



**STD-SPE-G-019  
DEVELOPER PROVIDED ASSETS  
WATER SUPPLY AND SEWERAGE  
ASSET CREATION AND ACCEPTANCE PROCESS**





© 2017 Icon Water Limited (ABN 86 069 381 960)

This publication is copyright and contains information that is the property of Icon Water Limited. It may be used and reproduced only for the purposes of designing and constructing assets which will, if accepted by Icon Water, form part of Icon Water's water/wastewater networks and facilities (Icon Water Purposes).

Disclaimer

This document has been prepared for Icon Water Limited for the Icon Water Purposes only. Icon Water does not make any warranties or representations in relation to or assume any duty of care with respect to, and is otherwise not responsible for the suitability of this document for any purpose other than the Icon Water Purposes.

## Document management

**Document authorisation table**

Issue	Date	Author	Reviewer	Approver
1	06/06/18	A. Hassan (Cambia Consulting)	K. Danenbergsons	I. McDonell
2	02/07/18	K. Danenbergsons	Various	I. McDonell
3	30/08/19	M. Rushaidat	K. Danenbergsons, N. Dahal and C. Allen	P. Botes

**Version control table**

Issue	Date	Reason for issue
1	06/06/18	Issued for internal and external consultation
2	02/07/18	Issued for use
3	30/08/19	Minor process updates and error corrections; issued for use

**Document applicability table**

Asset area	Applicable (Yes/No)	Asset area	Applicable (Yes/No)
Dams (DAM)	No	Water Network (WAT)	Yes
Bulk Water Supply (BWS)	Yes	Sewerage Network (SEW)	Yes
Water Treatment Plants (WTP)	No	Sewage Pump Stations (SPS)	Yes
Water Pump Stations (WPS)	Yes	Sewage Treatment Plants (STP)	No
Reservoirs (RES)	Yes	Recycled Water Systems (REC)	Yes

## Table of Contents

Abbreviations and definitions .....	i
1 Background .....	1
2 Scope.....	1
3 Purpose.....	1
4 Referenced documents .....	2
5 Technical requirements .....	3
5.1 General .....	3
5.2 Hierarchy of Icon Water Standards – Water supply and sewerage .....	3
5.3 Deviations .....	4
5.3.1 General .....	4
5.3.2 Approved products.....	4
5.4 Design responsibility and Icon Water acceptance.....	5
6 Asset creation and acceptance process .....	6
6.1 Phases and Works Categories .....	6
6.2 General .....	9
6.3 Pre-lodgement.....	10
6.4 Minor Works Pathway.....	11
6.5 Major Works – Linear Pathway.....	19
6.6 Major Works – Complex Pathway.....	28

## Abbreviations and definitions

Abbreviation or Term	Interpretation/Definition
ACT	Australian Capital Territory
Block of Land	An area of land (lot/allotment) on the final plan of a subdivision, for which a separate Land Act lease will be issued on completion of the subdivision.
Chartered Engineer	A Professional Civil Engineer with chartered (CPEng) membership of Engineers Australia.
Class 2 Infrastructure Charge – Inside a Precinct	A charge for infrastructure upgrades that are triggered by new developments in established areas as determined in accordance with the Water and Sewerage Capital Contributions Code
Consulting Engineer	A professional engineer or company of professional engineers having qualifications and practical experience in the appropriate specialist discipline.
Constructor	A Contractor engaged by the Developer to undertake the construction of the water supply and sewerage assets in the land being developed. Note: In some existing Icon Water documentation, the term “Contractor” is used. For the purposes of interpreting Icon Water Standards, “Contractor” shall be taken to have the same meaning as “Constructor”.
Designer	A person or organisation engaged by the Developer to design the works on his behalf.
Developer	Any person or company who undertakes works, either within or outside leased land, that will require modifications or additions to Icon Water's hydraulic networks.
ESP	External Services Plan
Hydraulic Services Deed	A legal document between Icon Water and the Developer containing the terms and conditions on which Icon Water agrees to connect hydraulic services to the water and sewerage network.
Icon Water	Icon Water Limited
Icon Water Standards	The technical standards which provide mandatory details relating to the design, construction, testing and handover of water supply and sewerage assets.
ICRC	Independent Competition and Regulatory Commission
In-precinct	The area of land identified as a Precinct on the Precinct Map available at: <a href="https://www.iconwater.com.au/precinctmap">https://www.iconwater.com.au/precinctmap</a>

Abbreviation or Term	Interpretation/Definition
Inspector	An authorised Icon Water employee, who is required as part of their job function, to inspect the assets being constructed by the Developer on behalf of Icon Water to ensure compliance with Icon Water Standards and the Icon Water accepted design.
ITP	Inspection and Test Plan
Land Package	An area of land identified by the ACT Government as being suitable for development and being offered for such development.
Out of Precinct	The area of land that is not identified as a Precinct on the Precinct Map available at: <a href="https://www.iconwater.com.au/precinctmap">https://www.iconwater.com.au/precinctmap</a>
Qualified Surveyor	A surveyor with formal qualifications and experience that meets or exceeds the requirements detailed in Icon Water specification <i>STD-SPE-C-004 Survey and Tolerancing Requirements</i> .
Rectification Estimate	A written estimate by Icon Water of the reasonable costs required to carry out rectification work on defects identified during the Defects Liability Period.
Sewerage Master Plans	Plans showing the layout and sizes of sewers serving the proposed land package. Plans show land use, road and block layout, proposed sewers and maintenance holes, and catchment boundaries etc.
WAE	Work as executed. An accurate record of the constructed assets.
Water and Sewerage Capital Contributions Code	The code that sets out new funding arrangements for water and sewerage infrastructure upgrades that are triggered by new developments in established areas, available at: <a href="http://www.icrc.act.gov.au/water-and-sewerage/capital-contribution-code/">http://www.icrc.act.gov.au/water-and-sewerage/capital-contribution-code/</a>
Water Supply and Sewerage Concept Plans	Plans prepared, held and regularly updated by Icon Water which detail the proposed type, size and alignment of major components of the water and sewerage infrastructure (in areas identified as suitable for land development).
Water Supply Master Plans	Plans showing the detailed layout and sizes of water supply reticulation mains serving the proposed land package. Plans show the general location of mains, pressure zone boundaries and valve layouts.
WSAA	Water Services Association of Australia

## 1 Background

Within the Australian Capital Territory, utilities are licensed by ICRC under Part 3 of the Utilities Act 2000. Icon Water Limited is a licensed utility for the purpose of providing water and sewerage services.

Like any other utility, Icon Water requires new assets to cater for population growth and the changing needs of the local area (e.g. urban infill development). New assets may be provided by Icon Water or they may be provided by a Developer (depending upon the class/type of asset and the circumstances leading to its creation).

When a Developer provides water supply and sewerage assets as part of the development of land within the ACT, they are responsible for asset design, construction and acceptance testing in accordance with Icon Water's Standards. The Developer is also required to handover documentation such as drawings which accurately depict the assets in terms of what was constructed and where; also in accordance with Icon Water's Standards. If it is found that the assets provided by the Developer are defective or non compliant with Icon Water's Standards, then the Developer is also responsible for defect rectification costs.

In 2017, Icon Water began to transition to the use of WSAA codes as a basis for its Standards. The asset creation and acceptance process and associated requirements detailed in this document have been updated to be consistent with the relevant WSAA code content and the best practices of the Australian urban water industry. This document forms part of Icon Water's Standards.

## 2 Scope

This document details Icon Water's process and requirements for the design, construction, testing, handover and acceptance of water supply and sewerage assets, built by Developers, for incorporation into the systems owned and/or controlled by Icon Water. Developers, and those authorised by the Developer to act on their behalf such as Consulting Engineers and Constructors, are required to follow the process and to also comply with the requirements detailed herein.

The process and requirements detailed within this document only apply to the asset areas shown in the Document Applicability Table (located prior to the table of contents).

*Commentary: It should be noted that not all assets associated with water supply and sewerage are provided by Developers on behalf of Icon Water. In general, complex assets such as water pumping stations, sewage pumping stations and reservoirs are designed and constructed under the direct control of Icon Water unless there is a compelling reason not to do so. This is either due to (i) the requirement for Icon Water to maintain its own internal expertise in the design and construction of such complex assets or (ii) Icon Water utilising members of its Engineering Services Panel who have been pre-vetted to ensure that they have the necessary qualifications, skills, knowledge and experience to design and construct such assets. In situations where Icon Water has direct control of the design and construction of new assets (i.e. Developers are not involved in the design and construction of assets even though they may be contributing funds) Icon Water's internal project delivery procedures and requirements shall be followed rather than the process and requirements detailed in this document.*

## 3 Purpose

The purpose of this document is to provide a reference to Developers regarding the process and requirements for the design, construction, testing, handover and acceptance of water supply and sewerage assets, designed and built by Developers on behalf of Icon Water.

## 4 Referenced documents

The documents listed in Table 4.1 are either referenced by this specification, or shall be read and complied with in-conjunction with this specification.

**Table 4.1 - Referenced Documents**

Item	Document number	Title
<b>SafeWork Australia (and WorkSafe ACT) Codes of Practice</b>		
1	Not provided	Safe Design of Structures
<b>WSAA codes and publications</b>		
2	WSA 02-2014	Gravity Sewerage Code of Australia (Version 3.1)
3	WSA 03-2011	Water Supply Code of Australia (Version 3.1)
4	WSA 04-2005	Sewage Pumping Station Code of Australia (Version 2.1)
5	WSA 201	Manual for the Selection and Application of Protective Coatings
<b>Icon Water standards and publications<sup>(Note2)</sup></b>		
6	SD Series	SD Series Drawings - various
7	STD-SPE-C-001	Civil and Structural Works
8	STD-SPE-C-004	Survey and Tolerancing Requirements
9	STD-SPE-C-005	Pipelines
10	STD-SPE-E-001	Electrical Works
11	STD-SPE-E-002	Electrical Installation
12	STD-SPE-E-003	Instrumentation
13	STD-SPE-E-004	Low Voltage
14	STD-SPE-E-006	Electrical Numbering Standards
15	STD-SPE-G-001	Testing and Commissioning
16	STD-SPE-G-002	Decommissioning and Demolition
17	STD-SPE-G-003	Training
18	STD-SPE-G-004	Functional Description
19	STD-SPE-G-005	Icon Water Supplement to WSA 201 Manual for the Selection and Application of Protective Coatings
20	STD-SPE-G-006	Approved Products List
21	STD-SPE-G-007	WSA Product Specifications – Icon Water Edition
22	STD-SPE-G-008	Design Guidelines for Safe Access, Egress and Working at Heights
23	STD-SPE-G-009	Supplement to AS 1657 Fixed Platforms, Walkways, Stairways and Ladders – Design, Construction and Installation
24	STD-SPE-G-010	Supplement to WSA 04 Sewage Pumping Station Code of Australia
25	STD-SPE-G-011	Supplement to WSA 02-2014 Gravity Sewerage Code of Australia
26	STD-SPE-G-012	Supplement to WSA 03-2011 Water Supply Code of Australia
27	STD-SPE-G-013	Documentation
28	STD-SPE-G-014	P&IDs and PFDs
29	STD-SPE-G-015	Operation and Maintenance Manuals
30	STD-SPE-G-017	Water and Sewerage Service and Installation Rules
31	STD-SPE-G-018	Drafting Standard
32	STD-SPE-G-019	Developer Provided Assets, Water Supply and Sewerage, Asset Creation and Acceptance Process
33	STD-SPE-G-020	Requirements for Asset Data Records
34	STD-SPE-G-021	Engineering Asset Identification
35	STD-SPE-M-001	Mechanical
36	STD-SPE-M-002	Piping and Valves



Item	Document number	Title
37	STD-SPE-M-003	Hydraulically Operated Automatic Water Control Valves
38	STD-SPE-M-004	Compendium of Piping Specification Sheets
39	STD-SPE-M-005	Penstocks
40	STD-SPE-M-006	Property Service Connections and Water Meters
41	STD-SPE-S-001	Tankage
42	STD-SPE-S-002	Reservoirs

**Notes:**

1. The documents shall be the latest publication at the time of award of contract for construction of the works unless noted otherwise in the approved project specific documentation.
2. Abridged document titles used.

