

Guidelines D-GDE-STD-001

Seqwater Network Consent

Document Number: GDE-00348

This document is the property of Seqwater. It must not be copied or reproduced in any way whatsoever without the authority of Seqwater. This document is uncontrolled when printed. An electronic database manages and stores the controlled version.

Rev	Description	Owner		Approved for issue		
no.		Position	Signature	Position	Signature	Date
3	Amended Version	Lead Civil Engineer – P7514	Refer supporting information in REX	Principal Engineering Standards and Assurance – P6255	Refer supporting information in REX	21/07/2021



Version History

Rev	Date	Description	Author	SME	Owner	Approver
3	21/07/2021	Amended Version	Naurelle Black	Errol George	Lead Civil Engineer, Errol George	Principal Engineering Standards and Assurance, Geoff Simmers
2	16/06/2014	Amended Version (Seqwater)				George Henry
1	11/2/2010	Original Version (LinkWater)				George Henry

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 2 of 37



Contents

1.	Who is Seqwater	.6
2.	Purpose, Operation and Application of these Consent Guidelines	.8
2.1	Purpose of Guidelines	.8
2.2	Operation of Guidelines	.8
2.3	Application of Guidelines	.9
2.4	Independent Advice	.9
2.5	Other Approval and Compliance Requirements	.9
2.6	Caution Regarding Works within Seqwater Corridors	.9
2.7	Seqwater's Access to its Infrastructure	10
3.	Dial Before You Dig	1
4.	When is Consent Required?	1
5.	Consent for Works within Seqwater Landholdings, Easements and Other Tenures	2
5.1	Seqwater Landholdings	12
5.2	Easements in Favour of Seqwater	12
5.3	Non-Easement Land	12
6.	The Consent Application Process – Overview	3
7.	Application and Information Stage	4
7.1	Applications	14
7.2	Fees	4
7.3	Information Required for Application1	4
7.4	Location of Seqwater Infrastructure	
7.5	Level Datum	5
7.6	Works Requiring Further Information	
	7.6.1 Category 1 1	
	7.6.2. Category 2 1	
	7.6.3. Category 3 1	6
8.	Assessment Stage	17
9.	Decision Stage	8
10.	Works Delivery Stage	8
10.1	Prior to Commencement of the Works	8
10.2	Works Completion	9
11.	Additional Information	9
11.1	Public Liability, Construction and Other Insurance	19

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 3 of 37



11.2	Work Method Statements	19
11.3	Erosion/Sediment Control and Vegetation Management Plans	19
11.4	Notification of Works and Inspections	19
	11.4.1. Notice to Start Works	20
	11.4.2. Seqwater Works Inspections	20
	11.4.3. Notice of Completion of Works	20
11.5	Reinstatement of Infrastructure Corridor	20
11.6	'As Constructed' Documentation Requirements	20
	11.6.1. Works within an Easement or in Close Proximity to Seqwater Infrastructure	20
	11.6.2. Works on Seqwater Infrastructure	20
12.	Further Information	21
12.1	Contact Details	21
12.2	Disclaimer	21
13.	Changes from previous version	21
14.	Verification	
15.	Further Information	
-	ific Requirements for Activity Types	
A.1.	Billboards, Signs and Similar Structures	
A.2.	Blasting / use of Explosives	
A.3.	Building	
	A.3.1. Building within or Proximate to Easements	
	A.3.2. Buildings not in Easements	
A.4.	A.3.3. Plan of Survey Cultivation, Cropping and Similar Agricultural Activities	
A.4.	Earthworks, Excavations and Modifications to Surface Levels	
A.6.	Fences and Gates	
A.7.	Grazing of Livestock	
A.8.	Lighting of Fires / Burning-off	
A.9.	Machinery and Vehicles Operating within 5m of Either Side of Pipeline	
	A.9.1. Ground Conditions	
	A.9.2. General Approval	
	A.9.3. Vehicles and Equipment Generally	27
	A.9.4. Light Vehicles	27
	A.9.5. Registered Heavy Vehicles Operating Within Legal Load Limits	27
	A.9.6. Unregistered Heavy Vehicles, Earthmoving, Construction Machinery and/or Equ 27	
A.10.	Mining, Undermining, Quarrying, Substantial Excavation And Dam Construction	27

