Land Development Manual

May 2019





Document Control

Name	Land Development Manual
File location	TRIM: INT18-08006
Document version	Version 1
Date of issue	May 2019
Prepared by	Manager Engineering and Construction
Reviewed and Accepted by	Manager Engineering and Construction General Manager Assets and Operations General Manager Customer and Community
Approved by	General Manager Assets and Operations Executive Team

Disclaimer

The Westernport Water Land Development Manual sets out the procedures and requirements of Westernport Water in relation to the construction of water, sewerage and recycled water (where applicable) assets in Westernport Water's service area. It does not constitute technical, engineering or legal advice. Parties undertaking land development requiring water and/or sewerage services from Westernport Water must obtain their own technical, engineering and legal advice as applicable.

Contacts

For information regarding Westernport Water land development requirements, please contact our **Engineering and Construction Team** on either

Email: westport@westernportwater.com.au; or Telephone: 1300 720 711

Land Development Manual

May 2019



Table of Contents

1	Definitions and Abbreviations	4
1.1	Definitions	4
1.2	Abbreviations	7
2	General	8
2.1	Introduction	8
2.2	Scope	8
2.3	Intended Audience	8
2.4	Review Mechanism	8
2.5	Westernport Water Areas of Interest or Control	8
2.6	Recycled Water (where applicable)	9
2.7	Trade Waste and Minor Trade Waste	9
3	Types of Development	11
3.1	Single Connections	11
3.2	Development with Works	11
3.2.1	Sewerage services	11
3.2.2	Water tapping requirement	11
3.2.3	Recycled Water tapping requirement (where applicable)	11
3.3	Development with No Developer Works	11
3.4	Two-lot Subdivision Development	12
3.5	Owners' Corporation Developments (known as "body corporate")	12
3.6	No Owners' Corporations Development	12
3.7	Industrial and Commercial	12
3.8	Non-subdivisional Development	12
3.8.1	Dual Occupancy	12
3.8.2	Multi-Storey	12
4	Land Development Process	13
4.1	Servicing Advice and Feasibility Studies	13
4.2	Planning Referral	13
4.2.1	Planning Permit Referral (Section 55)	13
4.2.2	Certification Referral – Plan of Subdivision (Section 8)	14
4.3	Development Agreement	14
4.4	Fees and Charges	15
4.4.1	New Customer Contributions	15
4.4.2	Administration Fees	15
4.4.3	Cost of Feasibility Studies	15
4.4.4	Works Warranty/Security	15
4.5	Shared and Reticulation Assets	16
4.6	Development Servicing Plans	16
4.7	Bring Forward Costs	16
4.8	Temporary Assets	16
4.9	Reimbursements	16
4.10	Internal Private Works	16

Development Works	17
Accredited Consultants and Contractors	17
Accredited Consultants	17
Accredited Contractors	17
Design Standards	17
	18
	18
	18
Pre-Construction	18
	19
	19
	19
	20
·	21
	21
	21
List of Forms	21
Auditing of Development Works	22
Design Review	22
Construction Site Inspections	23
	23
•	23
	23
	24
Intensive Audits	24
Asset Protection	25
Reference Material	26
Appendices	27
Appendix 1: Westernport Water Land Development Works Process Flowchart	
Appendix 6: As Constructed Information and GIS (ACDC)	
Appendix 7: As Construction Drawings (Internal Sewer)	
Appendix 8: Build Overs	
Appendix 9: Water Metering and Servicing Guidelines	
Appendix 10: Sewer Servicing Guidelines	
Appendix 11: Forms	
	Accredited Consultants and Contractors Accredited Consultants Accredited Contractors Design Standards Requirements for Submission of Design Preferred Material Executed Development Agreement Pre-Construction Construction Live Asset Shutdown Inspection and Testing As Constructed Survey Defects Liability Certificate of Completion List of Forms Auditing of Development Works Design Review Construction Site Inspections CCTV and Laser Profiling Ovality Inspections Survey and As Constructed Information End of Defects Liability Audit Corrective Action Request Intensive Audits Asset Protection Reference Material Appendix 2: Design Standards and Approving Developer Designs - Water and Sewer Design Standards Appendix 4: Construction India Gls (ACDC) Appendix 7: As Construction Drawings (Internal Sewer) Appendix 7: As Construction Drawings (Internal Sewer) Appendix 7: As Construction Drawings (Internal Sewer) Appendix 9: Water Metering and Servicing Guidelines Appendix 10: Sewer Servicing Guidelines

Definitions and Abbreviations

Definitions 1.1

Unless the context otherwise requires, the definitions and abbreviations in the Development Agreement and Standard Conditions (Development Agreement) will also apply to this Manual. In addition, the following definitions apply in this Manual:

12 (1) Easement is an easement shown by dimensions on the property Title Plan or Plan of Subdivision, 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 is an easement for the benefit of lots necessary to provide passage or provision of water supply, recycled water (where applicable), 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 means a letter issued by Westernport Water once it is satisfied that the Development Works have been satisfactorily completed as outlined in the Development Agreement. This signifies the beginning of operation of new assets by Westernport Water.

Accredited Consultant The consulting engineer stated in the Acceptance Form (or such other consulting engineer as approved by Westernport Water from time to time) who must be accredited by Westernport Water to undertake the design and undertake the supervision of the construction of the Works and various other actions or functions specified in this Agreement.

Accredited Contractor A contracting entity which must be accredited by Westernport Water to undertake the Works and various other relevant actions or functions specified in this Agreement.

As Constructed Information Documents which the Owner/Developer must procure that the Consultant prepares, verifies and submits (electronic and/or hard copy) to Westernport Water as per Appendix 6 of the Land Development Manual.

Audit 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.

Boundary Re-alignment means a boundary amendment to a Plan of Subdivision that does not increase the number of lots. Bring Forward Costs has the meaning set out in Section 4.7 of this Manual.

Certificate of Completion is the certificate issued when Westernport Water is satisfied that the Development Works, all other services and roads, and any defect notified to the Owner/Developer, are complete. This signifies the beginning of the two (2) year Works Warranty period.

Certification Referral means the referral of a Plan of Subdivision by a Responsible Authority to Westernport Water for consent, required alterations or refusal.

Class A recycled water means the highest quality of recycled water. It is supplied to residential and industrial customers for non-drinking purposes such as toilet flushing, garden watering and car washing.

Consent to Statement of Compliance means a notice issued by Westernport Water to a Responsible Authority that it consents to the issuing of Statement of Compliance (SOC) under Section 21 of the Subdivision Act 1988 with respect to a Development incorporating a Subdivision.

Construction Verification Form is the form lodged and signed by the Consultant certifying that all requirements are met prior to consent to Statement of Compliance.

Consultant has the same meaning as Consultant nominated by the Owner/Developer and accepted by Westernport Water.

Contractor has the same meaning as Contractor nominated by the Owner/Developer and accepted by Westernport Water.

Corrective Action Request is raised by Westernport Water when the Owner/Developer, Consultant or Contractor does not perform a particular task in accordance with the Development Agreement or their Deed of Accreditation.

Council (the Council) means the local responsible authority for the review and granting of any required Planning Permission in connection with the Development Works.

Day means calendar day.

Defects Liability Period The period specified in the Particulars (as extended pursuant to Clause 17) after Westernport Water issues an Acceptance of Works Certificate.

Deferred Works Agreement means an agreement reached between the Owner/Developer and Westernport Water pursuant to which Westernport Water accepts early acceptance of all or part of the Works.

Design Documents means, but is not limited to, the drawings, specifications and other information, samples, models, patterns and the like, required by the Development Agreement conditions (and including, where the context so requires, those to be created by the Consultant or Contractor) for the construction of the Development Works.

Design Verification Form is the form lodged and signed by the Consultant verifying that Development Works have been designed in accordance with the Development Agreement requirements.

Development means a Development of land and/or buildings, including Subdivisions, incorporating Development

Development Agreement means the agreement entered into by Westernport Water and the Owner/Developer. This includes the formal Instrument of Agreement, the Development Agreement Standard Conditions, the Land Development Manual (this Manual) applying from time to time, and Schedules or other documents specified as incorporated in a particular Development Agreement.

