoning

Land Use	Size	Preferred Land Tenure Action
Private Property	≤600mm	<p>Minimum 3.0m easement (min 1.0m clearance from outside of pipe to easement boundary).</p> <p>Maintenance structure located within easement.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
	>600mm	<p><i>Redesign wherever possible outside of private property.</i> (If proven not possible a 3.7m + DIA of pipe rounded to 0.5m easement with pipe to be centrally located).</p> <p>Maintenance structure located within easement.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
Municipal Reserve	<300mm	<p>Where a sewer offset is &gt;2.0m offset from a title boundary a minimum 2.0m easement is required.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
	300 – 450mm	<p>Minimum 2.5m easement (min 1.0m clearance from outside of pipe to</p>



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		<p>easement/ title boundary).</p> <p>Maintenance structure located within easement.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
	>450 – 600mm	<p>Minimum 3.0m easement (min 1.0m clearance from outside of pipe to easement/ title boundary).</p> <p>Maintenance structure located within easement.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
	>600mm	<p>3.7m + DIA of pipe rounded to 0.5m easement.</p> <p>Maintenance structure located within easement. Pipe to be centrally located.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>

## Rural zoning (>4000sq m)

Land Use	Size	Preferred Land Tenure Action
Private Property	< 300mm	<p>Where a sewer offset is &gt;2.0m offset from a title boundary a minimum 2.0m easement is required.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
	300 – 450mm	<p>Minimum 2.5m easement (min 1.0m clearance from outside of pipe to easement/ title boundary).</p> <p>Maintenance structure located within easement.</p> <p>Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.</p>
	>450– 600mm	<p>Minimum 3.0m easement (min 1.0m clearance from outside of pipe to easement/ title boundary).</p> <p>Maintenance structure located within</p>

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		easement. Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.
	>600mm	3.7m + DIA of pipe rounded to 0.5m easement. Maintenance structure located within easement. Easements to extend a minimum 1.0m past the end of pipe or maintenance structure at the end of line.

## Sewer pump stations

Land Use	Size	Preferred Land Tenure Action
Private Property	All	Redesign: <i>Not acceptable in private property under any circumstances.</i>
Municipal Reserve	All	Located within easement with carriageway rights. Size shall be determined on an individual basis. Site to be fenced. 24 hr access to be provided.

## Low pressure sewer pump systems

Land Use	Size	Preferred Land Tenure Action
Private Property	All	No easements are required. For low pressure reticulation lines (external to private property) same as for <i>Rising mains</i> .
Municipal Reserve	All	No easements are required.

## Rising mains

Land Use	Size	Preferred Land Tenure Action
Private Property	All pipes	Redesign: <i>not acceptable in private property under any circumstances.</i>
Municipal Reserve	≤150 mm	Minimum 4.0m easement. Pipe located centrally within easement.
	>150 mm	Minimum 6.0m easement. Pipe located centrally within easement.

## Effluent reuse pipelines

Land Use	Size	Preferred Land Tenure Action
Private Property	All pipes	Redesign: <i>not acceptable in private property unless no other option is</i>

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		<i>available.</i> If unavoidable refer to easements as per municipal reserve below.
Municipal Reserve	≤150 mm	Minimum 4.0m easement. Pipe located centrally within easement.
	>150 mm	Minimum 6.0m easement. Pipe located centrally within easement.

## Gas checks and emergency relief structures (ERS)

Land Use	Size	Preferred Land Tenure Action
Private Property	All	Redesign: <i>not acceptable in private property under any circumstances.</i> Public access required for maintenance.
Municipal Reserve	All	Located within easement with carriageway rights. Size shall be such that a minimum of 1.0m clearance exists from edge of easement to outside of structure. Refer <i>WSAA Code – SEW Supplementary Manuals.</i> 24 hr access to be provided.

## Detention tanks

Land Use	Size	Preferred Land Tenure Action
Private Property	All	Redesign: <i>not acceptable in private property under any circumstances.</i>
Municipal Reserve	All	Located within an easement, with carriageway rights. Size shall be determined on an individual basis, according to what is needed to operate the facility. Site to be fenced. 24 hr access to be provided.