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 4 of 37



A.11.	Overhead Services – Powerlines And Telecommunication Lines	28			
A.12.	Pavement Requirements	28			
A.13.	Planting of Vegetation	29			
	A.13.1.Plant Selection	29			
	A.13.2.Removal of Vegetation	30			
A.14.	Recreational Activities	30			
A.15.	Roads	30			
	A.15.1.General Road Requirements	30			
	A.15.2.Design Traffic Loadings	30			
A.16.	Retaining Walls	31			
A.17.	Underground Service Installations	31			
	A.17.1. Cables and Conduits	33			
	A.17.2. Irrigation Equipment	33			
	A.17.3. Pipelines	33			
A.18.	Piling	34			
APPE	APPENDIX B:				
Third	Party Consent Application Fees and Reimbursement of Other Costs	35			



1. Who is Seqwater

Seqwater is a Queensland Government statutory authority responsible for ensuring a safe, secure and reliable water supply for over three million people across South East Queensland and providing essential flood mitigation services. It also provides irrigation services to around 1000 rural customers in five water supply schemes.

The authority is one of Australia's largest water businesses with the most geographically spread and diverse asset base of any capital city water authority in the country.

With operations which extend from the New South Wales border, to the base of the Toowoomba ranges and north to Gympie, Seqwater manages more than \$10 billion of water supply assets and the natural catchments of the region's major water supply sources. This includes dams, weirs, conventional water treatment plants and climate resilient sources of water through the Gold Coast Desalination Plant and the Western Corridor Recycled Water Scheme.

Twelve of the largest treatment plants are connected by the SEQ Water Grid, a 600-kilometre pipeline network which allows water to be transported to where it is needed most. Sequater also operates systems of Bulk Raw Water and Bulk Irrigation within the South East Queensland Region.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 6 of 37

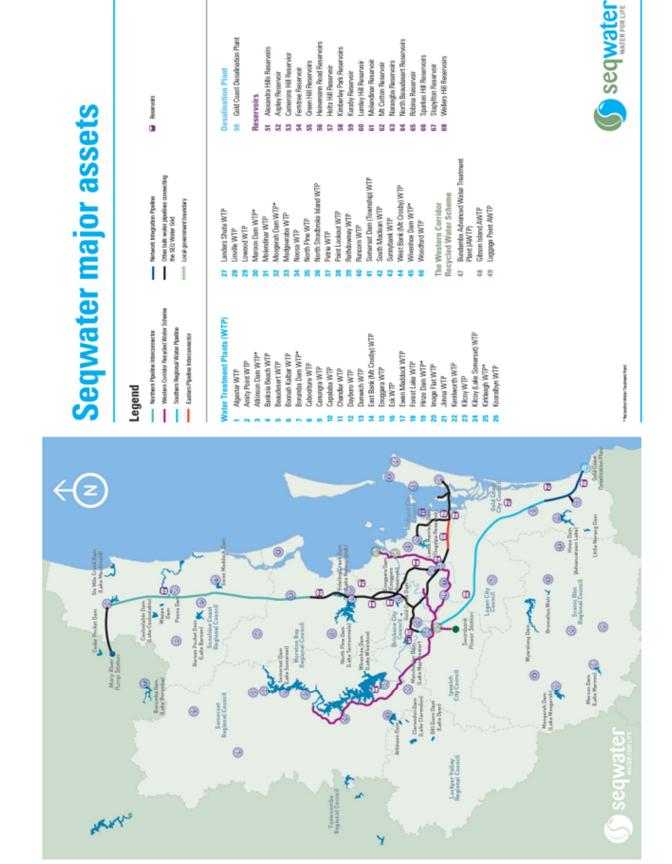


Figure 1-1 Major Seqwater Assets of the Water Grid

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 7 of 37

Sequater for Life

The controlled version of this document is registered. All other versions are uncontrolled.