Development Agreement Standard Conditions means the standard conditions incorporated by reference in the Development Agreement.

Development Servicing Plans are used as the baseline for calculating standardised New Customer Contributions (NCCs) and for determining the magnitude of bring forward charges that may be applicable to new connections.

Development Works (the Works) means the Works to be designed and constructed under the Development Agreement for the supply of water, recycled water (where applicable), sewerage assets and infrastructure to service a Development, and includes any Works undertaken in response to a notice issued by Westernport Water during the Works Warranty Period.

Dual Occupancy means two (2) dwellings on one (1) lot.

End of Defects Liability Verification Form means the form to be lodged by the Owner/Developer and signed by the Contactor and the Consultant at the end of the Work Warranty period in order to trigger the release of any Security held by Westernport Water.

Fronted by (water and/or recycled water (where applicable) and/or sewer main) means to have a water main abutting the property boundary that provides for a legal water/recycled water (where applicable) tapping and/or sewer connection.

Internal Services means water and recycled water (where applicable) pipes or sewers owned and operated by land Owners or an Owners' Corporation. See also Private Service.

Lot means an area within a Development that is separately titled or is, or can be, individually metered for water or recycled water (where applicable) supply purposes.

Manual means this Land Development Manual (this Manual).

Multi-Unit Development means two (2) or more dwellings on one (1) lot.

New Customer Contributions (NCCs) are an upfront payment levied by Westernport Water when a customer builds or develops a property and connects to Westernport Water's water, sewerage or recycled water (where applicable) network, as specified in the Price Determination.

Non-works means a Subdivision or Development of land that does not require any extension of Westernport Water Assets or new Assets. This would typically occur when the required services for the Development Works are already available adjacent to all the new allotments or land. Internal Services and the installation of property connections or tappings may still be required. For example, sewer branches and water and recycled water (where applicable) tappings are considered to be non-works.

Owners' Corporation is the entity that is created as part of a Plan of Subdivision in accordance with the Owners' Corporations Act 2006. The Owners' Corporation is responsible for the maintenance and administration of any common property and/or common services. For example, the Owners' Corporation may be responsible for any private water, recycled water (where applicable) or sewer(s) within the Plan of Subdivision.

Owner means the owner of the property, as described in the Particulars.

Plan of Subdivision means a Plan of Subdivision relating to a Development or Development Works prepared in accordance with the Subdivision Act 1988.

Planning Permit is the permit required under the Planning and Environment Act 1987 for use or Development of the land.

Planning Permit Application means an application by or on behalf of the Owner/Developer to the Council for any planning permission.

Pre-Acceptance of Works Audit means the Audit carried out by Westernport Water prior to the issuing of the Acceptance of Works Certificate or consent to Statement of Compliance.

Pre-Construction Verification Form has the meaning given in Section 5.3 of this Manual.

Preferred Material List means a document that lists material preferred by Westernport Water to be used in Development Works

Price Determination means the water price review Westernport Water determines as approved by the ESC from time to time.

Private Services has the same meaning as Internal Services.

Referall Authority means an authority or organisation that planning applications and subdivision plans are referred to pursuant to the Planning and Environment Act 1987 and the Subdivision Act 1988.

Reserve means 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.

Responsible Authority means a responsible authority under the Planning and Environment Act 1987.

Reticulation Assets are defined as water mains, recycled water mains (where applicable) and sewerage networks that are required as part of the Development Works and provided by the Owner/Developer when connecting to Westernport Water systems. The Owner/Developer must meet all costs associated with reticulation assets including design, construction, materials and infrastructure components. Reticulation assets are defined by the Essential Services Commission (ESC).

Sewer Catchment means an area of land serviced by a particular sewerage system.

Shared Assets are generally defined as water mains or recycled water (where applicable) mains that are greater than 150mm diameter and gravity sewerage mains that are greater than 225mm diameter, and all associated assets including:

- Water or recycled water (where applicable) pump stations (where the pump discharges into a water or recycled water main greater than 150mm diameter);
- Pressure reducing valves (where connected to water or recycled water (where applicable) mains greater than 150mm diameter);
- Water and recycled water (where applicable) tanks (where the outlet main is greater than 150mm diameter);
- Sewer pump stations, emergency storages and rising mains (where the gravity sewer inlet to the sewer pump station is greater than 225mm diameter);
- Sewer pressure mains (where the receiving gravity sewer main is greater than 225mm diameter).

Statement of Compliance (SOC) is a document required to finalise the Subdivision process, to allow registration of the Subdivision issued by a Responsible Authority.

Tapping(s) means the connection of the internal water service to Westernport Water's water and/or recycled water (where applicable) main.

Trade Waste Acceptance Criteria has the meaning given in Section 2.7 of this Manual.

Trade Waste Agreement means the agreement entered into between a customer and Westernport Water for the disposal of trade waste.

Trade Waste Application Form has the meaning given in Section 2.7 of this Manual.

Trade Waste Charges means the charges set by Westernport Water at its absolute discretion for accepting trade waste into Westernport Water's system.

Trade Waste Customer Charter has the meaning given in Section 2.7 of this Manual.

Trade Waste Guidelines has the meaning given in Section 2.7 of this Manual.

Two-lot Subdivision means the Subdivision of one (1) lot into two (2) lots.

Abbreviations 1.2

The following abbreviations apply in this document:

Abbreviation	Reference	
AHD	Australian Height Data	
BCSC	Bass Coast Shire Council	
CAD	Computer-Aided Design	
CAR	Corrective Action Request	
DGN	Design (CAD programs file name extension)	
DWG	Drawing (CAD programs filename extension)	
DXF	Drawing Exchange Format (CAD programs filename extension)	
EPA	Environment Protection Authority	
ESC	Essential Services Commission	
GIS	Geographic Information System	
IFC	Issued For Construction drawings	
ISO	International Organisation for Standardisation	
JAS-ANZ	Joint Accreditation System of Australia and New Zealand	
LDM	Land Development Manual (this document)	
MGA	Map Grid of Australia (Metric rectangular grid system)	
MRWA	Melbourne Retail Water Agencies	
NCCs	New Customer Contributions	
OH&S	Occupational Health and Safety	
PDF	Portable Document File (Adobe Systems document)	
VCAT	Victorian Civil and Administrative Tribunal	
WSAA	Water Services Association of Australia	
WPW	Westernport Region Water Corporation (trading as Westernport Water)	

2 General

Introduction

The Land Development Manual (this Manual) outlines the processes and guidelines for obtaining approvals for provision of water supply and sewerage. Where it is available, connection to water services may also include connection to dual pipe/Class A recycled water services to new land development projects.

Most commercial, industrial and residential Developments within Westernport Water's serviced region (including Subdivisions) require connection to reticulated water and sewerage. On large allotments and in rural or semi-rural areas these requirements may vary.

All Developments to be connected to Westernport Water's water and sewerage services must comply with the requirements set out in, and arising from, this Manual.

The various forms and approvals referred to in this Manual must be lodged with Westernport Water's Engineering and Construction Team unless otherwise stated.

This Manual must be read in conjunction with the Development Agreement issued by Westernport Water with each land development project. A copy of the Development Agreement Standard Conditions can be obtained from Westernport Water's website (www.westernportwater.com.au - Customers/Development).

2.2 Scope

The information in this Manual may not apply to all Development proposals. Where this information is not appropriate for a particular Development, Westernport Water will determine the requirements on a case-by-case basis. Any special requirements, conditions, contributions or fees not covered by this Manual are included in the Development Agreement on an individual-case basis.

2.3 Intended Audience

This Manual has been written for all consultants, plumbers, contractors, surveyors, owners/developers, land owners, local councils and Westernport Water personnel involved with Developments within Westernport Water's service area. Any person who requires clarification or guidance about the content of this Manual must contact Westernport Water's Engineering and Construction Team.

2.4 Review Mechanism

The Owner/Developer has a right to object to requirements placed on a Development under the Water Act 1989. However, Westernport Water will first try to resolve the matter in negotiation.