## Chemical injection plants

Land Use	Size	Preferred Land Tenure Action
Private Property	All	Redesign: <i>not acceptable in private property under any circumstances.</i>
Municipal Reserve	All	Located within an easement with carriageway rights. Size shall be determined on an individual basis for what is needed to operate facility and comply

# Land Development Policies and Pricing Manual

		with dangerous goods requirements. Site to be fenced. 24hr access to be provided
--	--	---

## Sewage treatment plants

Land Use	Size	Preferred Land Tenure Action
Municipal Reserve	All	On land owned by South East Water. 24hr access to be provided.

## 5.1.2 Land Tenure Guidelines – Water Assets

Water asset location must in accordance with WSAA Code and South East Water Supplementary manuals.

### Water mains

#### Residential, commercial and industrial zoning

Land Use	Size	Preferred Land Tenure Action
Private Property	All sizes	Permanent - Redesign: <i>not acceptable in private property under any circumstances.</i> Temporary – If proven necessary.
	<150 mm	Minimum 4.0m easement
	>150 – 600mm	Minimum 6.0m easement
Municipal Reserve	<150 mm	Minimum 4.0m easement
	>150 – 600mm	Minimum 6.0m easement
	>600mm	Easement size to be determined
Owners corporation common property	<150mm	Minimum 4.0m easement
	>150 - 600mm	Minimum 6.0m easement

#### Reservoirs, tanks and stand pipes

Structure is to be located on land owned by South East Water.

#### Pump stations

Land Use	Size	Preferred Land Tenure Action
Private Property	All	Redesign: <i>not acceptable in private property under any circumstances.</i>
Municipal Reserve	All	Located within an easement with carriageway rights. Size shall be determined on a case by case basis according to what is required to operate

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		the facility. Site to be fenced.
--	--	----------------------------------

## Pressure reducing stations

Land Use	Size	Preferred Land Tenure Action
Private Property	All	Redesign: <i>not acceptable in private property under any circumstances.</i>
Municipal Reserve	All	Located within an easement with carriageway rights. Size shall be determined on a case by case basis according to what is required to operate the facility. Site to be fenced.

## Water treatment plants, e.g. chlorinator

Land Use	Size	Preferred Land Tenure Action
Private Property	All	Redesign: <i>not acceptable in private property under any circumstances.</i>
Municipal/ Drainage Reserve	All	Located within an easement with carriageway rights. Size shall be determined on a case by case basis according to what is required to operate the facility. Site to be fenced.

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## 6 Occupational Health and Safety

### 6.1 Consultants and contractors

The consultant and contractor must ensure that all work is in strict adherence to OH&S related legislation, in particular the OH&S Act, Regulations and compliance codes.

## 7 Environment

### 7.1 Environment

#### 7.1.1 Environmental policy statement

South East Water Corporation is committed to the supply of safe water and the removal, transport and treatment of sewage in an environmentally sensitive and responsible manner through:

- meeting all environmental licence, contract, legislative and regulatory requirements;
- seeking to continually improve environmental performance management;
- catering for market and stakeholder expectations;
- improving cost efficiencies through waste management;
- preventing/addressing potential sources of pollution as a result of its activities;
- developing a framework for setting and reviewing its environmental objectives and targets; and
- contributing to protecting environmental values for present and future generations.

#### 7.1.2 General

In carrying out the works the Consultant shall comply, and ensure compliance by all sub-contractors, with:

- the requirements of all laws, statutes, by-laws, standards, policies, guidelines and the like which are relevant to environment protection, where failure to comply may render the Consultant liable to prosecution by the EPA and/ or other authorities;
- South East Water Corporation's Environmental Policy, the provisions of this clause and any other environmental protection provisions in the Development Agreement; and
- all notices and instructions issued by South East Water with respect to environmental protection.

#### 7.1.3 Removal and disposal of rubbish

The contractor must maintain the work site in a reasonably neat condition by regularly removing all rubbish and unused materials.

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## 7.1.4 Noise control

The contractor shall:

- conform with *AS 2436 - 2010 Guide to noise and vibration control on construction, demolition and maintenance sites*;
- avoid practices which lead to excessive noise and disturbance to site occupants, adjoining land owners and occupiers; and
- minimise noise emanating from spoil dumping into trucks and from other machinery.