2. Purpose, Operation and Application of these Consent Guidelines

2.1 Purpose of Guidelines

The main purpose of these guidelines is to assist people who seek to undertake works¹ near Seqwater's infrastructure, and to provide guidance on when and how a Works Consent application should be submitted, as well as providing guidance on specific requirements when undertaking specific works near Seqwater infrastructure.

Seqwater's infrastructure is protected under section 192 of the *Water Supply* (Safety and *Reliability*) Act 2008 (Qld) which legislates that a person must not interfere with Seqwater infrastructure without first obtaining Seqwater's written consent. Bulk Water Corridors and Easements are also provided a level of protection within the Queensland State Planning Policy² "All of the following state interest policies must be appropriately integrated in planning and development outcomes, where relevant: (1) "... and bulk water supply infrastructure locations and corridors (including easements) are protected from development that would compromise the corridor integrity, and the efficient delivery and functioning of the infrastructure.."

2.2 Operation of Guidelines

Seqwater requires an application for Consent for all proposals involving works near Seqwater infrastructure. The nature of the consent required is dependent on the scale of proposed works and tenure of the land upon which Seqwater's infrastructure is located (refer to section 0).

These guidelines describe:

- When consent is required
- The process for obtaining Seqwater's consent including the specifics of the application process
- The information required for assessment of an application
- Seqwater's assessment framework
- Consent conditions
- Complying with consents issued
- Specific requirements for various activity types (Appendix A)
- Cost recovery (Appendix B)

² Page 54; Queensland State Planning Policy 2017

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 8 of 37

¹ Works – includes the construction, installation, alteration, repair, restoration, maintenance, extension, demolition or dismantling of works located near Sequater infrastructure



2.3 Application of Guidelines

The information contained within these guidelines should be used as a **guide only** and does not override any applicable conditions of an easement instrument, licence, other arrangement, or any subsequent written advice that may be issued by Seqwater or other relevant bodies.

This information must be read in conjunction with the terms and conditions contained in any applicable easement instrument, any other consent advices, agreed arrangements, permits and/or licences that may also be in place. Seqwater Consents encourages intending Applicants to discuss Seqwater's particular engineering requirements at an early stage of their design process.

2.4 Independent Advice

Seqwater recommends applicants obtain independent legal, town planning, and engineering advice before undertaking any works impacting on the operation and maintainability of Seqwater's infrastructure.

2.5 Other Approval and Compliance Requirements

Any consent to works provided by Seqwater does not alter or remove any other obligations the landowner has to obtain consent or approval for those works from other authorities or agencies.

In particular, compliance with these guidelines does not discharge an applicant from its responsibility to:

- Obtain consent from the landowner
- Obtain any required environmental, legislative and building approvals
- Ensure that all proposed works meet relevant Australian Standards including any applicable building regulations
- Ensure all works affecting Seqwater's water infrastructure complies with:
 - Water Services Association of Australia, Water Supply Code WSA 03 2011 V3.1
 - Seqwater's Engineering Standard "D-SPE-STD-001 Water Supply Networks Planning, Design and Construction (<u>SPE-00395</u>) (Supplementary Manual to the Water Supply Code of Australia – WSA 03 – 2011 Version 3.1 – Water Services Association of Australia)
 - Australian Standards
 - Any other associated Seqwater consent requirements

2.6 Caution Regarding Works within Seqwater Corridors

Due to the presence of large diameter, very high-pressure water pipelines within these corridors; works within the vicinity of Seqwater's infrastructure may have the potential to compromise the pipelines and their safe operation.