2.5 Westernport Water Areas of Interest or Control

Westernport Water provides water, wastewater and recycled water (where applicable) services to approximately 20,000 customers across an area covering 300 square kilometres encompassing Phillip Island and townships from The Gurdies to Archies Creek.

The Westernport Water region contains various water and sewerage districts where Westernport Water is the water and sewerage authority. Within these districts, all Subdivisional Development (with some limited exceptions) must be referred to Westernport Water as part of the planning permit approval process.

Within these water and sewerage districts:

- I. Westernport Water is not obliged to provide a water and sewerage service to all properties.
- II. Some land may not necessarily be able to be serviced.
- III. On occasion, an inability to service a development may affect the ability to develop that land, Westernport Water accepts no liability for any inability to service a Development.
- IV. On occasion, Developments outside the service areas may be subject to an additional approval process and Service By Agreement.

Westernport Water also produces Class A recycled water (where applicable) for residential, recreational, agricultural and commercial purposes in specific areas of Phillip Island. Westernport Water also provides commercial trade waste services, operates a liquid waste disposal facility, undertakes catchment programs aimed at improving raw water quality and delivers water efficiency education programs and initiatives.



Figure 1: Westernport Water's Service Area

Recycled Water 2.6 (where applicable)

Recycled water is treated by Westernport Water to a standard that is safe for beneficial re-use but not suitable for drinking.

Westernport Water may supply recycled water in some areas by either:

- Class A recycled water to residential and other users in a dual pipe scheme; or
- Recycled water for irrigation or a particular industrial purpose which does not need to be a Class A recycled supply.

Westernport Water's Engineering and Construction Team will provide further information upon request.

2.7 **Trade Waste and Minor Trade Waste**

Westernport Water limits the quality and other characteristics of the trade waste it accepts into the sewerage system.

These limits are known as Trade Waste Acceptance Criteria and any trade waste meeting these criteria will normally be suitable for discharge to the sewerage system.

Westernport Water's Trade Waste Customer Charter outlines the services performed by Westernport Water and the respective rights and responsibilities of Westernport Water and its customers. The Owner/Developer must, and must ensure that the Owner/Developer (if any), the Consultant and the Contractor comply with the Trade Waste Customer Charter.

The Owner/Developer must ensure that

they have written permission from Westernport Water (in the form of either an agreement relating to trade waste (Trade Waste Agreement) or a consent provided by Westernport Water (Trade Waste Consent)) before it (or the Owner/Developer (if any) or the Contractor) discharges any trade waste into sewers;

- they (and the Owner/Developer (if any), the Contractor, the Consultant and persons for whom they are responsible) are aware of, and comply with, the Trade Waste Acceptance Criteria as well as any requirements set out or contained in any Trade Waste Agreement or Trade Waste Consent;
- pre-treatment systems installed are correctly and adequately maintained; and
- additives used in pre-treatment processes have been assessed by Westernport Water, and are certified by an appropriately-qualified technical person, as being harmless to the sewerage system, treatment process and the environment.

In addition to the above requirements, the Owner/Developer must (or must procure that the Owner/Developer (if any), the Consultant or the Contractor must) develop a management plan and submit a Trade Waste Application Form to Westernport Water for its review and comment before any trade waste is discharged into the Westernport Water system.

Trade waste charges are calculated based on the volume and the quality of the waste and consideration of certain risk factors.

Copies of Westernport Water's Trade Waste Acceptance Criteria, Trade Waste Customer Charter, Trade Waste Guidelines and Trade Waste Application Form can be downloaded from Westernport Water's website (www. westernportwater.com.au - Customers/Development)

3 Types of Development

The term Development, for the purpose of this Manual, refers to the aspects of any land or building Development which relates to water supply services (including drinking and recycled water (where applicable)) and sewerage services including trade waste.

Westernport Water's interface with the Owner/Developer of a Development will typically fit into one (1) of the following categories:

- Connection of the Development to existing Westernport Water assets only.
- Subdivision or other Development of land where Westernport Water works are required.
- Subdivision or other Development of land where Westernport Water works are not required.

Note: The specific requirements and extent of the process detailed in this Manual will vary based upon the size and complexity of a particular Development.

Single Connections 3.1

For Developments on new or existing properties where water and/or sewerage services are already available, connection to Westernport Water services may be required. These single connections are not subject to the Development Works process.

The Development Works process (including relevant forms and information) for connecting to Westernport Water's existing water and/or sewerage pipes (where those assets are adjacent to the development property) is outlined in the Customers section of Westernport Water's website (www. westernportwater.com.au - Customers/Development).

Tappings into existing water and recycled water (where applicable) mains must be undertaken by Westernport Water or an Accredited Contractor.

Connections into existing sewers must be undertaken by an Accredited Contractor.

Development with Works

A Subdivision or Development of land within Westernport Water's service area may require water, recycled water (where applicable) and/or sewerage assets to service the Development.

Where new water and/or sewerage assets are to be built by or on behalf of the Owner/Developer and transferred to Westernport Water, these assets must comply with the Development Works process, as outlined in Section 4 of this Manual.

A Development may need major water supply or sewerage infrastructure.

Subdivisions that already adjoin or are adjacent to water or sewerage services must provide each newly-created lot with water or recycled water (where applicable) or sewerage service.

Most land with a residential or related zoning will require water and sewerage services.

Westernport Water will review the requirement for a reticulated sewerage and water service including consideration of the following:

- number of lots in a Subdivision;
- nature of surrounding lots;
- potential for further Development under present land
- any relevant state or local planning schemes;
- distance to the nearest assets capable of servicing the Development; and
- a land capability assessment report.

3.2.1 Sewerage services

A separate point of connection to any sewerage service must be created for each separate lot within a Subdivision.

3.2.2 Water tapping requirement

A separate water tapping must be provided for each separate lot within a Subdivision.

3.2.3 Recycled Water tapping requirement (where applicable)

A separate recycled water tapping must be provided for each separate lot within a Subdivision.

Development with No Developer 3.3 Works

A Subdivision or Development of land may not require any extension of Westernport Water assets or new assets. This would typically occur when the required services for the Development are already available adjacent to all the new allotments or land. Internal Services and the installation of property connections or tappings may still be required; however, the Development Works process is not required for these types of Developments.

Two-lot Subdivision 3.4 **Development**

Two-lot Subdivisions with an Owners' Corporation must be serviced in accordance with Section 3.5 (see below).

For boundary re-alignments, where private water supply, recycled water (where applicable) and sewerage services cross property boundaries, the Owner/Developer must procure new connections to each affected lot.

Where a residential two-lot Subdivision creates a vacant lot without direct access to Westernport Water's sewers, the Owner/Developer may be required by Westernport Water to procure up-front construction of the length of private service to the boundary of the vacant lot.

Note: This condition is additional to the easement requirements referred to above and is imposed to reduce the possibility of neighbourhood disputes relating to gaining access to construct private services at a future date.

3.5 Owners' Corporation **Developments (known as** "body corporate")

For all residential and industrial/commercial multi-unit Developments, all private or internal water supply, recycled water supply (where applicable) and sewerage infrastructure must be provided in accordance with AS/NZS 3500 and will be owned, operated and maintained by the Owners' Corporation and/or property Owner/Developer.

Where common property exists on a Subdivision, generally only one (1) water tapping of Westernport Water's main will be permitted.

Where all lots have a street frontage, Westernport Water assets are to be installed, regardless of whether an Owners' Corporation exists or is intended to be established.

Each building and common property garden tap within an Owners' Corporation must be individually metered in accordance with Westernport Water's Metering and Servicing Guidelines as outlined in Appendix 9 of this Manual and which is also available on Westernport Water's website (www. westernportwater.com.au - Customers/Development).

Internal private water and sewerage works must be designed and constructed by the Owner's/Developer's plumber or hydraulic consultant in accordance with AS/NZS 3500 under a Victorian Building Authority Number issued by Westernport Water.

Westernport Water will not accept responsibility for water supply, recycled water (where applicable) and sewerage assets in common property or private property within Owners' Corporation Subdivisions.

Westernport Water sewers will only be accepted within common or private property within Owners' Corporation Developments if it is an existing sewer or a new sewer that is required to extend the service to other land where an easement is in place.