## 7.1.5 Minimising mud and dust

The contractor shall adopt practices that ensure that the dust and mud associated with the works are minimised. Appropriate methods are set out in EPA Victoria Publication No. 275; *Construction Techniques for Sediment Pollution Control*.

## 7.1.6 Disposal of contaminants

The contractor shall properly dispose of all solid, liquid and gaseous contaminants in accordance with all statutory requirements.

## 7.1.7 Sediment management of construction sites

The objective of sediment control is to minimise the impact of contaminated stormwater into the local drainage networks. If contaminated stormwater enters a drainage line or stormwater drainage system, it will eventually discharge into an adjacent waterway and pollute it.

If all known on-site treatment methods are unsuitable or impractical, then turbid and silt laden water must be removed by tankers for treatment and disposal at an appropriate waste water treatment facility.

## 7.1.8 Tree preservation

### Avoiding damage to significant trees

If during the planned works, there is a possibility of permanent damage to significant trees, and the area cannot be avoided, expert advice should be obtained. Trees that have to be removed must be replaced with two or three pot-sized 'sewer friendly' trees.

### Repairing damage to trees

Any necessary damage to trees must be done in a way that minimises possible health risks to them. Roots or branches must be scored, and the cut end of the limb daubed with mastic. Roots with a minimum diameter of 50 mm must be dug around and not damaged.

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## Avoiding piling soil against trees

No soil, rocks or gravel should be piled directly against trees or under tree canopies.



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## 8 References

### 8.1 Legislation

- Aboriginal Heritage Act 2006 (Victoria)
- Building Act 1993 (Victoria)
- Building Regulations 2006 (Victoria)
- Dangerous Goods Act 1985 (Victoria)
- Dangerous Goods (Storage and Handling) Regulations (Victoria)
- Dangerous Goods (Transport by Road or Rail) Regulations 2008 (Victoria)
- Environment Protection Act 2017 (Victoria)
- Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
- Equipment (Public Safety) Act 1994 (Victoria)
- Equipment (Public Safety) Regulations 2017 (Victoria)
- Occupational Health and Safety Act 2004 (Victoria)
- Occupational Health and Safety Regulations 2017 (Victoria)
- Owners Corporations Act 2006 (Victoria)
- Planning and Environment Act 1987 (Victoria)
- State Environment Protection Policy (Waters of Victoria) – EPA Victoria
- Subdivision Act 1988 (Victoria)
- Subdivision (Procedures) Regulations 2011 (Victoria)
- Victorian Civil and Administrative Tribunal Act 1998 (Victoria)
- Water Act 1989 (Victoria)
- WorkSafe Victoria Compliance Code - Confined Spaces – Edition 1, March 2018

### 8.2 Standards

- AS 2124 – 1992 General conditions of contract
- AS 2436 - 2010 Guide to noise and vibration control on construction, demolition and maintenance sites
- AS/ NZS 4801 - 2001 Occupational health and safety management systems - Specification with guidance for use
- AS/ NZS ISO 9000 – 2016 Quality management systems - Fundamentals and vocabulary
- AS/ NZS ISO 9001 – 2016 Quality management systems – Requirements
- AS/ NZS ISO 9004 – 2011 Managing for the sustained success of an organization - A quality management approach
- AS/ NZS ISO 14001 - 2016 Environmental management systems - Requirements with guidance for use

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## 8.3 Deeds and Agreements

- Contractor Accreditation Deed
- Consultant Accreditation Deed
- Development Agreement

## 8.4 Technical standards

- Water Supply Code of Australia - Melbourne Retail Water Agencies Integrated Code - WSA 03- 2011-3.1 Version 2.0
- Sewerage Code of Australia - Melbourne Retail Water Agencies Integrated Code - WSA 02-2014-3.1 Version 2.0
- Sewage Pumping Station Code of Australia - WSA 04-2005-2.1
- Sewage Pumping Station Code of Australia Version - WSA 04-2001 South East Water Supplement Revision 2, Issue Date August 2010
- Vacuum Sewerage Code - WSA 06-2008 Version 1.3
- Pressure Sewerage Code of Australia - WSA 07-2007 Version 1.1
- Polyethylene Pipeline Code 3rd edition - WSA 01-2004 Version 3.1
- Conduit Inspection Reporting Code of Australia - WSA 05-2013 Version 3.1
- Pressure Sewerage Code of Australia WSA 07-2007-1.1 -MRWA Supplement
- MRWA Backfill Specification 04-03.2
- MRWA Sewer Acceptance Testing Specification 13-01.1
- MRWA Water Quality Compliance Specification 04-02-2.1
- MRWA Web Portal
- MRWA Newsletters – The Pipeline
- MRWA/ WITS Survey Manual and WITS Design Manual where applicable
- MRWA Water Metering and Servicing Guidelines
- MRWA Standard Drawings
- South East Water’s design and construction addendums located on its website