## 5 Technical requirements

### 5.1 General

The technical requirements for the planning, design, construction, testing, acceptance and handover of water supply and sewerage assets by Developers are contained within Icon Water’s suite of water supply and sewerage design and construction standards (i.e. Icon Water Standards). These Standards are published on the Icon Water website [www.iconwater.com.au](http://www.iconwater.com.au) and are augmented and amended from time-to-time. The user (e.g. Developer, Developer’s Consulting Engineer or Developer’s Constructor) should make themselves fully aware of the requirements and status of Icon Water standards by visiting the Icon Water website prior to commencing any design (in the case of Designers) or construction (in the case of Constructors).

*Commentary: The documents listed in Table 4.1 form the basis for Icon Water Standards which relate to the design, construction, testing, acceptance and handover of water supply and sewerage assets by Developers. However, other documents (e.g. Australian standards and ACT legislation) are in-turn referenced by these documents and also need to be complied with.*

### 5.2 Hierarchy of Icon Water Standards – Water supply and sewerage

This document is the overarching document for the design and construction of water supply and sewerage assets provided (i.e. “gifted”) by Developers to Icon Water. The requirements of this document take precedence over the requirements detailed in all other Icon Water Standards (including WSAA codes).

The requirements detailed in the *Service and Installation Rules (STD-SPE-G-017)* and the *Approved Products List (STD-SPE-G-006)* take precedence over all other Icon Water Standards (including WSAA codes) with the exception of the requirements detailed in this document.

The chart depicted in Fig. 5.2.1 illustrates the hierarchy of Icon Water Standards (i.e. which documents take precedence over others). The requirements detailed in the documents higher in the chart take precedence over the requirements detailed in the documents lower down in the chart. For example, Icon Water’s supplement to *WSA 03* takes precedence over *WSA 03 Water Supply Code of Australia* itself.

Should a document higher up in the chart be “silent” with regards to a particular design and construction requirement, then a document lower down in the chart shall be used to determine the requirement. For example, *WSA 02*, *WSA 03* and *WSA 04* are all “silent” with regards to the requirements for expanding masonry anchors (e.g. “Dynabolts” and “Trubolts”). However, the Icon Water specification for *Civil and Structural Works (STD-SPE-C-001)* details these requirements and specifically prohibits the use of expanding masonry anchors. The masonry anchor requirement for *STD-SPE-C-001* should therefore be followed when constructing assets in the water supply and sewerage network (including sewage pumping stations).

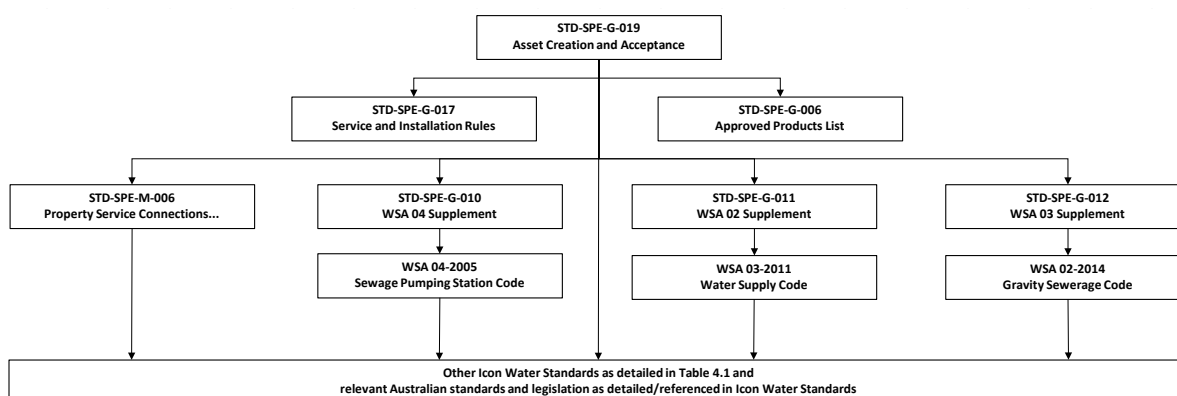


Figure 5.2.1 Hierarchy of Icon Water Standards

## 5.3 Deviations

### 5.3.1 General

Design deviations from Icon Water Standards are not permitted unless it can be demonstrated that there are exceptional circumstances. To minimise delays, such proposed deviations and circumstances shall be brought to Icon Water’s attention as soon as possible and prior to the submission of final design drawings. Specific written approval from Icon Water shall be obtained before any deviations from Icon Water standards are permitted to be incorporated.

For the construction phase, Constructors shall construct, test and handover in accordance with the design drawings which have been accepted in writing by Icon Water as well as Icon Water Standards (e.g. the Icon Water *Approved Products List*). Should any previously unforeseen constructability issues arise, it is required that such issues are resolved amongst the Developer, their authorised Consulting Engineer and their authorised Constructor in the first instance. Should it be found that the accepted design cannot be built in whole or part due to a constructability issue, this should be brought to the attention of Icon Water as soon as possible and prior to the construction of affected design elements. Deviations to the accepted design during the construction phase shall not proceed without written approval from Icon Water. Any unapproved construction deviation shall be subject to demolition and removal at the instruction of Icon Water.

If redesign is required due to a non-compliance with Icon Water Standards or due to a constructability issue, the responsibility for such redesign shall rest with the Developer or their authorised Consulting Engineer. Icon Water shall not be responsible for designing on behalf of the Developer for issues created by the Developer or anyone engaged by the Developer, or anyone acting on behalf of the Developer.

### 5.3.2 Approved products

#### 5.3.2.1 Requirements for Designers

Icon Water requires Designers to specify products and materials which are specifically listed in the Icon Water *Approved Products List (STD-SPE-G-006)*. Products and materials not specifically listed in the Icon Water *Approved Products List* shall not be specified by Designers unless written authorisation has been obtained from Icon Water. For some projects, depending upon the circumstances, Icon Water will provide a project specific list of products and materials to supplement the Icon Water *Approved Products List*. This will typically be provided early in the design phase of the project. Designers shall treat such a project specific list in the same way that they are required to treat the Icon Water *Approved Products List*.

Designers shall not use the words “or equivalent” in specifications or on drawings as Designers are required to specifically name the chosen product or material in sufficient detail so that it can be easily procured by the Constructor and easily checked for compliance by Icon Water during construction.

Otherwise, if this cannot be done for some compelling reason, the words “or approved equivalent” shall be used.

#### 5.3.2.2 Requirements for Constructors

Icon Water requires Constructors to construct in accordance with the project specific design documentation package which will include specifications and drawings. The Constructor shall only use products and materials specifically shown/detailed in the project specific drawings and specifications.

If the specifications and drawings do not nominate a product or material specifically (e.g. by make and model) then the Constructor shall refer to the Icon Water *Approved Products List* and only purchase and install a product or material specifically detailed in the Icon Water *Approved Products List* for the relevant product or material type.

If the design drawings or specification show the words “or equivalent” when referring to a particular product or material, the Constructor shall treat this as an error on behalf of the Designer and shall interpret these words as “or approved equivalent”. The words “or approved equivalent” indicate that the Constructor must use the product or material specifically nominated by the Designer unless a written approval is obtained from Icon Water prior to installation of an alternative product or material.

If an exceptional circumstance arises such as the design documentation package and the Icon Water *Approved Products List* are both “silent” for a particular product or material type, then the Constructor shall contact Icon Water as soon as possible (and prior to procuring and/or installing such a product or material type) so that Icon Water can provide a written approval or rejection.

In the event that the Constructor installs an unapproved product, Icon Water shall consider this a defect and the Constructor shall be required to rectify such defects at their cost and to the satisfaction of Icon Water using approved products and materials. Rectification shall include but not be limited to complete removal of the product or material from the site and replacement with an approved product or material.

Icon Water is not obliged to provide retrospective approvals for unapproved products and materials already installed by the Constructor and is not obliged to provide any requested retrospective approval in a timeframe that suits the Constructor’s project schedule.

The Constructor shall not be entitled to make a claim for delay or damages if they install an unapproved product or material which is rejected by Icon Water.

## 5.4 Design responsibility and Icon Water acceptance

Icon Water Standards are a combination of prescriptive and performance based requirements that are based on WSAA codes, Australian standards and relevant legislation. In general, prescriptive requirements are mandated when consistency in operability, maintainability, safety and reliability are of primary concern. Otherwise, minimum performance requirements have been provided which are generic and/or conceptual in nature and will require further analysis and detailed design by the Developer or their authorised Designer (e.g. a Consulting Engineer).

Full compliance with Icon Water’s Standards is a mandatory requirement. However, each new development will be located in a different area and will have different configurations to take into account topography, terrain, development size, transport requirements and landuse types etc. Therefore, design responsibility rests with the Developer for a particular development. Icon Water does not accept any responsibility for the Developer’s design. It is a mandatory requirement that the Designer interpret and use Icon Water’s Standards appropriately as well as comply with all relevant legislation.

As part of the asset creation and acceptance process, Icon Water will either accept or reject the design(s) submitted by the Developer (or their authorised Consulting Engineer) for the purpose of progressing to the next step of the process (i.e. Development Application / Building Application with the relevant Planning authority if In-Principle Acceptance has been received or the Construction Phase if Design Acceptance has been received).

Design acceptance does not constitute approval by Icon Water that the design meets Icon Water Standards, nor does it constitute acceptance by Icon Water of any responsibility for the design, or an

indication that Icon Water considers the design safe to construct or in compliance with the relevant legislation.