Where a pipeline has been compromised, this may have the potential to cause a serious threat to life, and/or result in significant damage to surrounding areas and property. Due to the very high pressures; a break of a Trunk water main also has the potential to damage other essential infrastructure; rendering parts of the community without other vital services.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 9 of 37





Figure 2-1: Due to the very high pressure at which Trunk water Mains operate; a break has the potential to release dangerous water jets.



Figure 2-2: An example of the damage caused to other community assets following the break of a relatively small Trunk Water Main. This damage has the potential to render other community infrastructure un-usable until repairs are effected.

2.7 Seqwater's Access to its Infrastructure

Seqwater and its authorised representatives shall at all times retain the right to unobstructed access to its infrastructure corridor and to all its water infrastructure and associated facilities.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 10 of 37



3. Dial Before You Dig

To determine whether or not Seqwater's Consent is required for proposed works or activities, applicants should contact *Dial Before You Dig* before digging or excavating.

Dial Before You Dig is a free national community service designed to prevent damage and disruption to the vast pipe and cable networks which provide Australia with the essential everyday services– electricity, gas, communication and water.

The service also protects Australia's excavators from harm.

Enquiries:

Online: www.1100.com.au Phone: 1100 (anywhere in Australia)



4. When is Consent Required?

In addition to tenure rights, Seqwater has a statutory right to require consent under section 192 of the *Water Supply (Safety and Reliability) Act 2008 (QLD)*. In accordance with that section, it is an offence to interfere with, build over, interfere with access to, change the cover over, or change the surface of the land to cause ponding over Seqwater's infrastructure without written consent from Seqwater. Seqwater therefore has an interest in any third party works and activities which:

- Occur on Seqwater landholdings
- Occur within Seqwater easements
- Occur within 5m of Seqwater's infrastructure
- Impact on or have the potential to impact on Seqwater's infrastructure e.g. activities such as piling and vibration, or
- Impact on Seqwater's continued safe access and operations.

Where Seqwater has an interest, Seqwater's written consent will be required for various works and/or activities before they can proceed. These works may include, but are not limited to, those works described in Appendix A.

In case of uncertainty as to whether proposed work requires Seqwater's consent, please call Seqwater on (FREECALL) 1800 771 497 for information.

Please note that Seqwater is not able to provide planning or development advice in relation to any proposed works. Any queries about local government requirements should be directed to the local government or a town planner.

Works Consents are not transferrable. In the event of change of applicant, further works, major changes, or more than 2 years passing since project consent approval, a new application must be submitted for assessment.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 11 of 37



5. Consent for Works within Seqwater Landholdings, Easements and Other Tenures

The *Water Act 2000* and the *Water Supply (Safety and Reliability) Act 2008* require Seqwater to ensure a reliable supply of water to South East Queensland and to maintain safe operating conditions for its assets.

Where Seqwater is not the landowner, it is the applicant's responsibility to also seek appropriate consent from the landowner. Applicants may be requested to provide evidence of the landowner's consent.

5.1 Seqwater Landholdings

Seqwater, where it is the owner of freehold land, has the absolute right to deny or accept any application to carry out activities on its land. Any application will be considered on a case by case basis and, if consent is granted, it will be subject to any necessary conditions based on the relevant operational requirements at that location.

5.2 Easements in Favour of Seqwater

Seqwater's easement terms and conditions may vary depending on when the easement was acquired and the specific intent of the easement itself. In some instances, separate Seqwater easements with differing conditions may be located over a single property.

The easement area may also be shared by another service utility, such as water, energy, gas, etc. In such instances these service utilities will have their own individual easements registered on the land and will also have their own specific requirements regarding any works that may or may not be allowed. Seqwater makes no representation on any other authorities'/agencies' assets.