Suitable plans and/or sketches of any sewer, water or recycled water (where applicable) asset proposed to be owned, operated and maintained by an Owners' Corporation will need to be provided to Westernport Water for review prior to consent to Statement of Compliance being issued.

No Owners' Corporations Development

For Subdivisions without an Owners' Corporation, it is mandatory for the water and the recycled water (where applicable) supplied to have a tapping and water service to each individual lot or unit, in accordance with Westernport Water's Metering and Servicing Guidelines which are set out in Appendix 9 of this Manual and also available on Westernport Water's website (www.westernportwater.com.au - Customers/Development).

Industrial and Commercial 3.7

All industrial or commercial Subdivisions within the designated water and sewerage districts must be provided with water and sewerage services. Westernport Water may not apply this requirement if it decides the Subdivision is too remote from the existing system.

Standard practice is for industrial and commercial Subdivisions to be developed without any water property connections due to uncertainty over the demand of the end user. In these circumstances, the Owner/Developer may be required by Westernport Water to install a conduit for a future water supply in which case Westernport Water will note the water supply being available but not yet connected.

If recycled water (where applicable) is available, the Owner/Developer must discuss with Westernport Water's Engineering and Construction Team whether it has to be provided for the Development.

Non-subdivisional Development 3.8

3.8.1 **Dual Occupancy**

A dual occupancy is where a second dwelling or premises is constructed on a single title or lot without that land being subdivided. Westernport Water will apply the same requirements to a dual occupancy Development as to a twolot Subdivision with no Owners' Corporation.

3.8.2 Multi-Storey

All multi-storey Developments must have Westernport Water sewerage, water and recycled water (where applicable) services to the property boundary. The maintenance, operation and replacement of the internal plumbing are the responsibility of the Owners' Corporation or the Owner.

4 Land Development Process

This section sets out the steps to be taken by the Owner/ Developer in order to obtain the approval of Westernport Water to connect to its water and/or sewerage system including recycled water (where applicable).

As an authority under Section 145 of the Water Act 1989, Westernport Water has the legal right to impose conditions relating to the connection to Westernport Water's systems. Westernport Water may also impose conditions in any Planning Permit for any Development referred to Westernport Water via the planning process.

If land is subdivided, Westernport Water can impose requirements for the Subdivision through the planning referral process and under the Subdivision Act 1988.

The Westernport Water Land Development Works Process Flowchart set out in Appendix 1 of the Manual, provides further information.

4.1 Servicing Advice and **Feasibility Studies**

Owners/Developers and Consultants are encouraged to contact Westernport Water early in the preparation of a Development to obtain servicing advice. Servicing advice and feasibility studies provided by Westernport Water will detail the technical feasibility for servicing the new Development and in addition Westernport Water will consider the need for further infrastructure.

The level of information required by Westernport Water and the detail of the servicing advice (and feasibility studies) provided will vary depending on the complexity and size of each development and is at Westernport Water's discretion. Westernport Water may request additional information for large or complex developments which may include a meeting with the Owner/Developer, the Contractor and/or the Consultant to clarify requirements.

Any request by or on behalf of an Owner for servicing advice must include the following information:

- A description of the type of Development (eg residential allotments, commercial sites, industrial sites, two-lot subdivision, owners' corporation, retirement village or multi-storey building(s));
- The number of lots to be created (if any);
- The location and zoning of the land subject to the Development;
- A layout plan of the Subdivision/Development;
- Contour information must be provided for all greenfield applications.

Westernport Water can provide two (2) levels of advice for the Development of land:

Preliminary Servicing Advice

Advice available to the Owner/Developer in order to better determine the infrastructure servicing needs of their Development. The information provided consists of either an email or 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.

Detailed Feasibility Study

Advice for when a detailed study is required to model the impact of the Development on the Westernport Water system to determine the associated servicing requirements. This advice typically involves a formal written response from Westernport Water and a review and discussion of initial Development layouts and/or concepts, including more specific details regarding the total number of lots involved and relevant staging and/or timing of the Development.

It must be noted that any servicing advice provided is highlevel only and applicable at the time at which it is provided. Preliminary servicing requirements, works and/or costs are subject to change between the time of providing preliminary advice and entering into a Development Agreement.

4.2 Planning Referral

Westernport Water is a formal Referral Authority for specified Planning Permit Applications pursuant to Section 55 of the Planning and Environment Act 1987.

4.2.1 Planning Permit Referral (Section 55)

Where a Planning Permit is required for a Development, including the Subdivision of land, the Owner/Developer will submit a Planning Permit Application to the local responsible authority, ie Bass Coast Shire Council (the Council).

Where the Council is required to refer applications associated with the Subdivision/Development to Westernport Water for comments and/or conditions, Westernport Water will respond to the Council by selecting one (1) of the following options:

- Do not object to the granting of the permit; or
- Do not object to the granting of the permit subject to conditions; or
- Object to the granting of the permit (specify rounds of objection); or
- Request additional information; or
- No referral required.

As authorised under Section 145 of the Water Act 1989, Westernport Water has the legal right to impose conditions relating to the connection to Westernport Water systems. Some typical conditions required by Westernport Water outlined in Planning Permits required include, but are not limited to:

- a requirement that the Owner/Developer or nominated party enters in a Development Agreement with Westernport Water for the design and construction of sewers, water mains and recycled water (where applicable) mains;
- a requirement that the Owner/Developer creates an easement in favour of Westernport Water over new and existing sewer mains;
- a requirement that the Owner/Developer prepares and delivers of a digitised plan of subdivision and ancillary requirements in accordance with Westernport Water's drafting standards and practices; and
- a requirement that the Owner/Developer pays Westernport Water's fees.

Once Westernport Water's conditions have been met, Westernport Water issues consent to Statement of Compliance to the Council.

4.2.2 Certification Referral - Plan of Subdivision (Section 8)

Subdivisional certifications are also referred to Westernport Water by the Council. Westernport Water will not consent to the Certification of a Plan of Subdivision until such time as an approved Functional Layout Plan has been provided for Westernport Water's records and assessment purposes.

Westernport Water will respond to the Council by:

- providing its consent; or
- advising that no referral is required; or
- refusing to consent; or
- requesting a suspension of time and a requirement for alterations to the Plan of Subdivision.

Where alterations to a Plan of Subdivision are requested by Westernport Water, these alterations are generally associated with inclusion of easements in favour of Westernport Water and/or the requirement for the Owner to provide reserves to cover existing or proposed Westernport Water assets.

Functional Layout Plans of water mains and sewers must be submitted to Westernport Water before certification consent will be provided. These Functional Layout Plans will be required to assess the location of proposed assets in relation to required easements. Westernport Water will not consent to Statement of Compliance where any assets that require an easement have not been located within an easement.

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

Development Agreement

To apply for formal conditions and fees applicable for a Development, the Owner/Developer or Consultant is required to submit a completed Application for Development Agreement Form to Westernport Water, accompanied by the following information:

- Details of the Owner/Developer;
- The Plan of Subdivision;
- Any relevant Planning Permit;
- Functional Layout Plans for water, sewer and recycled water (where applicable) services;
- Details of the Consultant;
- Details of all Lots numbered:
- Details of any Crown Land and/or Reserves labelled;
- Details of Super or Stage Lots indicated;
- Details of the lot areas shown, including areas of roads and reserves;
- Details of the road names shown;
- Details of the contours and spot levels indicated; and
- Outlines of existing buildings shown.

Following review of the proposed Development and processing of the Application for Development Agreement Form, Westernport Water will issue a Development Agreement to the Owner/Developer, which will set out all the conditions and fees applicable for the Development, including a set of schedules and other details specific to the Development and incorporating the Development Agreement Standard Conditions specifying the respective rights and obligations of each of the parties.

The Owner/Developer or its Consultant may download the Development Agreement Standard Conditions available on Westernport Water's website (www.westernportwater.com. au - Customers/Development) and Westernport Water will issue the schedules and any other details including financial contributions, design and construction requirements and any other required documentation, which together will form the Development Agreement.

Westernport Water will generally issue the Development Agreement within 30 business days of receiving a completed application. However, due to the complexity of the servicing requirements of some Developments, a longer period may be required.