*Commentary: Consider a development which requires buried maintenance structures such as valve chambers constructed of reinforced concrete. Design of such structures would require the Designer to specify and detail (in both drawing and specification form) requirements for reinforcing steel, construction joints and the compressive strength of the concrete which form the walls and base of the structure. Icon Water does not necessarily specify such reinforcing, jointing and concrete strength details in Icon Water Standards as such details are dependent on a number of project specific factors. Rather, Icon Water specifies details such as minimum space for safe access and egress, structure overall geometry as well as minimum space for operation and maintenance activities. During the acceptance process, Icon Water staff will check these space and geometry requirements but will not necessarily check concrete and reinforcement details if they have not been specified in Icon Water Standards.*

*Ultimately, the Designer is responsible for their design and for also having appropriately qualified personnel involved in both the preparation and checking of all designs as well as operating an appropriate quality management system to ensure that the prepared designs meet all necessary requirements.*

## 6 Asset creation and acceptance process

### 6.1 Phases and Works Categories

The asset creation and acceptance process is divided into 7 phases:

- 1. Pre-lodgement
- 2. In-principle
- 3. DA/BA
- 4. Detailed Design
- 5. Construction
- 6. Connection
- 7. Defects Liability

The type of works to be carried out during the asset creation and acceptance process is split into three categories (excluding Demolition Works) for simplicity which are:

- Minor Works
- Major Works – Linear
- Major Works – Complex

All work is required to pass through each of the 7 phases, however there is a different pathway and set of requirements within each phase depending on the work category.

Icon Water is the sole arbiter in determining the works category. The work category is determined as part of Phase 1. Pre-lodgement (refer to Section 6.3 Pre-lodgement for further details). The following examples are provided for general guidance only and are subject to a number of project specific factors:

- **Minor Works:** Are generally external works associated with the development of a single Land Act Lease (“Associated Works”). Icon Water will confirm the status of any works when the Developer makes the first approach and is able to provide, as a minimum, sketch details of the proposal. Examples of such works are:
  - a connection and/or disconnection, or the relocation of services to a single dwelling;
  - Installation of a water tie (domestic and fire).

- the adjustment of cover levels or the lowering of pipes;
  - the addition of hydrants or valves to pipes;
  - modifications to covers or water meters;
  - installation of a sewer tie;
  - Demolition of existing water and sewer tie to block.
- 
- Major Works – Linear: Are generally works which require the design and construction of new water mains and realignment of existing of sizes up to and including DN750 (with a maximum PN16 rating) and/or sewer mains of sizes up to and including DN750 but that do not require the design and construction of complex assets such as but not limited to reservoirs, water pumping stations, sewage pumping stations, odour control units and chemical dosing units etc. This category also includes property service connections that are DN20 or larger for “Out of Precinct” estate developments. Icon Water may consider the new main minor works when it only services a block that is subdivided into two residential dwellings and the works will not impact on the existing or future network.
  - Major Works – Complex: Are generally works which require the design and construction of complex assets such as but not limited to reservoirs, water pumping stations, sewage pumping stations, odour control units and chemical dosing units etc. as well as larger water and sewer mains. Note: Such assets are typically designed and constructed under the direct control of Icon Water rather than a Developer unless there is a compelling reason not to do so.

Whilst Icon Water has used the term “Developer” throughout this document, the term “Consulting Engineer” or “Constructor” may also be used unless specifically noted otherwise in this document (or accompanying Icon Water forms) instead of the term “Developer” if the Developer has authorised such parties to act on their behalf and the appropriate documentation has been provided to Icon Water.

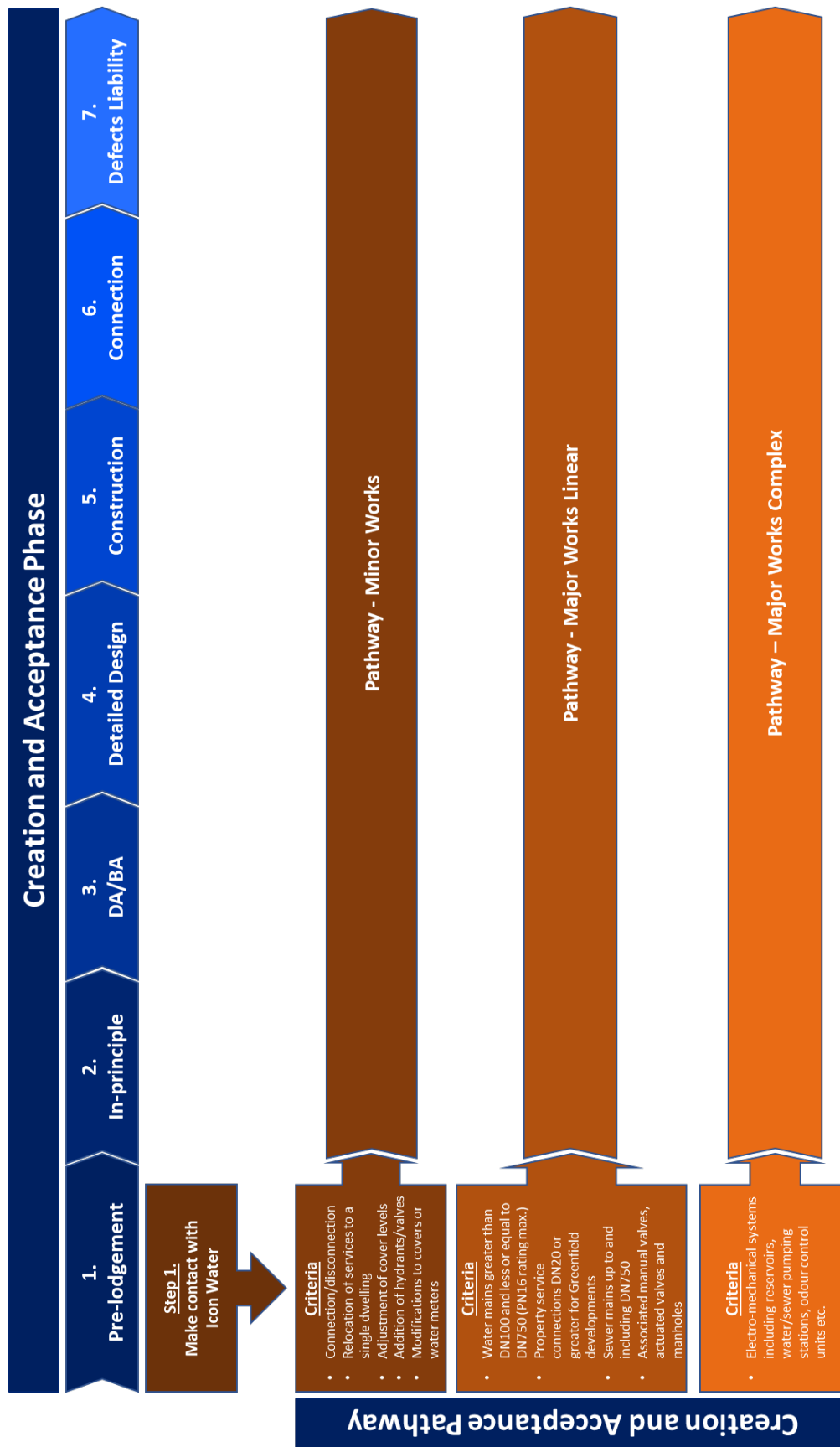


Fig. 6.1 Asset Creation and Acceptance Pathways

## 6.2 General

### Liquid Trade Waste

The Developer is responsible for determining whether the proposed project requires a Liquid Trade Waste (LTW) approval. A LTW approval from Icon Water is a pre-requisite for obtaining plumbing certification (where such an approval is required). A separate application for LTW approval can be submitted to the Icon Water LTW Team at the same time as the submission for Detailed Design Acceptance.

Refer to the Icon Water website at <https://www.iconwater.com.au/tradewaste> for information regarding LTW.

### Design Consultant and Constructor Performance Feedback

Should the Developer request so, Icon Water will provide the Developer with formal feedback regarding the past performance of Design Consultants and Constructors on the Asset Creation and Acceptance process (where this information is available). Icon Water reserve the right to provide the developer with formal feedback regarding the current performance of Design Consultants and Constructors during project life cycle.

### Confirmation of existing assets (pre-design survey)

*A Pre-design Survey is not required for Minor works.*

After obtaining initial asset information from the various asset owners, the Developer must confirm the location and nature of existing services and assets in the field. Confined spaces and live sewers should not be entered without prior approval from the owner of the asset concerned. In most cases, supervision or a safety team would need to be provided by the asset owner to enable safe access for the purpose of pre-design surveys.

### Authorisation for Consulting Engineer and Certification

*Authorisation for Consulting Engineer and Certification is not required for Minor works.*

Prior to making any formal submissions or applications to Icon Water in relation to a development project, the Developer must provide to Icon Water written authorisation showing their selected consultant is permitted to liaise with Icon Water on their behalf. This must be provided by completing the relevant section of the "Design Form Pack – Major Works" and submitting to Icon Water as outlined in the relevant steps of sections 6.5 Major Works – Linear Pathway and 6.6 Major Works – Complex Pathway.

Certification is required by a Chartered Engineer and a Qualified Surveyor at various phases of the process. This must be provided by completing the relevant section of the "Design Form Pack – Major Works" and "WSSS-4 Application for Provisional Certificate of Operation" and submitting to Icon Water as outlined in the relevant steps of sections 6.5 Major Works – Linear Pathway and 6.6 Major Works – Complex Pathway.

### Hydraulic Services Deed

*A Hydraulic Services Deed is not required for Minor works unless specifically requested by Icon Water.*

A Hydraulic Services Deed will need to be executed by the Developer prior to Icon Water accepting a Detailed Design.

The Hydraulic Services Deed sets out the terms and conditions on which Icon Water agrees to connect hydraulic services to the water and sewerage network, including Developer obligations to meet Icon Water Standards and insurance requirements for the Developer and their contractors.

### Staging Plan

*A Staging Plan is not required for Minor works.*

The Staging Plan must show the proposed order in which all hydraulic assets within the relevant land package are intended to be constructed, and to identify any separable stages of the works for which handover inspections will be required. The timing of submission of a Staging Plan is outlined in the relevant steps of sections 6.5 Major Works – Linear Pathway and 6.6 Major Works – Complex Pathway

and is for Icon Water's information only. Icon Water's agreement to a proposed staging sequence does not absolve the Developer from their responsibility to ensure that the interdependencies between the various stages are properly considered. It remains the Developer's responsibility to ensure that the separable stages of the works are fully serviced when handover is requested. Icon Water will not accept handover unless the leases are fully serviced in accordance with the accepted drawings and are able to be permanently connected to the hydraulic systems. Icon Water will not accept temporary connections to developments.

### 6.3 Pre-lodgement

Pre-lodgement is the first phase in the Creation and Asset Acceptance process. During this phase Icon Water aims to obtain an understanding of the Developer's proposed project and subsequently:

- Advise the Developer on the required Creation and Acceptance Pathway to follow and the relevant acceptance requirements; and
- Provide the Developer with relevant information regarding Icon Water's assets so that the Developer can compile their submission for In-principle Acceptance.

The first step in this phase requires the Developer to contact Icon Water via

HydraulicAssetAcceptance@iconwater.com.au to discuss the details of their proposed project.

#### Determination of Works Category

For all development projects, the Developer is required to contact Icon Water and provide sufficient written details of their development proposal so that Icon Water can decide the works category.