5.3 Non-Easement Land

Seqwater's infrastructure is also located within land of other tenures including State-owned land, roads, railway corridors, electricity corridors and watercourses. There are also instances where Seqwater's assets are located in State owned and private property without easements. This infrastructure is protected under section 192 of the *Water Supply (Safety and Reliability) Act 2008 (Qld)*. A *Dial Before You Dig* enquiry will advise on asset location information.

er. no. Doc No.	Doc Owner	Version Date	Doc Approver	
3 GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 12 of 37

The controlled version of this document is registered. All other versions are uncontrolled.



6. The Consent Application Process – Overview

STAGE 1 - APPLICATION & INFORMATION

- 1. Application lodged with Seqwater
- 2. Seqwater acknowledges receipt of application
- 3. Where necessary, a request may be made to the applicant for additional information to establish the Category of the works.

STAGE 2 – ASSESSMENT

- 4. Seqwater advises the applicant of the application fee (if applicable)
- 5. Upon receipt of fees, Seqwater assesses the applicant's proposed works at which time further information or a site visit may be requested

STAGE 3 – DECISION

6. Seqwater issues applicant with a Consent Approval to carry out the works; or Refuses the Application.

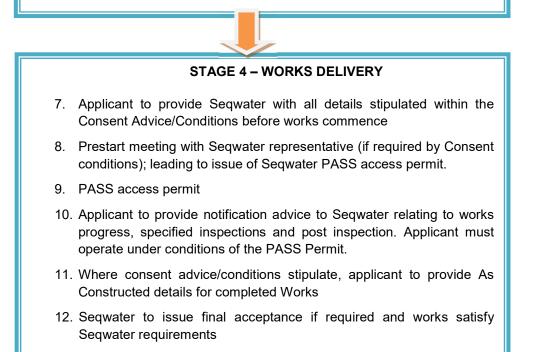


Figure 6-1 A summary of the consent process

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 13 of 37



These stages are described in more detail in sections 7, 8, 9 and 10 of these guidelines. Note that applications are generally assessed within 10 business days of the receipt of the application plus any additional information requested and/or fees subject to the complexity of the application, Seqwater's business requirements, and the completeness of the application provided.

7. Application and Information Stage

7.1 Applications

It is the applicant's responsibility to provide the required information to a sufficient level of detail to enable Seqwater to undertake an appropriate level of assessment. Failure to provide the required level of information may lead to delays in assessment and potentially rejection of the application. Specifics on the type of information required are set out in sections 7.3 to 7.5. Further clarification can be obtained by contacting Seqwater. Note that the level of information required differs depending on the nature of the works proposed.

Applications should be made using the Consent Application Form located on the "Working Near Water Infrastructure" page on the Seqwater website <u>http://www.seqwater.com.au</u> and submitted online or sent to "**Consent Applications**" at either:

- Via post to: Seqwater, PO Box 328, IPSWICH QLD 4305; or
- Via email to: <u>consents@seqwater.com.au</u>

The applicant must nominate a representative who can be contacted about the works and for sourcing additional information.

7.2 Fees

Application fees are payable where the proposed activity is of a commercial nature, or an alternative location for the proposed activity is available and the use of the Seqwater corridor is being sought for convenience. Generally, fees will not apply to a Commonwealth, State or a local government authority.

After submission of a Consent Application Form, Seqwater will assess the scope and extent of the works to which the consent relates, and advise the applicant on the relevant application category. See **Appendix B** for a description of the categories of application and associated application fees.

7.3 Information Required for Application

In order for Seqwater to process the application for consent, the applicant must submit:

- A properly completed Consent Application Form.
- 'For Construction' drawings that will allow Seqwater to determine the nature, specific location and extent of the proposed works. Where possible, drawings should include Seqwater infrastructure and cross sections indicating clearances.
- RPEQ engineering analysis, if required, related to proposed works, including heavy vehicles, earthmoving and construction machinery, and other activities .
- Application fee (if applicable).
- Other supporting information as is appropriate to the Works.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 14 of 37



7.4 Location of Seqwater Infrastructure

Dependent on the extent of works and the potential impact on Seqwater's infrastructure, Seqwater reserves the right to require the applicant to locate and confirm the position of its infrastructure prior to any works, design, and construction as appropriate as Seqwater considers it is the responsibility of the applicant to ascertain exact locations of Seqwaters infrastructure. Where required, the infrastructure is to be accurately located by approved nondestructive methods such as hydro-vacuum potholing systems or hand excavation at the applicant's expense.