If the Owner/Developer considers any of the fees or charges specified within the Development Agreement are unacceptable, there is provision under Section 271 of the Water Act 1989 for the Owner/Developer to object and apply for a review of the charges on specific grounds.

To enable proper consideration to be given to any objection, it must include full details of the matters that are to be considered in support of the objection. To merely copy out the grounds as listed in Section 271 of the Water Act 1989 is not considered satisfactory evidence.

Development Agreements issued by Westernport Water are to be signed and returned within three (3) months of issue should intention to proceed exist. The Development Agreement commencement date is the date upon which Westernport Water subsequently executes the returned Development Agreement.

If there are any changes to the details, or if the Development Agreement has not been signed within three (3) months of the issue date and/or construction does not commence within 12 months from the commencement date, a new Development Agreement must be entered into with Westernport Water for the Development to continue. This new Development Agreement will incur additional administration fees.

Unless otherwise specified in the Development Agreement, administration fees are required to be paid upon submission of the signed Development Agreement.

All other fees must be paid prior to Westernport Water issuing consent to Statement of Compliance or Acceptance of Works Certificate.

Detailed design must not be submitted prior to the Development Agreement being signed and the administration fees being paid.

The Development Agreement is valid in respect of the current Development for the particular property at the time it is made. It will not continue to apply in the following circumstances:

- A new Consultant is appointed;
- The property is sold or transferred;
- The plans for the Development (for the water and/or sewer needs or design) change in a material way.

4.4 Fees and Charges

4.4.1 New Customer Contributions

New Customer Contributions (NCCs) are an up-front payment to recover the cost of major water, sewerage and recycled water (where applicable) infrastructure required to service new Developments.

The basis for NCCs is provided in Sections 268 and 269 and 270 of the Water Act 1989. The Water Act 1989 requires NCCs to be assessed as fair and reasonable with review by the Victorian Civil and Administrative Tribunal (VCAT).

Westernport Water has developed standardised NCCs in accordance with Essential Services Commission (ESC) pricing principles. For simplicity, Westernport Water has adopted standardised charges for greenfield and in-fill Development in the defined eligible areas within its region.

An annual indexation, as specified by Westernport Water's pricing structure, is applied to NCCs at the start of each financial year.

4.4.2 Administration Fees

Administration Fees are charged to recover costs incurred for preparation of the Development Agreement, design checking, construction audit, asset recording survey (as required), review of As Constructed GIS information and associated administration.

Administration Fees are based on the preliminary cost estimates of the Development and whether the Works are required to be undertaken by or on behalf of the Owner. Details of the basis of these calculations and current rates are available on Westernport Water's website (www. westernportwater.com.au - Customers/Development).

4.4.3 Cost of Feasibility Studies

If feasibility studies are required to be undertaken, the Owner/Developer will be required to fund the study. Costs associated with feasibility studies will be determined on a case-by-case basis by Westernport Water.

4.4.4 Works Warranty/Security

A Works Warranty/Security must be provided to ensure that the Works are completed by the Owner/Developer in accordance with the requirements of the Development Agreement.

This security is required and must be lodged before the consent to Statement of Compliance is issued by Westernport Water.

The security must be a total of 5% of the final value of the Works, as determined by Westernport Water.

Upon the expiration of two (2) years after Westernport Water issues a Certificate of Completion, the Owner/Developer may apply to Westernport Water for a return of the balance of the Works Warranty/Security held by Westernport Water (if any).

For further information, refer to Clauses 17 and 18 of the Standard Conditions.

Shared and Reticulation Assets 4.5

The Owner/Developer is required to provide and fund all Reticulation Assets for the water, recycled water (where applicable) and sewerage network. Westernport Water is required to fund works being defined as a Shared Asset.

Reticulation Assets are defined by Essential Services Commission (ESC) directives but generally comprise water mains and recycled mains (where applicable) with 150mm or less in diameter and gravity sewerage mains that are 225mm or less in diameter, and all associated assets including:

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

4.6 **Development Servicing Plans**

Westernport Water has Development Servicing Plans, which outline the future water, recycled water (where applicable), sewerage infrastructure and the timing of these future Developments. These plans show all Shared Assets Westernport Water is required to fund.

The timing of this infrastructure in the plans has been determined following a logical sequencing of Development. If the Owner/Developer wishes to proceed with the Development prior to the planned sequencing, Westernport Water may levy Bring Forward Costs.

Bring Forward Costs

Bring Forward Costs are those costs levied where infrastructure is being built out-of-sequence and earlier than anticipated by the Development Servicing Plans.

The basis for these charges can be found within the Essential Services Commission Guide to NCCs.

When determining the Bring Forward Costs, the number of years the asset is to be brought forward is calculated as the difference between the date of the Development Agreement and the date shown for the asset in the Development Servicing Plans.

Temporary Assets 4.8

Temporary Assets are works provided in relation to services for a Development which will not be used in the ultimate servicing solution.

Temporary Assets are typically used to avoid or reduce the need to bring forward the construction of major infrastructure, with significant financing costs, and which may take some time to deliver.

Temporary Assets are, generally, to be fully funded by the Owner/Developer, including the capital, operating and decommissioning costs.

Reimbursements 4.9

A reimbursement is payable by Westernport Water to the Owner/Developer when the Owner/Developer is required to construct a Shared Asset for a Development. By signing the Development Agreement the Owner/Developer is deemed to have agreed or referred to in the Development Agreement to comply with Westernport Water's Reimbursement Procedure.

Prior to the construction of any Shared Assets by or on behalf of the Owner, there must be agreement between the Owner and Westernport Water on the location, size, length and specification of the asset. If no agreement is in place then Westernport Water reserves the right (at its absolute discretion) to not reimburse those works.

4.10 Internal Private Works

Internal private water and sewerage works must be designed and constructed by the Owner's/Developer's plumber in accordance with AS/NZS 3500 or WSAA under a Victorian Building Authority consent number issued by Westernport

A Property Service Plan of private internal water and sewer works must be provided to Westernport Water prior to seeking consent to Statement of Compliance for the Subdivision. It is up to the Owner/Developer to provide these drawings.

5 Development Works

Westernport Water may require the Owner/Developer to construct water, recycled water (where applicable), sewer or other works to provide services to new properties created by the Development. Where the Development Agreement includes works to service the Development, the process outlined in the Development Agreement applies.

The Owner/Developer is required to engage an Accredited Consultant to design and audit construction of any water, recycled water (where applicable) and sewerage works to service the Development. The Owner/Developer will also be required to engage an Accredited Contractor who will undertake the construction of the Works.

Westernport Water's consent to the Works proceeding or inspection of any stage of the Works does not amount to Westernport Water approving, consenting to, ratifying or otherwise accepting the design or construction.

All liability for design and construction of the Works remains with the Owner/Developer, the Accredited Consultant and the Accredited Contractor.

Westernport Water's role is to assess the Development with regard to its strategic relationship to Westernport Water's systems and to confirm that the design drawings are generally in accordance with Westernport Water's standards of design and presentation. Otherwise, in relation to design and construction of the works, Westernport Water expressly relies on the Owner/Developer and the professional capacities of the Accredited Consultant and Accredited Contractor.

5.1 Accredited Consultants and Contractors

To be accredited by Westernport Water, Consultants and Contractors must demonstrate that they have the necessary qualifications, expertise, management systems and capabilities to provide consultancy or construction services for land development projects within Westernport Water's service area.

The responsibilities of the Owner/Developer, Consultant, Contractor and Westernport Water in relation to the design of the Development works are set out in the Development Agreement Standard Conditions.

The Owner/Developer must procure that the Consultant is to design the works in accordance with the Development Agreement and relevant design standards including those listed in Section 5.2 of this Manual.

Any special conditions in relation to design of the Works will be set out in the relevant Schedule of the Development Agreement.

5.1.1 Accredited Consultants

The Owner/Developer must appoint Accredited Consultants who are accredited in the applicable areas of works to carry out the design of the Works.

The minimum requirements for Consultants are detailed in the application to become an Accredited Consultant for Westernport Water works as outlined in Appendix 11 of this Manual and also available on Westernport Water's website (www.westernportwater.com.au - Customers/Development).