Icon Water will assess the works and then advise the Developer of the subsequent Creation and Acceptance Pathway to follow and the acceptance requirements. In some instances, the Developer may need to ensure their design is in accordance with Icon Water's strategies for the wider area of which the development forms a part. Atypical projects may require additional steps such as the need for Icon Water to provide a detailed requirements specification particular to the project. Such a specification may require that special studies or investigations be conducted prior to designs being submitted to Icon Water for acceptance.

#### Preliminary information provided by Icon Water

Prospective buyers are advised to contact Icon Water prior to the issue of the lease to make themselves acquainted with this information.

Prior to the issue of a lease for any given parcel of land offered for development, Icon Water will make available to all prospective buyers information and requirements arising from Icon Water's existing asset layouts, performance and future servicing Concept Plans for the land. Information provided may be in relation to:

- Proposed trunk assets;
- Proposed headworks;
- Hydraulic interdependencies between land packages;
- Existing water supply network capacities and pressure availability;
- Existing sewerage network capacities;
- Other known constraints;
- Temporary works required;
- Icon Water charges and funding requirements;
- Icon Water General Conditions of Supply.



## 6.4 Minor Works Pathway

Table 6.4.1 details the process to be followed by the Developer for projects which Icon Water has determined to be Minor Works. Table 6.4.1 assumes that the initial approach by the Developer (as detailed in Section 6.3) has already occurred (hence the process starts at Step 2.1). An accompanying flow chart is outlined in Figure 6.1 - Pathway for Minor Works.

**Table 6.4.1 The development and acceptance process for Minor Works**

Step	Process requirements
<b>2. In-principle Phase</b>	
2.1	<p>Developer submits the following documents to Icon Water via <i>HydraulicAssetAcceptance@iconwater.com.au</i> for In-principle Acceptance:</p> <ul style="list-style-type: none"> <li>• Design in the form of an External Services Plan (ESP)</li> <li>• Form “Design Form Pack – Minor Works”</li> </ul> <p>Refer to the following Icon Water standards as a minimum for requirements for preparing the ESP. It is the responsibility of the Developer to determine if other standards are applicable (contact Icon Water for further advice if required):</p> <ul style="list-style-type: none"> <li>• <i>SD Series – SD Series Drawings - various</i></li> <li>• <i>STD-SPE-G-006 Approved Products List</i></li> <li>• <i>STD-SPE-G-011 Supplement to WSA 02-2014 Gravity Sewerage Code of Australia</i></li> <li>• <i>STD-SPE-G-012 Supplement to WSA 03-2011 Water Supply Code of Australia</i></li> <li>• <i>STD-SPE-G-017 Water and Sewerage Service and Installation Rules</i></li> <li>• <i>STD-SPE-G-018 Drafting Standard</i></li> <li>• <i>STD-SPE-M-006 Property Service Connections and Water Meters</i></li> </ul>
2.2	<p>Icon Water assesses the submission for compliance against Icon Water’s standards and applicability of the Class 2 Infrastructure Charge – Inside a Precinct (C2IC).</p> <p>A maximum of 7 non-conformances will be identified and documented by Icon Water prior to halting the assessment process.</p> <p>Icon Water endeavour to turn-around the assessment of submissions for In principle Acceptance as the following:</p> <ul style="list-style-type: none"> <li>• Original submission &amp; first resubmission: Within 10 business days for each.</li> <li>• Second resubmission and more: Within 15 business days for each.</li> </ul> <p>As at the time of writing this document Icon Water is investigating the introduction of charges for the resubmission of designs that have already been deemed as non-compliant. This charge may be introduced in the future.</p>
2.3	<p>If the submission is assessed as non-compliant then details of the non-compliance will be provided by Icon Water to the Developer.</p>
2.4	<p>Developer addresses non-compliance.</p> <p>The Developer is solely responsible for ensuring that their submission is compliant with Icon Water standards. This includes addressing any non-conformances that were not identified by Icon Water during the assessment process.</p>

Step	Process requirements
2.5	<p>If the submission is assessed as compliant then Icon Water issues via <a href="mailto:HydraulicAssetAcceptance@Iconwater.com.au">HydraulicAssetAcceptance@Iconwater.com.au</a>:</p> <ul style="list-style-type: none"> <li>• In-principle Acceptance in the form of an acceptance stamp on the External Services Plan; and</li> <li>• The Class 2 Infrastructure Charge – Inside a Precinct 1<sup>st</sup> Letter if applicable.</li> </ul>
<b>3. DA/BA Phase</b>	
3.1	<p>Developer submits a Development Application (DA)/Building Application as required to the relevant planning authority. The Developer should refer to the relevant planning authority for requirements regarding their proposed development.</p> <p>Icon Water will be engaged in the process for DA/BA directly by the relevant Planning authority as required.</p> <p>Icon Water will not assess an application for DA/BA approval for its component unless the application has already received In-principle Acceptance as per Step 2.5.</p>
<b>4. Detailed Design Phase</b>	
4.1	<p>Developer submits the following documents to Icon Water for Design Acceptance:</p> <ul style="list-style-type: none"> <li>• An External Services Plan (ESP)</li> <li>• Form “Design Form Pack – Minor Works”</li> </ul> <p>Refer to the following Icon Water standards as a minimum for requirements for preparing the ESP. It is the responsibility of the Developer to determine if other standards are applicable (contact Icon Water for further advice if required):</p> <ul style="list-style-type: none"> <li>• <i>SD Series – SD Series Drawings - various</i></li> <li>• <i>STD-SPE-G-006 Approved Products List</i></li> <li>• <i>STD-SPE-G-011 Supplement to WSA 02-2014 Gravity Sewerage Code of Australia</i></li> <li>• <i>STD-SPE-G-012 Supplement to WSA 03-2011 Water Supply Code of Australia</i></li> <li>• <i>STD-SPE-G-017 Water and Sewerage Service and Installation Rules</i></li> <li>• <i>STD-SPE-G-018 Drafting Standard</i></li> <li>• <i>STD-SPE-M-006 Property Service Connections and Water Meters</i></li> </ul>

Step	Process requirements
4.2	<p>Icon Water assesses the submission for compliance against Icon Water's standards and confirms applicability of the Class 2 Infrastructure Charge – Inside a Precinct (C2IC).</p> <p>A maximum of 7 non-conformances will be identified and documented by Icon Water prior to halting the assessment process.</p> <p>Icon Water endeavour to turn-around the assessment of submissions for Detailed Design Acceptance as the following:</p> <ul style="list-style-type: none"> <li>• Original submission &amp; first resubmission: Within 10 business days for each.</li> <li>• Second resubmission and more: Within 15 business days for each.</li> </ul> <p>As at the time of writing this document Icon Water is investigating the introduction of charges for the resubmission of designs that have already been deemed as non-compliant. This charge may be introduced in the future.</p>
4.3	<p>If the submission is assessed as non-compliant then details of the non-compliance will be provided by Icon Water to the Developer.</p>
4.4	<p>Developer addresses non-compliance.</p> <p>The Developer is solely responsible for ensuring that their submission is compliant with Icon Water standards. This includes addressing any non-conformances that were not identified by Icon Water during the assessment process.</p>
4.5	<p>If the submission is assessed as compliant then Icon Water issues:</p> <p>Via HydraulicAssetAcceptance@Iconwater.com.au:</p> <ul style="list-style-type: none"> <li>• Certificate of Design Acceptance;</li> <li>• Acceptance stamp on the External Services Plan;</li> <li>• The Class 2 Infrastructure Charge – Inside a Precinct (C2IC) 2<sup>nd</sup> Letter if applicable; and</li> <li>• A Design feedback form to the Developer outlining their performance on the Design Phases of the Asset Creation and Acceptance process.</li> </ul>
<b>5. Construction Phase</b>	
5.1	<p>Developer submits a Request for Quotation for work required to be carried out by Icon Water via the online form at <a href="https://www.iconwater.com.au/Developers-and-Renovators/Relocate-or-alter-a-service.aspx">https://www.iconwater.com.au/Developers-and-Renovators/Relocate-or-alter-a-service.aspx</a> on the Icon Water website (if applicable).</p> <p>Terms and conditions of the quotation, including notification times required by Icon Water and anticipated turnaround times to carry out the work, are available via the link above.</p> <p><b>Note:</b> This step may be deferred to a later time but no later than immediately upon completion of “pot-holing” and verification of the proposed connection.</p>

Step	Process requirements
5.2	<p>Developer submits the following form to notify Icon Water of the scheduled commencement date for the works via HydraulicAssetAcceptance@Iconwater.com.au:(at least 2 weeks before construction starts on site. Otherwise, connection may be delayed)</p> <ul style="list-style-type: none"> <li>Form “Advice on Commencement of Construction of Hydraulic Works” to notify Icon Water of the scheduled commencement date for the works</li> </ul>
5.3	<p>Developer undertakes work in accordance with the accepted design as per Step 4.5, Icon Water Standards and relevant legislation.</p> <p>Any proposed changes to the accepted design will require further acceptance from Icon Water. Proposed changes may be of a minor or major nature. Minor changes may be accepted in writing on site by Icon Water. Major changes will require the submission of an Amendment to Accepted Design (including fully documented amended design drawings) and will need to pass through the In-principle and/or Detailed Design phase prior to their construction.</p> <p>It is at the discretion of Icon Water to decide what constitutes a minor or major change. To avoid delays it may be in the interest of the Developer to submit full details of any proposed changes for acceptance well in advance of the inspection. All accepted changes, minor and major, must be shown on the amended design drawings.</p> <p>It should be noted that the Developer requires Development Approval / Building Approval (if applicable) from the relevant planning authority prior to the commencement of any construction activities.</p>
5.4	<p>Icon Water may undertake inspections at any stage during the construction phase to check for compliance against Icon Water’s standards if deemed to be necessary.</p>
5.5	<p>Developer’s authorised licensed plumber collects the water meter from Icon Water (if applicable) and must install this within 14 days of collection.</p> <p>Icon Water reserves the right to not issue the Developer’s licensed plumber with a water meter if the plumber has any outstanding water meters that are not currently installed according to Icon Water requirements.</p>
5.6	<p>If the Class 2 Infrastructure Charge – Inside a Precinct (C2IC) is applicable, the Developer advises Icon Water not more than 90 days and not less than 30 days prior to expected completion of the works.</p>
5.7	<p>If the Class 2 Infrastructure Charge – Inside a Precinct (C2IC) is applicable, Icon Water issues an invoice for the Class 2 Infrastructure Charge – Inside a Precinct (C2IC).</p>