It should be noted that Seqwater does not require permits to undertake the pipe location by approved non-destructive methods. However, Seqwater must be given <u>10 business days'</u> <u>notice</u> of this action taking place so that, if deemed appropriate, Seqwater can organise a representative to attend the site.

7.5 Level Datum

Many of Seqwater's older as-constructed drawings are plotted to the former 'Brisbane City Council' (BCC) Datum. This is particularly identified on drawings that do not have a Metric Symbol in the lower-right-hand corner, and dimensions are to 2 decimal places only. As an approximate conversion, subtract 3.76 feet from the level in BCC Datum, and then divide this value by 3.281. This converts the level in BCC Datum to the value of the level in Australian Height Datum (AHD).

7.6 Works Requiring Further Information

If Seqwater assesses that the works proposed in the application will impact, or have the potential to impact, on Seqwater's infrastructure then it may be assessed as Category 1, 2 or 3.

7.6.1 Category 1

Category 1 activities are defined as generally minor or low impact, with low potential to impact on Seqwater's easements or infrastructure.

Category 1A: Generally includes minor/low impact private or commercial work/s with low potential to impact on Seqwater's easements and/or infrastructure. This includes fences, gates, self-assessable retaining walls and buildings, access tracks, recreational and agricultural activities, vegetation management and requests for information. No fee is charged by Seqwater for Category 1A activities.

Applications will require information showing the relationship between the proposed work and the existing Seqwater infrastructure. Seqwater's officers will liaise with the Applicant for specific information requirements, as related to the proposed works.

Category 1B: Generally minor works including underground services up to 80mm diameter crossing Seqwater Trunk Water Mains; and require a site pre-start meeting.

A small fee is charged by Seqwater for Category 1B activities to cover a simple engineering assessment and site prestart meeting. (Refer Appendix B for details of current fees).

Applications will require detailed information showing the relationships of the proposed works to existing Seqwater infrastructure, This is likely to include longitudinal and relevant cross-section details including the Seqwater Trunk Main to allow for assessment of potential clearances.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 15 of 37



7.6.2. Category 2

Category 2 activities are defined as medium scale with potential to impact on Seqwater's easements or infrastructure. These generally require a detailed engineering assessment.

If the application is assessed as Category 2, and prior to Seqwater advancing the application for consent further, the applicant may have to submit:

- An application fee in the amount prescribed in the schedule to these guidelines (Refer Appendix B for details of current fees).
- Detailed construction drawings endorsed by a Registered Professional Engineer Queensland (RPEQ) of the proposed works, including the location of the proposed works and/or structures, and shall include Seqwater's infrastructure
- Detailed information showing the relationships of the final surface level and/or clearances between Seqwater's infrastructure and the proposed Works. This includes longitudinal and relevant cross-section details including the Seqwater Trunk Main.
- Confirmation that the position and level of Seqwater's infrastructure was accurately located by way of approved non-destructive potholing such as hydro-vacuum and/or hand excavation techniques
- Detailed Work Method Statement or Job Safety Environment Analysis detailing how work will be managed around Seqwater's infrastructure
- A statement explaining the proposed construction methodology that the design is based around
- Other supporting information as is appropriate to the works.

7.6.3. Category 3

Category 3 activities are defined as large scale commercial or infrastructure works with a high impact on Seqwater easements or infrastructure.

These are often long-term projects that require ongoing or multiple assessments with significant engineering and other inputs required.