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

5.1.2 Accredited Contractors

The Owner/Developer must appoint Accredited Contractors who are accredited in the applicable areas of works to carry out the Works.

The minimum requirements for Contractors are detailed in the application to become an Accredited Contractor for Westernport Water works as outlined in Appendix 11 of this Manual and also available on Westernport Water's website (www.westernportwater.com.au - Customers/Development).

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

5.2 Design Standards

The design and construction of Westernport Water assets must be in accordance with the Water Services Association of Australia (WSAA) Codes and any relevant Westernport Water Supplements.

They are available on Westernport Water's website (www. westernportwater.com.au - Customers/Development). The requirements set out in Westernport Water Supplements take precedence over those contained in the WSAA Codes.

For Water Design Standards - Refer to Appendix 9

For **Sewer Design Standards** - Refer to Appendix 10

Requirements for Submission of Design 5.2.1

Following completion of the design, the Owner/Developer must (or must procure that the Consultant) have the designs audited and then submitted to Westernport Water with the Design Verification Form.

The detailed design submission must include:

- Detailed design sewer, water and recycled water (where applicable) plans;
- One (1) A3 size digital copy (.pdf) of road and civil drawings;
- The administration fee as detailed in Schedule 2 of the Development Agreement;
- The signed Development Agreement form;
- Copy of the Consultant's Certificate of Currency for Public Liability insurance;
- Copy of the Consultant's Certificate of Currency for Professional Indemnity insurance;
- One (1) digital copy (.pdf) of the Plan of Subdivision;
- Completed Water, Recycled Water (where applicable) and/or Sewer Design Checklist (available in Westernport Water's Supplementary Design Standard documents);
- Design Verification Form.

Further information on Westernport Water's requirements for design and construction may be found in Appendix 2 of this Manual.

Following submission of the design, Westernport Water may review the design for compliance in accordance with the Design Standards as outlined in Section 5.2 of this Manual.

Westernport Water will review designs in the order they are received. All designs submitted for review will comply with Westernport Water's design standards and must match the information provided in the accompanying design checklists.

Where discrepancies are found, the Owner/Developer must procure that the Consultant revises the relevant design drawings and/or checklist and re-submits them to Westernport Water.

Westernport Water will usually require a minimum of 10 business days in order to initially respond to the design review. However, due to the complexity of the servicing requirements of some Developments, a longer period could be required.

Upon completion of the design review, Westernport Water will confirm acceptance of the design in writing.

The Owner/Developer must procure that the Consultant is fully responsible for the design, detailed checking and quality assurance of the design. Westernport Water will only carry out final review of the design before issuing the design for construction.

Therefore, acceptance of a design by Westernport Water does not indicate any responsibility or liability for the design; this remains with the Owner/Developer and the Consultant.

Construction must not commence until Westernport Water provides written acceptance for the design.

5.2.2 Preferred Material

Unless otherwise specified in the Development Agreement, or subsequently approved by Westernport Water, all materials used in the Works must be specified as per the Preferred Material List or otherwise approved in writing by Westernport Water.

Westernport Water's Preferred Materials List for Pressure and Non-Pressure works are located on the Westernport Water website (www.westernportwater.com.au - Customers/ Development).

Executed Development Agreement

Prior to the development works commencing, the Development Agreement, executed by the Owner, is required to be lodged with Westernport Water. Westernport Water will then execute the Development Agreement. The commencement date on the document is the date that Westernport Water executes the Development Agreement.

Pre-Construction

At the pre-construction phase, the Consultant notifies Westernport Water of the intention to commence construction of the Works. The Consultant is required to provide Westernport Water with a completed Pre-Construction Verification Form that includes the following:

- Names of the Contractor(s) to be engaged to construct the works, ie the water Contractor and/or a sewer Contractor engaged by the Owner/Developer must be an Accredited Contractor for the relevant categories of works:
- Commencement date and expected completion date;
- Copy of the Consultant's Audit Schedule for Works that states how the construction must be managed to comply with quality requirements and carry out inspections and
- One (1) A3 size digital copy (.pdf) of the Issued For Construction (IFC) drawings.

Westernport Water will send an acknowledgement letter and/or email confirming that all the necessary documentation has been supplied.

Westernport Water may choose to conduct Audits during the construction of the Works and the Consultant and/or Contractor will be informed of any observations and/or corrective actions that need to be addressed.

The Pre-Construction Verification Form is required to be submitted at least five (5) business days prior to the commencement of construction.

5.5 Construction

The responsibilities of the Owner/Developer, Consultant, Contractors and Westernport Water in relation to the construction of the Works are set out in the Development Agreement Standard Conditions.

The Owner or the Developer (as the context requires) can only appoint Consultants and Contractors to carry out the audit activities and construction of the Works who are accredited by Westernport Water in the appropriate Development Works category.

Any specific conditions in relation to construction of the Works are set out in the Development Agreement.

The Owner/Developer must ensure that the Consultants and Contractors confirm that their work complies with the applicable Occupational Health and Safety Act 2004, Regulations and Codes of Practice and Commonwealth Environmental Legislation, Victorian Environmental Legislation and Local Government requirements.

During the construction phase, the following hold points apply where the Consultant is required to notify (or procure that the Consultant notifies) Westernport Water using the relevant form:

- Notification of Sewer and Water Mains Testing and/or Connection to Live Assets;
- At the completion of the Works, the Consultant is required to lodge the Construction Verification Form signed by both the Consultant's and Contractor's Nominated Representatives;
- The Consultant is also required to lodge the As Constructed Verification Form signed by the Consultant's Nominated Representative:
- Westernport Water will require a copy of the Construction Pricing Schedules for asset valuation and determining Works Warranty/Security requirements.

The Construction Verification Form and As Constructed Verification Form can be downloaded from Westernport Water's website (www.westernportwater.com.au - Customers/ Development).

Following acceptance of the Construction Verification Form and As Constructed Verification Form, Westernport Water will issue an Acceptance of Works Certificate.

5.5.1 Live Asset Shutdown

Where the works require temporary shutdown of Westernport Water's potable water, recycled water (where applicable) and/or sewerage infrastructure, unless Westernport Water permits otherwise, the following will apply:

- Shutdown period must not exceed a total duration of five (5) hours;
- Shutdown period must be between 9.00am and 3.00pm, Monday to Friday;
- The period of shutdown is defined as the time from when the last valve is shut off to the time that supply is restored and water flows from the hydrant;
- The shutdown must not occur on any declared Total Fire Ban day(s).

Only a Westernport Water representative is permitted to shut down existing live assets.

The Owner/Developer must not (and must procure that the Contractor must not) proceed with any work until Westernport Water confirms that the required asset has been shut down.

Notification of connection to Westernport Water's water and recycled water (where applicable) mains must be given by lodging the Planned Shutdown - Drinking and Recycled Water Application Form.

This form is available on Westernport Water's website (www. westernportwater.com.au - Customers/Development).

A minimum notice period of seven (7) business days is required for any shutdown request. Completed forms can be emailed to westport@westernportwater.com.au.

Westernport Water reserves the right to approve or reject or modify a request for approval for a shutdown of live Westernport Water assets. Modification may include the works being undertaken outside of business hours or complying with other conditions as required.

5.5.2 Inspection and Testing

At the completion of Works, and prior to the issuing of consent to Statement of Compliance, the Owner/ Developer must (or must procure that the Consultant and the Contractor must) undertake necessary water quality and inspection tests.

A Notification of Intention to Carry Out Testing Form must be submitted at least five (5) clear business days prior to the requested inspection date in order to confirm attendance by Westernport Water's representative.

Westernport Water's representative is to be notified to witness the Pre-Acceptance of Works Audit and the Owner/ Developer must (or must procure that the Consultant must) sign the Construction Verification Form prior to submission once the Audit meets Westernport Water's requirements.

5.6 As Constructed Survey

The As Constructed Design Certification (ACDC) system verifies and validates all asset attributes, geometric and spatial data, describes a clearly-defined set of business intelligence and requirements to capture data for Westernport Water's needs, which improves the quality and latency of asset information to Westernport Water.