Step	Process requirements
5.8	<p>Developer submits the following documents via HydraulicAssetAcceptance@Iconwater.com.au and makes relevant payments:</p> <ul style="list-style-type: none"> <li>• Submit Form “Application for Provisional Certificate of Operations”;</li> <li>• Submit WAEs;</li> <li>• Pay fees for work required by Icon Water as quoted in Step 5.1 (if applicable); and</li> <li>• Pay the invoice for Class 2 Infrastructure Charge – Inside a Precinct (C2IC) as quoted in Step 5.7 (if applicable).</li> </ul> <p>Refer to the following Icon Water standard for requirements relating to WAE drawings:</p> <ul style="list-style-type: none"> <li>• <i>STD-SPE-C-004 Survey and Tolerancing Requirements</i></li> <li>• <i>STD-SPE-G-018 Drafting Standard</i></li> </ul>
5.9	<p>Icon Water checks:</p> <ul style="list-style-type: none"> <li>• Completed works against WAEs (at Icon Water’s discretion)</li> <li>• Receipt of payment from the Developer: <ul style="list-style-type: none"> <li>▪ Work required by Icon Water (if applicable)</li> <li>▪ Class 2 Infrastructure Charge – Inside a Precinct (C2IC) invoice (if applicable)</li> </ul> </li> </ul> <p>Handover checks will only be undertaken by Icon Water following completion of all roads, kerbs, gutters, landscaping, and the installation of survey block pegs.</p> <p>If the constructed works offered to Icon Water for handover are not in accordance with the WAE drawings, Icon Water will refuse to inspect, witness testing or accept the works for handover until either remedial works are carried out, or properly (accepted) amended design drawings are available.</p> <p>Inspections before connections will commence from the top (upstream) end of the line and proceed down to the bottom (downstream) end.</p> <p>Icon Water endeavours to turn-around the result of these checks within 10 business days for the first inspection. In case site is not ready for inspection or has major comments, each re-inspection will occur within 10 business days.</p>
5.10	<p>If the WAE documentation is not an accurate reflection of the works (i.e. it does not meet the requirements of <i>STD-SPE-C-004 Survey and Tolerancing Requirements</i>), then the Developer must update WAE documentation and resubmit to Icon Water.</p> <p>As at the time of writing this document Icon Water is developing a standard for Electronic Files. In the future, WAE documentation will also need to comply with this standard.</p> <p>Icon Water reserves the right to delay the inspection before connection until the developer provides the accurate WAE drawings.</p> <p>It should be noted that Icon Water will not connect the works until compliant WAEs are received and full payment for works required by Icon Water as per Step 5.1 (where applicable) and C2IC invoice as per Step 5.7 (where applicable) has been received.</p>

Step	Process requirements
<b>6. Connection Phase</b>	
6.1	<p>Icon Water undertakes the connection / disconnection after complaint WAEs are submitted, relevant payments have been made as per Steps 5.1 and 5.7 (if applicable) and successful testing/inspection has been completed (if applicable).</p> <p>Refer to the Icon Water website at <a href="https://www.iconwater.com.au/Developers-and-Renovators/Relocate-or-alter-a-service.aspx">https://www.iconwater.com.au/Developers-and-Renovators/Relocate-or-alter-a-service.aspx</a> for estimated turn-around times to carry out the work which is usually occurred within 15 business days after the inspection is occurred.</p>
6.2	<p>Icon Water issues a:</p> <ul style="list-style-type: none"> <li>• “Provisional Certificate of Operation” to the Developer; and</li> <li>• Construction feedback form to the Developer outlining their performance on the Construction Phase of the Asset Creation and Acceptance process.</li> </ul> <p>The turn-around time to issue the certificate is usually 2 business days for ties up to DN 25mm, and 7 business days for others after carrying the work by Icon Water.</p> <p>If for some reason a Provisional Certificate of Operation cannot be issued at the time of handover, but Icon Water is satisfied that the Developer has completed the hydraulic works substantially in accordance with all its requirements, it may, at its discretion and upon request from the Developer, issue a Conditional Certificate of Operation.</p>
<b>7. Defects Liability Phase</b>	
7.1	<p>A Defects Liability Period of one year will commence from the date shown on the Provisional Certificate of Operation.</p> <p>Once accepted for handover by Icon Water, further work by the Developer on operational assets is not permitted. The liability for the expenses associated with any rectification work required during the Defects Liability Period on operational assets, as a result of defective materials, poor workmanship or departure from accepted design drawings and certified Work-as-Executed Records, or consequential damage or loss to any assets under the control of Icon Water, rests with the Developer. The necessary works will be undertaken by Icon Water (at the Developer’s expense) or by the Developer (at the Developer’s expense) at the sole discretion of Icon Water.</p> <p>Wherever possible, Icon Water will attempt to notify the Developer of any apparent defects prior to repairs being undertaken to enable the Developer to carry out inspections. Urgent repairs will, however, be carried out immediately by Icon Water.</p> <p>Failures resulting from suspected defective materials will be identified to the Developer who will have the opportunity to inspect the faulty components for a period of one month after repairs have been carried out.</p> <p>One month before the end of the Defects Liability Period, Icon Water will carry out an inspection of the works to determine any defective items requiring rectification or any outstanding incomplete items requiring completion. The</p>

Step	Process requirements
	<p>Developer may attend the inspection and Icon Water will give reasonable notice of the inspection.</p> <p>After this inspection Icon Water will issue:</p> <ul style="list-style-type: none"> <li>• A final inspection report giving details of any action necessary to ensure proper operation and satisfactory compliance with Icon Water's Standards and the Work-as-Executed Records; and</li> <li>• A written rectification estimate for the above work.</li> </ul> <p>If for any reason the actual cost of the final rectification work is not or will not be known within the period of two months after the final inspection, Icon Water will provide to the Developer a rectification estimate based on the reasonable costs to carry out these works.</p>
7.2	<p>Icon Water issues a "Certificate of Operation" to the Developer within 7 days after the satisfactory completion of the final rectification work identified in the final inspection report (as per Step 7.1) and when the payment for that work has been received.</p>

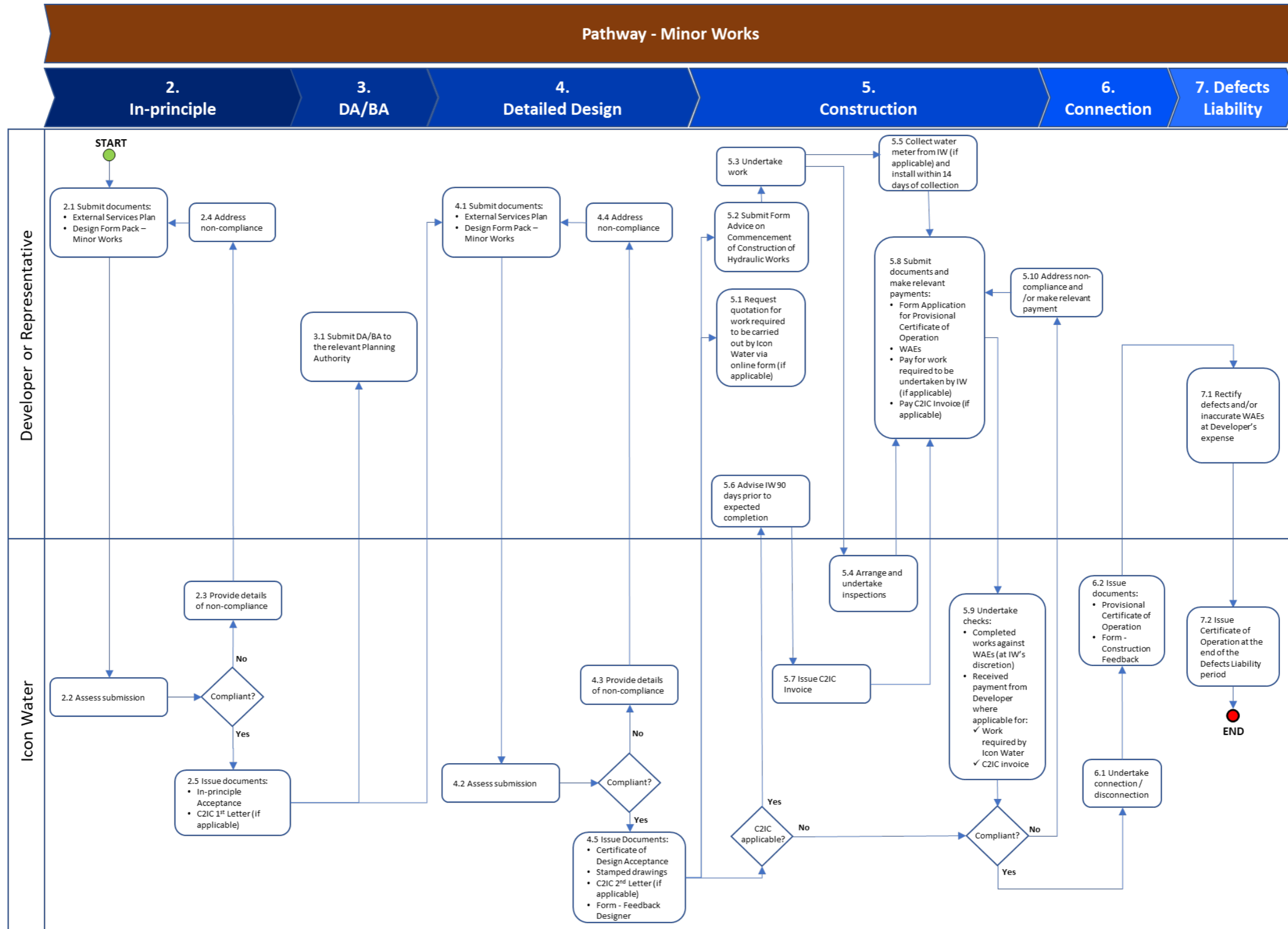


Figure 6.1 - Pathway for Minor Works



## 6.5 Major Works – Linear Pathway

Table 6.5.1 details the process to be followed by the Developer for projects which Icon Water has determined to be Major Works – Linear. Table 6.5.1 assumes that the initial approach by the Developer (as detailed in Section 6.3) has already occurred (hence the process starts at Step 2.1). An accompanying flow chart is outlined in Figure 6.2 – Pathway for Major Works Linear.