If the application is assessed as Category 3, then prior to Seqwater advancing the application for consent, the applicant may have to submit:

- An application fee in the amount prescribed in the schedule to these guidelines
- A report signed by a Registered Professional Engineer Queensland (RPEQ) that clearly:
 - confirms compliance with Seqwater's requirements, industry best practice, and appropriate Australian codes and standards
 - identifies any changes to the system operating conditions as a consequence of the proposed works (e.g. increased head losses, higher operating costs)
 - identifies any potential implications/risks of the proposed works for Seqwater in terms of the operation and maintenance of the infrastructure and/or future augmentation of infrastructure capacity and why it was not possible to reduce or avoid them
- Detailed engineering plan(s) endorsed by a RPEQ showing the location and arrangements of the existing infrastructure and the proposed works
- Longitudinal and Cross-sectional drawings detailing final surface level and clearances between Seqwater's infrastructure and the proposed works

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 16 of 37



- Confirmation that the position and level of Seqwater's infrastructure was accurately located by way of approved non-destructive potholing such as hydro-vacuum and/or hand excavation techniques and captured by survey
- Where required, detailed information on pipeline connections and, if appropriate, for the reconnecting of supply on a contingency basis
- Where pipeline connection drawings are required, the drawings shall:
 - provide sufficient information to confirm that the pipeline connection is possible with the nominated fittings
 - include enlarged views of the pipeline connection; in plan and elevation
 - provide cutting and repair information
- Detailed Safe Work Method Statement or Job Safety Environmental Analysis detailing how work will be managed around Seqwater's infrastructure
- Other supporting information as is appropriate to the works.

8. Assessment Stage

Upon receipt of a properly made application including the required documentation and applicable fee(s), Seqwater may consider the following criteria during assessment:

- Impact on the structural integrity of Seqwater's infrastructure
- Effect upon the safe operation and maintenance of the infrastructure
- Change to the operating conditions of the infrastructure
- Interference with any existing pipeline earthing, cathodic protection or signal systems
- Any access restrictions to routine or emergency operations and maintenance
- Any public safety risk or hazard and, in particular, the effect on the safety of persons in respect to high pressure water pipelines
- Impact on Seqwater's ability to comply with its legislative obligations or obligations to any other co-user
- Effect upon any anticipated future works, including maintenance, refurbishment, or asset replacement
- Impact on vegetation and ground conditions within Seqwater easements and Seqwater's environmental obligations.

It should be noted that in addition to the above, other specific design, engineering, geotechnical, environmental, and operational assessments may also be required by Seqwater, but are not specifically detailed in these guidelines.

Seqwater will have regard to both the criteria set out in these guidelines and the risks associated with the proposed works. During the assessment stage, Seqwater may request the applicant to provide additional information.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 17 of 37



9. Decision Stage

Having assessed an application, Seqwater may elect to grant its consent with or without conditions. In certain circumstances, at its absolute discretion, Seqwater may refuse to grant consent if it is concerned about proposed works that compromise the safe operation of, or access to, any of Seqwater's infrastructure. At this point, Seqwater would advise the areas of concern which may be addressed by design amendment.

If Seqwater elects to grant its consent, consent is issued and remains current for 24 months from the date of issue unless otherwise stated within the written consent. Prior to the consent period lapsing, the applicant must either:

- Complete the works, or
- Request an extension of time.

Should the designated time period pass prior to completing the works, the applicant will be required to reapply for written consent. Any changes to the proposed works after consent is granted may require reassessment by Seqwater prior to those works commencing.

Please Note: Consents are granted to the applicant in their personal capacity; and are not directly transferable to a third party. For example; where a Consent Approval is obtained by a designing Consultant; a further Consent Approval will be required by the person constructing the proposed works as differing work delivery methodologies may alter the effect on the Seqwater Infrastructure.

10. Works Delivery Stage

10.1 Prior to Commencement of the Works

Prior to commencing any works, the applicant must comply with the conditions which form the consent.