## 8.5 South East Water Documentation

- AM 2035 Lifting of Sewer Maintenance Structure Covers Procedure
- AM 2426 Asset Entry Procedure
- Best Practice Environmental Manual – A Practical Guide for Project Managers and Field Personnel in the Environmental Improvement of Operational and Maintenance Activities, 1996, South East Water Ltd
- BS 1882 Equipment Isolation Procedure – Lock Out Tag Out
- BS 1955 Confined Space Entry Procedure
- BS 2537 Confined Space Entry Permit and Rescue Plan
- BS 2722 Restricted Space Procedure
- South East Water’s Customer Contract
- South East Water’s Guidelines for > 19 Residential Unit Developments
- South East Water 2018 Price Determination

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- South East Water Prices Manual 2018-23 Tariffs and Charges
- South East Water technical addendums.

## 8.6 Other references

- EPA Victoria Publication No. 275; Construction Techniques for Sediment Pollution Control
- Essential Services Commission 2018, South East Water Final Decision: 2018 Water Price Review, 29 May

## 9 Revision status

### 9.1 Revision Table

Date	Description	Revised by	Approved by
26/07/2018	Updated pricing to reflect 2018/19 financial year. Updated to reflect introduction of PropertyConnect® and Manage Developer Works	T Dunkley	
19/07/2018		D Sweeney	

### 9.2 Review Intervals

This document shall be reviewed and revised as necessary at no greater than two yearly intervals.

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## 10 Appendix

### 10.1 Consultant's Construction Audit Schedule Guide

**Sewerage**  **or Water and/or Recycled Water**  (tick one)

**WARNING:** This Audit Schedule is issued solely for the purpose of assisting you in determining the number of audits required for a construction project. An individual assessment should be made for all projects, after analysing the risks involved in a particular activity. All liability at law (including under statute), and all conditions and warranties implied by law (including under statute), are expressly excluded except that liability and those conditions and warranties which cannot be excluded. In respect of liability and conditions and warranties which cannot be excluded, South East Water's liability to you is limited, as far as law (including statute) permits.

Section 1: General Project Information	
Project Name: .....	
Suburb: .....	Melways Reference: .....
SEWL File Number: .....	Consultant Reference:
Consultant Name: .....	Telephone No: .....
Approved Construction Auditor: .....	Telephone No: .....
Approved Construction Supervisor: .....	Telephone No: .....

**Note:** Asset Risk Ranking Codes are based on the Indicative Guide information provided in Section 4.4.6 of the Land Development Policies and Pricing Manual. Additional assessment must be carried out in accordance with Australian Standard AS/NZS 4360:2004 Risk Management and the Associated Guidelines.

Section 2: Risk Assessment					
Category	Low	Medium	High	Extreme	Comments (optional)
<b>Sewer Asset Type</b>					
Reticulation/Branch Sewers ≤ DN 300	<b>x</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Branch/Main Sewers > DN300	<input type="checkbox"/>	<b>x</b>	<input type="checkbox"/>	<input type="checkbox"/>	
Pressure Sewer	<input type="checkbox"/>	<b>x</b>	<input type="checkbox"/>	<input type="checkbox"/>	
Sewerage Pumping Station	<input type="checkbox"/>	<input type="checkbox"/>	<b>x</b>	<input type="checkbox"/>	
Vacuum Sewerage Systems	<input type="checkbox"/>	<input type="checkbox"/>	<b>x</b>	<input type="checkbox"/>	
Specialist Works	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>x</b>	
<b>Water / Recycled Asset Type</b>					
Reticulation Water Mains ≤ DN 300	<b>x</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Distribution Water Mains > DN300	<input type="checkbox"/>	<b>x</b>	<input type="checkbox"/>	<input type="checkbox"/>	
Water Supply Pumping Station	<input type="checkbox"/>	<input type="checkbox"/>	<b>x</b>	<input type="checkbox"/>	
Specialist Works	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>x</b>	
Under Pressure Cut-in Connections	<input type="checkbox"/>	<b>x</b>	<input type="checkbox"/>	<input type="checkbox"/>	
Steel Pipelines	<input type="checkbox"/>	<input type="checkbox"/>	<b>x</b>	<input type="checkbox"/>	