**Table 6.5.1 The development and acceptance process for Major Works – Linear**

Step	Process requirements
<b>2. In-principle Phase</b>	
2.1	<p>Developer submits the following documents to Icon Water via <a href="mailto:HydraulicAssetAcceptance@Iconwater.com.au">HydraulicAssetAcceptance@Iconwater.com.au</a> for In-principle Acceptance:</p> <ul style="list-style-type: none"> <li>• Design which is known as “Design Submission 1”. This must be based on project specific requirements if provided by Icon Water in ‘Phase 1. Pre-lodgement’ and in the form of Master Plan(s) for Water and/or Sewer</li> <li>• Form “Design Form Pack – Major Works”</li> <li>• Evidence of appropriate Professional Indemnity (PI) insurance cover for the Developer’s authorised Chartered Engineer</li> <li>• Staging Plan (if applicable).</li> </ul> <p>Refer to the Icon Water standards in Table 4.1 - Referenced Documents as a minimum for requirements for preparing the Master Plan and Staging Plan. It is the responsibility of the Developer to determine if other standards are applicable (contact Icon Water for further advice if required).</p>
2.2	<p>Icon Water assesses the submission for compliance against Icon Water’s standards, project specific requirements and applicability of the Class 2 Infrastructure Charge – Inside a Precinct (C2IC).</p> <p>A maximum of 7 non-conformances will be identified and documented by Icon Water prior to halting the assessment process.</p> <p>Icon Water endeavour to turn-around the assessment of submissions for In-principle Acceptance as the following:</p> <ul style="list-style-type: none"> <li>• Original submission and first resubmission: Within 15 business days for each.</li> <li>• Second resubmission and more: Within 20 business days for each.</li> </ul> <p>As at the time of writing this document Icon Water is investigating the introduction of charges for the resubmission of designs that have already been deemed as non-compliant. This charge may be introduced in the future.</p>
2.3	<p>If the submission is assessed as non-compliant then details of the non-compliance will be provided by Icon Water to the Developer.</p>
2.4	<p>Developer addresses non-compliance.</p> <p>The Developer is solely responsible for ensuring that their submission is compliant with Icon Water standards. This includes addressing any non-conformances that were not identified by Icon Water during the assessment process.</p>

Step	Process requirements
2.5	<p>If the submission is assessed as compliant then Icon Water issues via HydraulicAssetAcceptance@Iconwater.com.au:</p> <ul style="list-style-type: none"> <li>• In-principle Acceptance in the form of an acceptance stamp on the submitted plan(s)</li> <li>• The Class 2 Infrastructure Charge – Inside a Precinct (C2IC) 1<sup>st</sup> Letter if applicable</li> </ul>
<b>3. DA/BA</b>	
3.1	<p>Developer submits a Development Application (DA)/Building Application as required to the relevant Planning authority. The Developer should refer to the relevant Planning authority for requirements regarding their proposed development (e.g. Estate Development Plan).</p> <p>Icon Water will be engaged in the process for DA/BA directly by the relevant Planning authority as required.</p> <p>Icon Water will not assess an application for DA/BA approval for its compliance unless the application has already received In-principle Acceptance as per Step 2.5.</p>
<b>4. Detailed Design Phase</b>	
4.1	<p>Developer submits the following documents to Icon Water for Design Acceptance:</p> <ul style="list-style-type: none"> <li>• Detailed Design drawings which is known as “Design Submission 2”. This must be based on the In-principle Acceptance obtained in Step 2.5;</li> <li>• Form “Design Form Pack – Major Works”</li> <li>• Evidence of appropriate Professional Indemnity (PI) insurance cover for the Developer’s authorised Chartered Engineer</li> </ul> <p>Refer to the Icon Water standards in Table 4.1 - Referenced Documents as a minimum for requirements for preparing the Master Plan and Staging Plan. It is the responsibility of the Developer to determine if other standards are applicable (contact Icon Water for further advice if required).</p>
4.2	<p>Icon Water assesses the submission for compliance against Icon Water’s standards, project specific requirements and confirms applicability of the Class 2 Infrastructure Charge – Inside a Precinct (C2IC).</p> <p>A maximum of 7 non-conformances will be identified and documented by Icon Water prior to halting the assessment process.</p> <ul style="list-style-type: none"> <li>• Original submission and first resubmission: Within 15 business days for each.</li> <li>• Second resubmission and more: Within 20 business days for each.</li> </ul> <p>As at the time of writing this document Icon Water is investigating the introduction of charges for the resubmission of designs that have already been deemed as non-compliant. This charge may be introduced in the future.</p>
4.3	<p>If the submission is assessed as non-compliant then details of the non-compliance will be provided by Icon Water to the Developer.</p>
4.4	<p>Developer addresses non-compliance.</p> <p>The Developer is solely responsible for ensuring that their submission is compliant with Icon Water standards. This includes addressing any non-conformances that were not identified by Icon Water during the assessment process.</p>

Step	Process requirements
4.5	Icon Water issues a standard Hydraulic Services Deed of Agreement and details of the Security Undertaking to the Developer.
4.6	<p>Developer executes the Hydraulic Services Deed of Agreement.</p> <p>Design Acceptance will not be issued to the Developer by Icon Water until a Hydraulic Services Deed of Agreement has been executed by the Developer.</p>
4.7	<p>If the submission is assessed as compliant then Icon Water issues via HydraulicAssetAcceptance@Iconwater.com.au:</p> <ul style="list-style-type: none"> <li>• Certificate of Design Acceptance;</li> <li>• Acceptance stamp on the submitted plan(s);</li> <li>• The Class 2 Infrastructure Charge – Inside a Precinct 1<sup>st</sup> Letter if applicable; and</li> <li>• A Design feedback form to the Developer outlining their performance on the Design Phases of the Asset Creation and Acceptance process.</li> </ul>
<b>5. Construction Phase</b>	
5.1	<p>Developer submits a Request for Quotation for work required to be carried out by Icon Water via the online form at <a href="https://www.iconwater.com.au/Developers-and-Renovators/Relocate-or-alter-a-service.aspx">https://www.iconwater.com.au/Developers-and-Renovators/Relocate-or-alter-a-service.aspx</a> on the Icon Water website (if applicable).</p> <p>Terms and conditions of the quotation, including notification times required by Icon Water and anticipated turnaround times to carry out the work, are available via the link above.</p> <p><b>Note:</b> This step may be deferred to a later time but no later than immediately upon completion of “pot-holing” and verification of the proposed connection.</p>
5.2	<p>Developer submits the following documents to Icon Water via HydraulicAssetAcceptance@Iconwater.com.au:(at least 2 weeks before construction starts on site. Otherwise, connection may be delayed).</p> <ul style="list-style-type: none"> <li>• Form “Advice on Commencement of Construction of Hydraulic Works” to notify Icon Water of the scheduled commencement date for the works</li> <li>• Detailed ITPs and construction checklists</li> <li>• Detailed product/materials listing</li> <li>• Detailed construction program in Gantt Chart format (including anticipated dates for connection/disconnection)</li> </ul> <p>Refer to the following Icon Water standards as a minimum for requirements relating to ITPs / checklists. It is the responsibility of the Developer to determine if other standards are applicable (contact Icon Water for further advice if required):</p> <ul style="list-style-type: none"> <li>• <i>STD-SPE-G-011 Supplement to WSA 02-2014 Gravity Sewerage Code of Australia</i></li> <li>• <i>STD-SPE-G-012 Supplement to WSA 03-2011 Water Supply Code of Australia</i></li> </ul>
5.3	<p>Icon Water reviews:</p> <ul style="list-style-type: none"> <li>• Detailed ITPs and construction checklists</li> <li>• Detailed product/materials listing</li> <li>• Detailed construction program in Gantt Chart format</li> </ul> <p>Icon Water endeavours to turn-around the review of these documents within the 10 business days.</p>

Step	Process requirements
5.4	<p>If the following documents do not meet Icon Water's requirements:</p> <ul style="list-style-type: none"> <li>• Detailed ITPs and construction checklists;</li> <li>• Detailed product/materials listing; and</li> <li>• Detailed construction program in Gantt Chart format,</li> </ul> <p>Then the Developer will address the issues.</p>
5.5	<p>If the following documents meet Icon Water's requirements:</p> <ul style="list-style-type: none"> <li>• Detailed ITPs and construction checklists;</li> <li>• Detailed product/materials listing; and</li> <li>• Detailed construction program in Gantt Chart format,</li> </ul> <p>Then Icon Water will issue a written authorisation to proceed with construction as per the accepted design.</p>
5.6	<p>Developer commences on-site construction activities in accordance with the accepted design as per Step 4.7, Icon Water Standards, project specific requirements (if applicable) and relevant legislation. This work can only commence once a written authorisation to proceed with construction activities on Icon Water assets has been received by the Developer (and issued by Icon Water as per Step 5.5).</p> <p>Any proposed changes to the accepted design will require further acceptance from Icon Water. Proposed changes may be of a minor or major nature. Minor changes may be accepted in writing on site by Icon Water. Major changes will require the submission of an Amendment to Accepted Design (including fully documented amended design drawings) and will need to pass through the In-principle and/or Detailed Design phase prior to their construction.</p> <p>It is at the discretion of Icon Water to decide what constitutes a minor or major change. To avoid delays it may be in the interest of the Developer to submit full details of any proposed changes for acceptance well in advance of the inspection. All accepted changes, minor and major, must be shown on the amended design drawings.</p> <p>The Developer's authorised Chartered Engineer checks that all work is in accordance with the accepted design, Icon Water Standards, relevant legislation and any other relevant standard/code throughout the construction phase.</p> <p>The Developer must use a Qualified Surveyor for setout as well as the accurate recording of WAE information throughout the construction phase.</p> <p>It should be noted that the Developer requires Development Approval / Building Approval (if applicable) from the relevant Planning authority prior to the commencement of any construction activities.</p>

Step	Process requirements
5.7	<p><b><u>Acceptance Tests</u></b>  The Developer is responsible for carrying out all scheduled inspections and tests, recording the associated test data and supplying these records to Icon Water.</p> <p>Refer to the following Icon Water standards as a minimum for requirements relating to Acceptance Testing. It is the responsibility of the Developer to determine if other standards are applicable (contact Icon Water for further advice if required):</p> <ul style="list-style-type: none"> <li>• <i>STD-SPE-G-011 Supplement to WSA 02-2014 Gravity Sewerage Code of Australia</i></li> <li>• <i>STD-SPE-G-012 Supplement to WSA 03-2011 Water Supply Code of Australia</i></li> </ul> <p><b><u>Quality Control Inspections</u></b>  Icon Water undertakes both random and scheduled site inspections throughout the construction phase as well as progressive acceptance testing (as required in the accepted ITPs).</p> <ul style="list-style-type: none"> <li>• <b><u>Notification by Developer to Icon Water</u></b>  Notification by the Developer to Icon Water for all activities requiring the presence of Icon Water on-site should be directed to: <ul style="list-style-type: none"> <li>▪ Talk to us: 02 6248 3111</li> <li>▪ Email us: <a href="mailto:HydraulicAssetAcceptance@iconwater.com.au">HydraulicAssetAcceptance@iconwater.com.au</a></li> </ul> </li> <li>• <b><u>Witness and Hold Points</u></b>  The Developer provides a minimum of two (2) business days notification to Icon Water of scheduled witness and hold points (as per the accepted ITPs) which Icon Water has nominated attendance.</li> <li>• <b><u>Progressive Acceptance Testing</u></b>  The Developer provides a minimum of two (2) business days notification to Icon Water of progressive acceptance testing throughout the construction phase. Icon Water issues progressive inspection and test reports and either progressively accepts or rejects the works depending upon the results of the inspections and testing.</li> <li>• <b><u>Acceptance Testing at Conclusion of Works</u></b>  The Developer provides a minimum of five (5) business days notification to Icon Water of scheduled acceptance testing activities at the conclusion of the works. Icon Water issues an inspection and test report and either accepts or rejects the works depending upon the results of the testing.</li> <li>• <b><u>Test Rejection</u></b>  In the case of rejection, the works are required to be made compliant by the Developer in accordance with Icon Water Standards and the project specific requirements provided by Icon Water.</li> <li>• <b><u>Acceptance Testing not Witnessed by Icon Water</u></b>  For acceptance testing which is not witnessed by Icon Water, the Developer must provide written evidence of compliance with Icon Water Standards by providing test certificates in accordance with the following Icon Water standards: <ul style="list-style-type: none"> <li>▪ <i>STD-SPE-G-011 Supplement to WSA 02-2014 Gravity Sewerage Code of Australia</i></li> <li>▪ <i>STD-SPE-G-012 Supplement to WSA 03-2011 Water Supply Code of Australia</i></li> </ul> </li> </ul>