The Owner/Developer must arrange for the design, construction and survey of the Works in accordance with the Works Agreement, the Standards and Westernport Water's policy requirements.

The Owner/Developer must procure that a qualified surveyor is engaged for the purpose of confirming the As Built construction, with a validated and approved ACDC submission that satisfies Westernport Water's business requirements.

The Owner/Developer must procure that a survey field report accompanies the submitted plans, confirming how the correct horizontal orientation and height datum was maintained throughout the survey.

Any faults need to be addressed by the Owner/Developer before the submission will be accepted by Westernport Water. A tolerance report must be provided by or on behalf of the Owner/Developer highlighting the differences between the design and As Constructed details. This will include differences in invert levels, cover levels, grades, lengths and offsets. Also, any change of material or diameter from design should be noted by the Owner/Developer.

The Owner/Developer must procure that the final ACDC submission is submitted by a licensed surveyor or engineer. Additionally, the Owner/Developer must procure that project managers and engineers manually check all submitted data for completeness and accuracy; only then will an ACDC submission be accepted by Westernport Water.

Westernport Water reserves the right to carry out the survey of these Works if the information provided by the Owner's/ Developer's surveyor is deemed to be of an unacceptable standard. Should this occur, the Owner/Developer will be notified in writing and will bear the expense of the Westernport Water-conducted survey.

The Westernport Water ACDC specifications are summarised in Appendices 6 & 7 of this Manual.

5.7 Acceptance of Works Certificate/Consent to Statement of Compliance

The Consultant is required to lodge the Construction Verification Form to seek Westernport Water's assessment of whether all conditions of the Planning Permit and the Development Agreement have been met.

A minimum of 10 business days for consent to Statement of Compliance applies for all Major and Minor Works.

Westernport Water will issue the Acceptance of Works Certificate, and in the case of Developments including a Subdivision, also issue its consent to Statement of Compliance once it is satisfied that all conditions in the Planning Permit and Development Agreement have been met. The conditions generally include, but are not limited to, the provision of:

- Payment of all fees (including Administration Fee and
- Payment of Works Warranty/Security (cash or bank guarantee)
- **Practical Completion Test Certificates**
- As Constructed Verification Form
- Water Quality Test Results
- Recycled Water Checklist
- **CCTV Survey Results**
- Quality Records of both Contractor and Consultant
- Schedule of Value of Works
- Final Certification of the Plan of Subdivision
- As Constructed Design Certification
- Any other information that may be set out in the Verification Form and/or Development Agreement.

The Development Works must vest in (or transfer to) Westernport Water

- in the case of a Subdivision, Development Works for the relevant stage of the Subdivision, upon registration of the relevant stage of Subdivision; or
- for non-Subdivisional Development, upon the issue of the Acceptance of Works Certificate; or
- otherwise as directed by Westernport Water.

Defects Liability Period 5.8

The Defects Liability Period for the Works is as specified in the Particulars. The responsibilities of the Owner/Developer and Westernport Water with regard to the Works during the Defects Liability Period are set out in the Development Agreement.

5.9 **End of Defects Liability**

At the end of the Defects Liability Period, the Owner/Developer must lodge an End of Defects Liability Verification Form signed by the Nominated Representatives of the Consultant and the Contractor.

As stated in the Development Agreement Standard Conditions, unless an alternative period has been specified in the Development Agreement, the end of Defects Liability Period is two (2) years from the date that Westernport Water issues the Acceptance of Works Certificate.

The Consultant must arrange a suitable time to conduct a joint Audit of the Works with the Contractor's and Westernport Water's Nominated Representatives prior to lodging the End of Defects Liability Verification Form.

In order to arrange a joint Audit, the Notification of Intention to Carry Out Testing Form must be lodged with at least five (5) clear business days of notice. This form can be downloaded from Westernport Water's website (www. westernportwater.com.au - Customers/Development).

The End of Defects Liability Period Verification Form can be downloaded from Westernport Water's website (www. westernportwater.com.au - Customers/Development).

The Development Agreement sets out any other additional documentation required to be lodged at this time.

Westernport Water will conduct an Audit on the Works during the end of the Defects Liability Period and the Owner/ Developer, the Consultant and/or the Contractor will be informed of any observations and/or corrective actions that need to be addressed.

5.10 Certificate of Completion

Westernport Water will issue a Certificate of Completion at the successful completion of the Defects Liability Period in accordance with the Development Agreement Standard Conditions.

5.11 List of Forms

All forms required for the Land Development process are available on Westernport Water's website (www. westernportwater.com.au - Customers/Development).

Refer to Appendix 11 of this Manual.

6 Auditing of **Development Works**

Auditing is the process used to verify that an activity conforms to the obligations of the Owner/Developer, the quality assurance system and quality system standard.

There are three (3) common types of Audit:

First Party

First Party Audits are 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

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.

Note: Audits conducted by Westernport Water are Second Party Audits.

Third Party

Third Party Audits are conducted by organisations independent of both supplier and customer, and are accredited by JAZ-ANZ.

Third Party Audits reduce the need for Second Party Audits, saving time and money for both the supplier and the customer.

In addition to the Audits delivered by the Consultant, Westernport Water may carry out random Audits of the various activities during the design, construction and survey of the Works. These Audits may include the following:

- **Quality System**
- Design
- Construction
- Survey and As Constructed
- **End of Defects Period**

With the exception of the quality system audit, all audits will be conducted without prior notice to the Owner/Developer, the Consultant or the Contractor. The Consultant or the Contractor will be advised that an audit has been conducted only if the audit has revealed non-complying activities requiring Corrective Action.

Where OH&S related breaches are identified by Westernport Water, these will be escalated through one (1) or more of the Contractor's on site representatives, the Consultant or WorkSafe Victoria.

Design Review

Prior to submission to Westernport Water, the Owner/ Developer must procure that designs are reviewed internally by the Consultant and certified by a qualified engineer. The design reviewer may be either the Consultant preparing the design or an accredited third party. This will be confirmed on the Design Verification Form.

Westernport Water may also undertake design reviews to evaluate the Consultant's design. A design review will cover any aspect of the design including the following areas:

- Accuracy
- Completeness
- Compliance to the relevant standards
- Material

6.2 Construction Site Inspections

Westernport Water may conduct site inspections of the construction phase of the Works. Westernport Water's representative may arrive on site unannounced and observe the construction process. The Westernport Water representative must comply with all site safety requirements.

The duration and scope of an inspection will vary depending on the construction work being conducted at that time. Westernport Water's representative will also attend the site pre-commencement meeting and must be present to witness all acceptance findings.

The Owner/Developer will also be required to conduct appropriate construction audits in accordance with the submitted audit schedule to establish confidence in the Contractor and the quality of the works being constructed, ie confirm that the Works are being constructed in accordance with the Issued For Construction (IFC) drawings and construction standards.

6.3 CCTV and Laser Profiling **Ovality Inspections**

The Owner/Developer must arrange for CCTV and Laser Profiling Ovality Inspections of 100% of the reticulation sewer works. The CCTV inspections must be carried out in accordance with Westernport Water's Supplementary Information to the WSAA Conduit Inspection Reporting Code of Australia WSA 05-2013-3-1 Third Edition.

6.4 Survey and As Constructed Information

Westernport Water requires copies of the As Constructed Information and GIS (ACDC) after it has been verified by the Consultant and submitted to Westernport Water along with the As Constructed Drawing Verification Form. The Owner/ Developer must procure that As Constructed Information is provided to Westernport Water using the standard format outlined in Appendices 6 and 7 of this Manual.

These Audits may focus on the presentation/format of the information and/or a field Audit of the information shown on the As Constructed Information.

Information Presentation/Format Audit

This Audit checks that the format and presentation of the As Constructed Information is in accordance with Westernport Water's requirements. This Audit is conducted at the offices of Westernport Water and the accuracy of As Constructed Information is not checked.

Construction Audit

The Audit checks the accuracy of the submitted information and that assets are constructed to the design within acceptable tolerances.

Westernport Water reserves the right to carry out the survey of the Works if the information provided by the Owner's/ Developer's surveyor is deemed not to be of an acceptable standard. Should this occur, the Owner/Developer will be notified in writing and bear the expense of the Westernport Water-conducted survey.