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Category	Low	Medium	High	Extreme	Comments (optional)
<b>Excavation</b>					
Depth < 1.5m	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Depth 1.5 to 4.0m	<input type="checkbox"/>	x	<input type="checkbox"/>	<input type="checkbox"/>	
Depth 4.0 to 6.0m	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>	
Depth > 6.0m	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x	
<b>Soil type</b>					
Stiff clay	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sand	<input type="checkbox"/>	x	<input type="checkbox"/>	<input type="checkbox"/>	
Rock	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>	
Blasting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x	
Below Water Table	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>	
<b>Environment</b>					
Proximity to Residents	>100m	>50m	>10m	In Private Property	
Proximity to Watercourse	None	Within Catchment	Immediately Upstream	Crossing Watercourse	
Contaminants	None	Low Level	Medium Level	High Level/ Asbestos	
Traffic	None	Minor Road	Major Road	Arterial Road	
Tree Protection Zones	None	>20m of TPZ	Within TPZ	Boring Under Tree	
Heritage overlay, artefacts found	None	>20m	Within Declared Area	Disturbance of Artefacts	
<b>Contractor</b>					
Work performance history	Very Good	Good	Average	Poor	
Experience	High Level	Reasonable Level	Minimal	None	
Pipe material (UPVC, VC, PE, Steel, DI, GRP)	uPVC, VC	PE, GRP	Steel, DI	Other	
<b>Location</b>					
Greenfield	x	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Infill (redevelopment)	<input type="checkbox"/>	x	<input type="checkbox"/>	<input type="checkbox"/>	
Existing Built Up Area	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>	
Major Obstructions (other utilities etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x	

Has the Contractor's Project Management Plan (PMP) been reviewed and accepted by your accredited consultancy?

Yes

No

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Section 3: Audit Schedule Sign-off:				
<b>Overall Project Risk Ranking (tick)</b> Extreme <input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/>	<b>Audit Frequency</b> .....per week	<b>Total Number of Audits</b> ..... for project	<b>Average Audit duration</b> .....hrs per audit	<b>Total Audit Hours</b> .....
Specific Risks identified: 1. .... 2. .... 3. .... Risk mitigation measures implemented. (Elimination, Substitution, Engineering, Administration, Personal Protective Equipment) 1. .... 2. .... 3. ....				
Construction Auditor: .....(print) Signature: ..... Date: ...../...../.....		Company Representative: .....(print) Signature: ..... Date: ...../...../.....		

Section 4 Nominate any Special Site Audits to be undertaken by the Construction Auditor:	
Description of Works	Audit duration
Site Establishment/Set Out	
Materials Delivery and Storage	
Pipe Laying/Joining	
Bedding and Backfill	
Anchoring and Restraints	
Concrete Structures	
Connection to Existing Services	

# Land Development Policies and Pricing Manual

Section 5 <i>Mandatory Site Audit Hold points to be witnessed by the Construction Auditor:</i>
Pre-commencement meeting with Contractor.
Asset Testing
Significant Field Design Changes
Concrete Placement work, i.e. every 2 <sup>nd</sup> concrete delivery pour
Connection into Live Assets
Acceptance of Works
End of Defects Liability Period
Other (Please Specify)

Section 6: <b>Audit Frequency guide;</b> (refer Land Development Policies & Pricing Manual, Section 3.4.6 risk)	
Risk ranking Code	Minimum Site Audit Frequency
Extreme	Daily audits
High	4 audits per week
Medium	3 audits per week
Low	2 audits per week

Please attach site inspection record / checklist form to be used

## Hazard Control Hierarchy