Step	Process requirements
5.8	<p>Developer's licensed plumber collects the water meter(s) from Icon Water (if applicable) and must install this within 14 days of collection.</p> <p>Icon Water reserves the right to not issue the licensed plumber with a water meter if the licensed plumber has any outstanding water meters that are not currently installed according to Icon Water requirements.</p>
5.9	<p>If the Class 2 Infrastructure Charge – Inside a Precinct is applicable, the Developer advises Icon Water not more than 90 days and not less than 30 days prior to expected completion of the works.</p>
5.10	<p>If the Class 2 Infrastructure Charge – Inside a Precinct is applicable, Icon Water issues an invoice for the C2IC charge.</p>
5.11	<p>Developer submits the following documents via <a href="mailto:HydraulicAssetAcceptance@Iconwater.com.au">HydraulicAssetAcceptance@Iconwater.com.au</a> and makes relevant payments when all or an accepted stage of the work is complete and ready for inspection:</p> <ul style="list-style-type: none"> <li>• Submit Form “Application for Provisional Certificate of Operations” including all related documents;</li> <li>• Submit WAEs;</li> <li>• Pay fees for work required by Icon Water as quoted in Step 5.1 (if applicable);</li> <li>• Pay the invoice for C2IC charge as quoted in Step 5.10 (if applicable); and</li> <li>• Pay Security Undertaking (if applicable)</li> </ul> <p>Refer to the following Icon Water standard for requirements relating to WAE drawings:</p> <ul style="list-style-type: none"> <li>• <i>STD-SPE-C-004 Survey and Tolerancing Requirements</i></li> <li>• <i>STD-SPE-G-018 Drafting Standard</i></li> </ul>
5.12	<p>Icon Water undertakes handover checks:</p> <ul style="list-style-type: none"> <li>• Completed works against WAEs</li> <li>• Receipt of payment from the Developer: <ul style="list-style-type: none"> <li>○ Work required by Icon Water (if applicable)</li> <li>○ C2IC invoice (if applicable)</li> <li>○ Security Undertaking (if applicable)</li> </ul> </li> </ul> <p>Icon Water endeavours to turn-around the result of these checks within 10 business days for the first inspection. In case site is not ready for inspection or has major comments, each re-inspection will occur within 10 business days.</p> <p>Handover checks will only be undertaken by Icon Water following completion of all roads, kerbs, gutters, landscaping, and the installation of survey block pegs.</p> <p>If the constructed works offered to Icon Water for handover are not in accordance with the WAE drawings, Icon Water will refuse to inspect, witness testing or accept the works for handover until either remedial works are carried out, or properly accepted amended design drawings are available.</p> <p>Inspections before connections will commence from the top (upstream) end of the line and proceed down to the bottom (downstream) end.</p> <p>Refer to the following Icon Water standards for requirements relating to Handover of Work As Executed drawings:</p> <ul style="list-style-type: none"> <li>• <i>STD-SPE-G-011 Supplement to WSA 02-2014 Gravity Sewerage Code of Australia</i></li> <li>• <i>STD-SPE-G-012 Supplement to WSA 03-2011 Water Supply Code of Australia</i></li> </ul>

Step	Process requirements
5.13	<p>If the WAE documentation is not an accurate reflection of the works (i.e. it does not meet the requirements of <i>STD-SPE-C-004 Survey and Tolerancing Requirements</i>), then the Developer must update WAE documentation and resubmit to Icon Water.</p> <p>As at the time of writing this document Icon Water is developing a standard for Electronic Files. In the future, WAE documentation will also need to comply with this standard.</p> <p>Icon Water reserves the right to charge for the third resubmission for WAEs (and any subsequent resubmissions) that have already been deemed as non-complaint. Fees are outlined in Icon Water's Miscellaneous Fees and Charges Schedule, as updated from time to time, available at: <a href="https://www.iconwater.com.au/about/our-pricing.aspx">https://www.iconwater.com.au/about/our-pricing.aspx</a></p> <p>Icon Water reserves the right to delay the inspection before connection until the Developer provides the accurate WAE drawings.</p> <p>It should be noted that Icon Water will not commence works until compliant WAEs are received and full payment for works required by Icon Water as per Step 5.1 (where applicable), C2IC invoice as per Step 5.10 (where applicable) and Security Undertaking as per Step 5.11 (where applicable) has been received.</p>
<b>6. Connection Phase</b>	
6.1	<p>Icon Water undertakes the connection / disconnection after complaint WAEs are submitted and relevant payments have been made as per Steps 5.1 and 5.10 (if applicable).</p> <p>Refer to the Icon Water website at <a href="https://www.iconwater.com.au/Developers-and-Renovators/Relocate-or-alter-a-service.aspx">https://www.iconwater.com.au/Developers-and-Renovators/Relocate-or-alter-a-service.aspx</a> for estimated turn-around times to carry out the work which is usually occurred within 15 business days after the inspection is occurred.</p>
6.2	<p>After the works are accepted and connected to the relevant systems, Icon Water issues a:</p> <ul style="list-style-type: none"> <li>• “Provisional Certificate of Operation” to the Developer; and</li> <li>• Construction feedback form to the Developer outlining their performance on the Construction Phase of the Asset Creation and Acceptance process</li> </ul> <p>The turn-around time to issue the certificate is usually 2 business days for ties up to DN 25mm, and 7 business days for others after carrying the work by Icon Water.</p> <p>If for some reason a Provisional Certificate of Operation cannot be issued at the time of handover, but Icon Water is satisfied that the Developer has completed the hydraulic works substantially in accordance with all its requirements, it may, at its discretion and upon request from the Developer, issue a Conditional Certificate of Operation.</p>
<b>7. Defects Liability Phase</b>	
7.1	<p>A Defects Liability Period of one year will commence from the date shown on the Provisional Certificate of Operation.</p> <p>Once accepted for handover by Icon Water, further work by the Developer on operational assets is not permitted. The liability for the expenses associated with any rectification work required during the Defects Liability Period on operational assets, as a result of defective materials, poor workmanship or departure from accepted design drawings and certified Work-as-Executed Records, or consequential damage or loss to any assets under the control of Icon Water, rests with the Developer. The necessary works will be undertaken</p>

Step	Process requirements
	<p>by Icon Water (at the Developer's expense) or by the Developer (at the Developer's expense) at the sole discretion of Icon Water.</p> <p>Wherever possible, Icon Water will attempt to notify the Developer of any apparent defects prior to repairs being undertaken to enable the Developer to carry out inspections. Urgent repairs will, however, be carried out immediately by Icon Water.</p> <p>Failures resulting from suspected defective materials will be identified to the Developer who will have the opportunity to inspect the faulty components for a period of one month after repairs have been carried out.</p> <p>One month before the end of the Defects Liability Period, Icon Water will carry out an inspection of the works to determine any defective items requiring rectification or any outstanding incomplete items requiring completion. The Developer may attend the inspection and Icon Water will give reasonable notice of the inspection.</p> <p>After this inspection Icon Water will issue:</p> <ul style="list-style-type: none"> <li>• A final inspection report giving details of any action necessary to ensure proper operation and satisfactory compliance with Icon Water's Standards and the Work-as-Executed Records; and</li> <li>• A written rectification estimate for the above work.</li> </ul> <p>If for any reason the actual cost of the final rectification work is not or will not be known within the period of two months after the final inspection, Icon Water will provide to the Developer a rectification estimate based on the reasonable costs to carry out these works.</p>
7.2	<p>Icon Water issues a "Certificate of Operation" to the Developer within 7 days after the satisfactory completion of the final rectification work identified in the final inspection report (as per Step 7.1) and when the payment for that work has been received.</p>



### Pathway - Major Works Linear

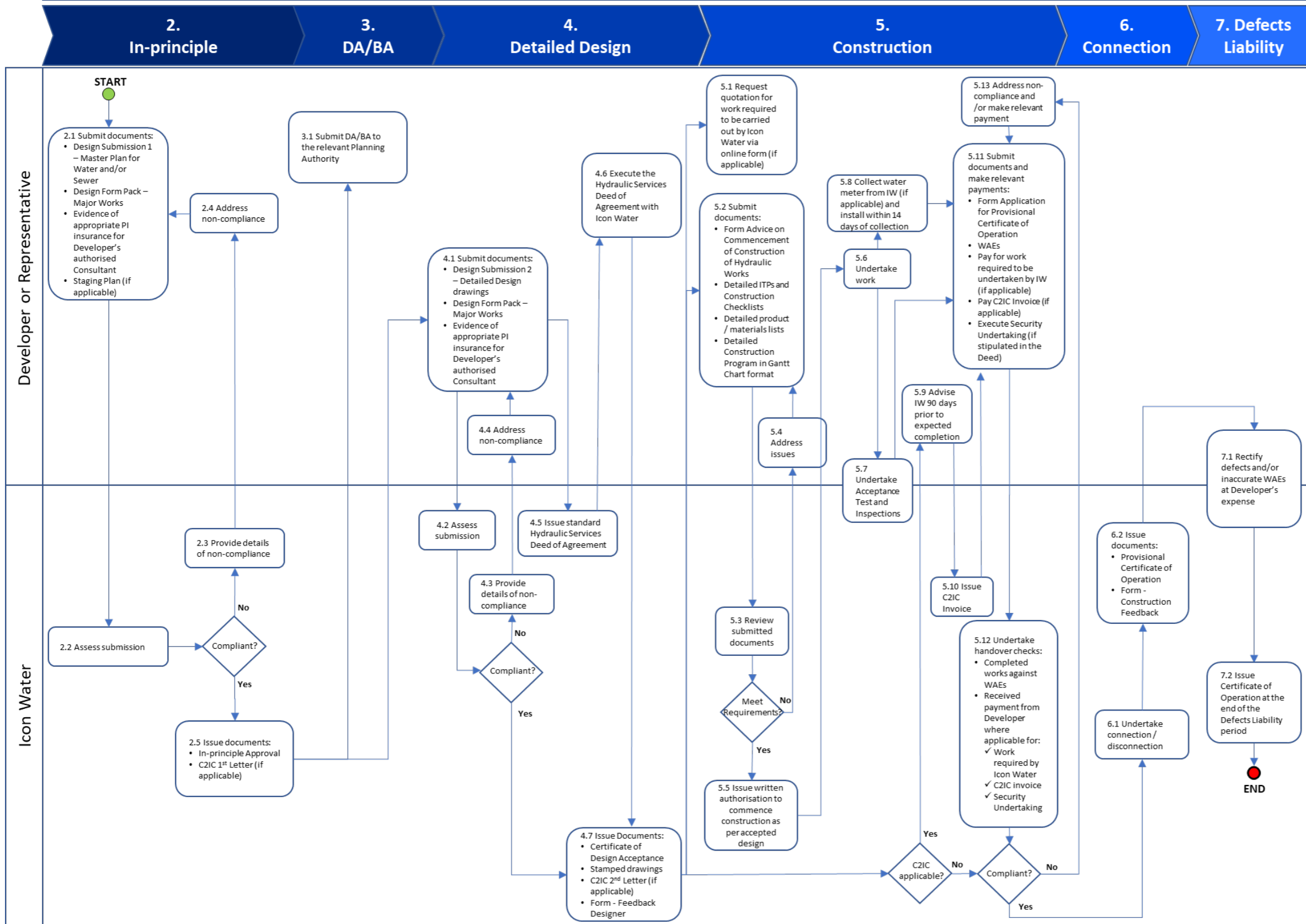


Figure 6.2 – Pathway for Major Works Linear

## 6.6 Major Works – Complex Pathway

Table 6.6.1 details the process to be followed by the Developer for projects which Icon Water has determined to be Major Works – Complex. Table 6.6.1 assumes that the initial approach by the Developer (as detailed in Section 6.3) has already occurred (hence the process starts at Step 2.1). An accompanying flow chart is outlined in Figure 6.3 – Pathway for Major Works Complex.