End of Defects Liability Audit

Westernport Water will conduct Audits of the Works during and at the completion of the Defects Liability Period. The Owner/Developer must procure that the Consultant and the Contractor arrange joint inspections of the Works with a Westernport Water representative at the end of the Defects Liability Period, prior to submitting the End of Defects Liability Period Verification Form. This process will minimise disputes surrounding third party damage.

6.6 Audit Records

Westernport Water will maintain the details and results of all Audits carried out on both Consultant and Contractor works.

These details must be used to

- assess the quality performance of a Consultant;
- assess the quality performance of a Contractor;
- determine whether a Consultant or Contractor has difficulty with particular aspects of the Works;
- determine the aspects of the Works that must be audited;
- schedule the time and the date of each audit;
- determine the scope of each audit;
- record the results of each audit; and
- determine the scope and extent of any corrective action required.

Corrective Action Request 6.7

A Corrective Action Request occurs when the Consultant or Contractor does not perform a particular task in accordance with the Development Agreement or their quality system.

There are four (4) types of Corrective Action Requests:

Observations

Generally minor problems, or at the very early stages of a problem, that at the time of the Audit, are not yet noncompliant.

The Westernport Water representative advises the site foreman or Contractor's representative of the observation for immediate rectification at the time of the audit and records the observations. A repeat breach is treated as a Minor or Major Corrective Action.

Opportunity for Improvement

A written suggestion aimed at assisting the Consultant or Contractor to improve their quality system and operation.

Minor Corrective Action

A record of a temporary lapse or an isolated error that does not result in a fundamental failure of the works. Timely corrective action to make sure the issue does not recur generally ensures the action is not escalated to a Major Corrective Action.

Non-Conformance and Major Corrective Action

A major issue or error in a process, system, product or service, or combination of corrective actions where there is a failure to achieve the specified requirements.

Examples of Major Corrective Actions include:

- Multiple or on-going repetition of Minor Corrective Actions;
- Clear breach of Development Agreement Standard Conditions or Standards;
- Sewer is too shallow to service the properties or catchment;
- Design grades are incorrect;
- Pressure rating of materials is insufficient.

Where Westernport Water issues a written Corrective Action Request, Consultants and Contractors must identify the root cause of the error or variation from requirements and implement positive and effective corrective action.

The Owner/Developer must (or procure that the Consultant or the Contractor must) record receipt of the notification and process the Corrective Action Request in accordance with their quality system, including:

- Identifying the root cause of the Corrective Action Request;
- Implementing effective corrective action;
- Providing written confirmation of the thoroughness of the investigations and rectification;
- Providing written evidence that steps have been taken to prevent recurrence of the corrective action within seven (7) days of the Corrective Action Request issue date.

Westernport Water reserves the right to conduct verification reviews on the status of the rectification of observations or corrective actions.

Depending on the nature of any corrective action required, Westernport Water may require additional inspections, and/ or hold points, or may conduct an Audit of the Consultant's and/or Contractor's quality management system.

Where there is evidence that the cause of the Corrective Action Request is widespread and a quality management system may be ineffective, the audit could extend to all aspects.

Westernport Water may also withhold the issuing of consent to Statement of Compliance until such time as it is satisfied that the Consultant's and/or Contractor's quality management system is functioning adequately.

Continued Corrective Action Requests could lead to termination of the Development Agreement and/or the re-classification, suspension or termination of a Consultant or Contractor.

6.8 Intensive Audits

Intensive Audits will be carried out where Westernport Water believes that the Works are defective or the quality management system has or is likely to fail.

If Westernport Water determines that an Intensive Audit of the design, construction or survey of the Works is required, the Owner/Developer must pay the cost of the Intensive Audit.

7 Asset Protection

Development of land may create requirements regarding the protection of water and/or sewerage or recycled water (where applicable) assets, including:

- Existing assets that the Development will impact;
- New water and/or sewerage and/or recycled (where applicable) assets constructed for the benefit of the Development.

Westernport Water assets and easements are protected under Section 148 of the Water Act 1989 which prohibits works above, below, or within one (1) metre of a Westernport Water asset or building or filling works within a Westernport Water easement.

In respect of new Developments, the Owner/Developer, Consultant and Contractor must be careful to determine the location of existing water, recycled water (where applicable) and/or sewerage assets and ensure their protection.

Details regarding location of existing Westernport Water assets can be made through the Dial Before You Dig (DBYD) service or by contacting Westernport Water directly.

If existing Westernport Water assets require alteration as a result of the Development, the Owner/Developer must pay the actual cost of this work. Only personnel authorised and accredited by Westernport Water are permitted to carry out the Works.

In some instances, other authorities may need to construct their works in the vicinity of Westernport Water's assets. Works by other authorities may also require the relocation of Westernport Water's assets.

Such assets are protected under the Water Act 1989 and cannot be impacted, moved or worked on without the consent of Westernport Water. The Water Act 1989 sets out various powers of Westernport Water and makes special provision for interaction with the Works and other assets of other authorities.

Section 137 of the Water Act 1989 operates in conjunction with the Road Management Act 2004.

The Road Management Act 2004 applies to Westernport Water in relation to non-road infrastructure which covers assets such as water mains and sewers.

Westernport Water reserves the right to determine the process to be followed in undertaking any alterations to its assets.

Works that Westernport Water does not undertake must be designed and constructed in accordance with the Owner/ Developer work's process using Accredited Consultants and Accredited Contractors.

8 Reference Material

The following references provide guidelines for Owners/ Developers and Consultants and support the information contained in this Manual.

The relevant current/adopted, updated or amended legislation, regulation, guideline or document must be referred to:

- Subdivision Act 1988
- Subdivision (Procedures) Regulation 1989
- Owners' Corporation Act 2006
- Water Act 1989
- Planning and Environment Act 1987
- **Environment Protection Act 1970**
- **Environment Protection and Biodiversity Conservation Act** 1999
- Aboriginal Heritage Act 2006
- Occupational Health and Safety Act 2004 and associated regulations
- Equipment (Public Safety) Act 1994
- Dangerous Goods Act 1985
- WSA 01-2004 WSAA Polyethylene Pipeline Code Version 3.1
- WSA 02-2002-2.3 WSAA Sewerage Code of Australia MRWA Edition and associated Westernport Water Supplementary Information
- WSA 03-2011-31 WSAA Water Supply Code of Australia MRWA Edition and associated Westernport Water Supplementary Information

- WSA 04-2005 WSAA Sewage Pumping Station Code of Australia Version 2.1 and associated Westernport Water Supplementary Information
- WSA 05-2013 WSAA Conduit Inspection Reporting Code of Australia Version 3.1
- WSA 07-2007 WSAA Pressure Sewerage Code of Australia Version 1.1 and associated Westernport Water Supplementary Information
- AS/NZS 3500.2.2 National Plumbing and Drainage
- AS/NZS ISO 9001 Quality Management Systems
- AS/NZS ISO 14001 Environmental Management System
- Westernport Water Guide to New Customer Contributions
- Westernport Water Class A Recycled Water Owner/ **Developer Guidelines**
- Westernport Water Trade Waste Customer Charter
- Westernport Water Trade Waste Acceptance Criteria
- Westernport Water Trade Waste Guidelines
- Westernport Water Metering and Servicing Guidelines
- Westernport Water Customer Guide to Building Over an Easement or Asset
- Westernport Water Reimbursements Policy
- Westernport Water Environmental Policy

9 Appendices

Appendix 1	Westernport Water Land Development Works Process Flowchart	
Appendix 2	Design Standards and Approving Developer Designs - Water and Sewer Design Standards	
Appendix 3	Preferred Material List	
Appendix 4	Construction Audit Checklists - Water and Sewer	
Appendix 5	Property Asset Plans	
Appendix 6	As Constructed Information and GIS (ACDC)	
Appendix 7	As Construction Drawings (Internal Sewer)	
Appendix 8	Build Overs	
Appendix 9	Water Metering and Servicing Guidelines	
Appendix 10	Sewer Servicing Guidelines	
Appendix 11	Forms	