**Table 6.6.1 The development and acceptance process for Major Works – Complex**

Step	Process requirements
<b>2. In-principle Phase</b>	
2.1	<p>Developer submits the following documents to Icon Water for In-principle Acceptance:</p> <ul style="list-style-type: none"> <li>• Design which is known as “Design Submission 1”. This must be based on project specific requirements if provided by Icon Water in ‘Phase 1: Pre-lodgement’</li> <li>• Form “Design Form Pack – Major Works”</li> <li>• Evidence of appropriate Professional Indemnity (PI) insurance cover for the Developer’s authorised Chartered Engineer</li> <li>• Staging Plan (if applicable)</li> <li>• Environmental Impact Statement (if applicable).</li> </ul> <p>Refer to the Icon Water standards in Table 4.1 - Referenced Documents as a minimum for requirements for preparing the design documents and Staging Plan. It is the responsibility of the Developer to determine if other standards are applicable (contact Icon Water for further advice if required).</p> <p>A minimum of 10 business days’ notice must be provided to Icon Water to attend the following workshops to be facilitated by the Developer in relation to their submission:</p> <ul style="list-style-type: none"> <li>• Design Review; and</li> <li>• Safety in Design (SiD) Review</li> </ul>
2.2	Icon Water assesses the submission for compliance against Icon Water’s standards (and project specific requirements where applicable).
2.3	<p>Developer’s authorised Consultant facilitates the following workshops (with Icon Water as a stakeholder) in relation to their submission:</p> <ul style="list-style-type: none"> <li>• Design Review; and</li> <li>• Safety in Design (SiD) Review</li> </ul> <p>Icon Water provides feedback on the design submission regarding compliance against Icon Water’s standards (and project specific requirements where applicable).</p>
2.4	<p>Developer’s authorised Consultant updates the design, incorporating feedback received from Icon Water regarding compliance against Icon Water’s standards (and project specific requirements where applicable), the Design Review and Safety in Design Review workshops.</p> <p>Developer’s authorised Consultant produces the Safety in Design Report in accordance with ACT Work Health &amp; Safety (WHS) requirements.</p> <p>Developer submits:</p> <ul style="list-style-type: none"> <li>• Updated design; and</li> <li>• Safety in Design Report</li> </ul>
2.5	Refer to Step 2.2 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
2.6	Refer to Step 2.3 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>

Step	Process requirements
2.7	Refer to Step 2.4 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
2.8	Refer to Step 2.5 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
<b>3. DA/BA</b>	
3.1	Refer to Step 3.1 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
<b>4. Detailed Design Phase</b>	
4.1	<p>Developer submits the following documents to Icon Water for Design Acceptance:</p> <ul style="list-style-type: none"> <li>• Detailed Design drawings which is known as “Design Submission 2”. This must be based on the In-principle Acceptance obtained in Step 2.5;</li> <li>• Form “Design Form Pack – Major Works”</li> <li>• Evidence of appropriate Professional Indemnity (PI) insurance cover for the Developer’s authorised Chartered Engineer</li> </ul> <p>Refer to the Icon Water standards in Table 4.1 - Referenced Documents as a minimum for requirements for preparing the design documents and Staging Plan. It is the responsibility of the Developer to determine if other standards are applicable (contact Icon Water for further advice if required).</p> <p>A minimum of 10 business days’ notice must be provided to Icon Water to attend the following workshops to be facilitated by the Developer in relation to their submission:</p> <ul style="list-style-type: none"> <li>• Design Review; and</li> <li>• Safety in Design (SiD) Review</li> </ul>
4.2	Icon Water assesses the submission for compliance against Icon Water’s standards (and project specific requirements where applicable).
4.3	<p>Developer’s authorised Consultant facilitates the following workshops (with Icon Water as a stakeholder) in relation to their submission:</p> <ul style="list-style-type: none"> <li>• Design Review; and</li> <li>• Safety in Design (SiD) Review</li> </ul> <p>Icon Water provides feedback on the design submission regarding compliance against Icon Water’s standards (and project specific requirements where applicable).</p>
4.4	<p>Developer’s authorised Consultant updates the design, incorporating feedback received from Icon Water regarding compliance against Icon Water’s standards (and project specific requirements where applicable), the Design Review and Safety in Design Review workshops.</p> <p>Developer’s authorised Consultant produces the Safety in Design Report in accordance with ACT Work Health &amp; Safety (WHS) requirements.</p> <p>Developer submits:</p> <ul style="list-style-type: none"> <li>• Updated design; and</li> <li>• Updated Safety in Design Report</li> </ul>

Step	Process requirements
4.5	Refer to Step 4.2 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
4.6	Refer to Step 4.3 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
4.7	Refer to Step 4.4 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
4.8	Refer to Step 4.5 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
4.9	Refer to Step 4.6 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
4.10	Refer to Step 4.7 in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
<b>5. Construction Phase</b>	
5.1	Refer to same Step Numbers in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i> .  <u>Note:</u> The submission of additional documents such as Operations & Maintenance Manuals and commissioning check-sheets will be required as well as other documentation. The requirements for such documents will be specified by Icon Water when “Phase 1: Pre-Lodgement” occurs.
5.2	
5.3	
5.4	
5.5	
5.6	
5.7	
5.8	
5.9	
5.10	
5.11	
5.12	
5.13	
<b>6. Connection Phase</b>	
6.1	Refer to same Step Numbers in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
6.2	
<b>7. Defects Liability Phase</b>	
7.1	Refer to same Step Numbers in <i>Table 6.5.1 The development and acceptance process for Major Works – Linear</i>
7.2	

### Pathway - Major Works Complex

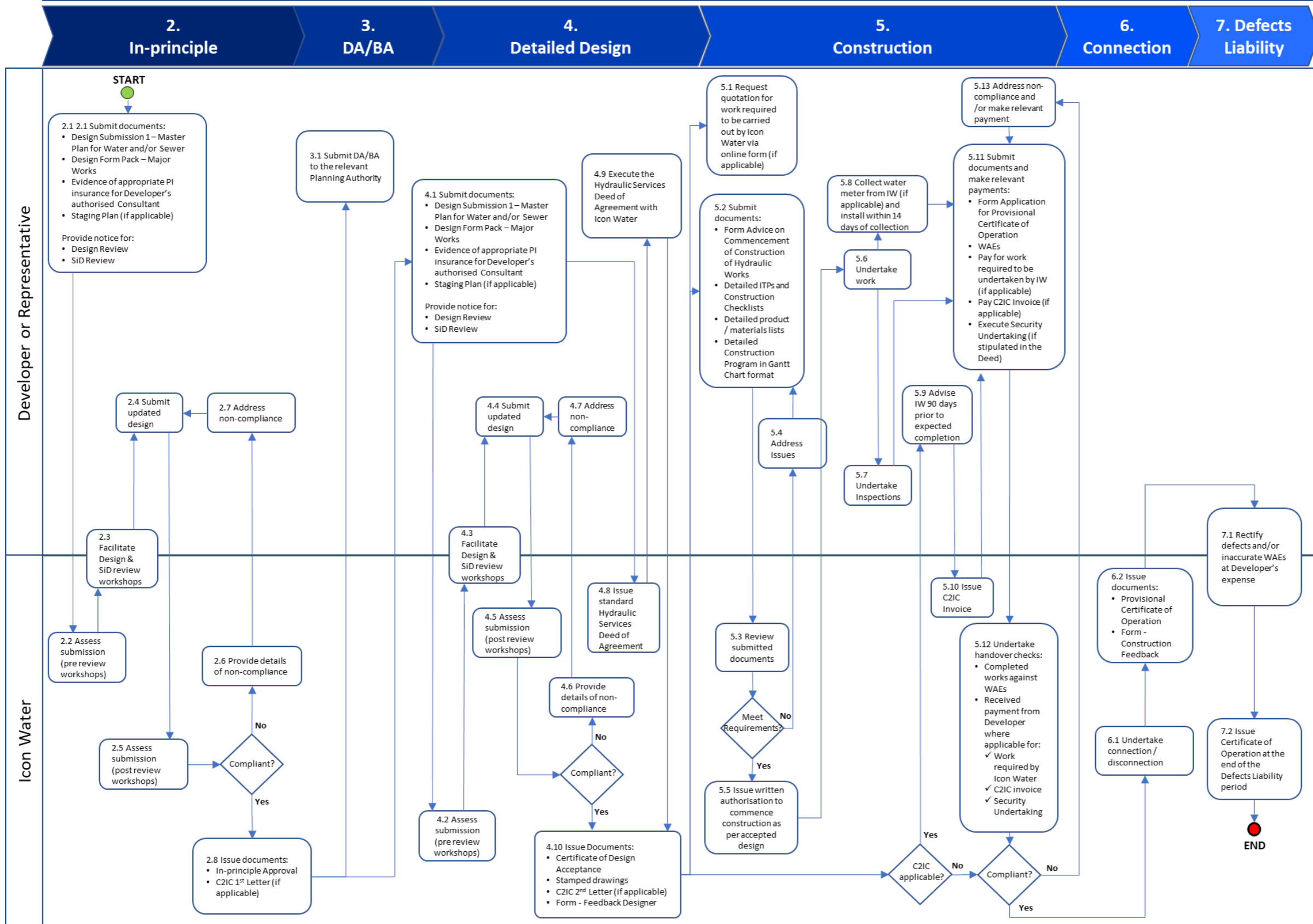


Figure 6.3 – Pathway for Major Works Complex

<This page intentionally left blank>


<This page intentionally left blank>



## **Talk to us**

**E** [talktous@iconwater.com.au](mailto:talktous@iconwater.com.au)

**T** 02 6248 3111

 @iconwater

GPO Box 366,  
Canberra ACT 2601

**iconwater.com.au**