Failure to comply with the conditions may result in the consent being withdrawn. Any works impacting on Seqwater infrastructure shall not commence until:

- A signed letter or email of approval has been issued to / received by the applicant.
- Conditions applying to the consent have been met including, as appropriate, provision of:
- All required information as identified in the written consent
- Proposed works program / schedule of works
- Detailed Safe Work Method Statements or Job Safety Environment Analysis
- Certificates of Currency Public Liability Insurance and other appropriate insurances
- The applicant can demonstrate that it has the necessary resources to complete the required Work in the nominated window of opportunity

The applicant must provide Seqwater with advanced notice for the works including:

- Notice to start works 10 business days prior to the commencement of the works
- Seqwater inspections 5 business days prior to required date

Written notices must be provided to Seqwater at <u>consents@seqwater.com.au</u>

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 18 of 37



See Section 12 of these guidelines for further information on contact details

10.2 Works Completion

Upon completion of the works, the applicant must:

- Provide Seqwater with written notification within 5 business days of completion
- Submit "as constructed" drawings within 20 business days of completion in accordance with section 11.6 of these guidelines.

11. Additional Information

11.1 Public Liability, Construction and Other Insurance

Dependent on the nature of the works and impact on Seqwater's infrastructure, the applicant may be required to have in effect, prior to undertaking the works and then maintain during the works, a public liability insurance policy.

Where those works relate to construction or are high risk, Seqwater may require an insurance amount of not less than \$20 million in respect of any single claim.

If the works have minor or low impact on Seqwater's infrastructure, then Seqwater will not require insurance coverage for those works.

In certain high-risk activities, Seqwater may require appropriate additional insurances for the proposed activity. In addition, where work is being undertaken that will directly impact Seqwater infrastructure, Seqwater may require a Deed of Agreement to be entered into between the applicant and Seqwater which sets out the terms and conditions of allowing the applicant to undertake such works.

11.2 Work Method Statements

As part of the conditions set within the written Consent, Seqwater may require that certain proposed Works are to be carried out in accordance with an approved Work Method Statement (WMS) and Inspection and Test Plans (ITPs). Where these WMS and ITPs are required, a copy of those procedures must be provided to Seqwater for review and approval 10 business days before the commencement of the construction Works.

The WMS must include all the steps required to carry out the works in the order that the works are performed. They must also be specific in relation to working alongside Seqwater infrastructure and cater for all risks associated with that.

11.3 Erosion/Sediment Control and Vegetation Management Plans

Dependent on the location of proposed works and associated Seqwater requirements and obligations, Seqwater may require erosion and/or sediment control plans and vegetation management plans for assessment.

11.4 Notification of Works and Inspections

Where conditioned in the written Consent, Seqwater will require (at its discretion) site inspections of the works. The applicant must provide Seqwater with the following written notifications:

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 19 of 37



11.4.1. Notice to Start Works

• a minimum of <u>10 business days' written notice</u> prior to the commencement of the works

11.4.2. Seqwater Works Inspections

• a minimum of <u>5 business days' written notice</u> prior to any required Seqwater inspections (including any 'Hold' and 'Test' Points) in accordance with the requirements of the site-specific Work Method Statements and Inspection Test Plans.

11.4.3. Notice of Completion of Works

• <u>within 5 business days</u> after the completion of the works written notice is to be provided to Seqwater.

11.5 Reinstatement of Infrastructure Corridor

Unless approved otherwise, the applicant must reinstate Seqwater's infrastructure corridor to at least the condition that it was prior to the works commencing. Dependent on the area of works and Seqwater's requirements and obligations, Seqwater may include special conditions relating to vegetation and finished ground surface conditions. In some instances, Seqwater will require replacement and maintenance of plants and vegetation within the corridor, of equal size and standard to existing plantings established by Seqwater. Seqwater may also require weed management controls to be put in place.

11.6 'As Constructed' Documentation Requirements

Unless otherwise specified, 'As Constructed' drawings and other such supporting information shall be submitted to Seqwater within 20 business days of construction completion. Drawings should be submitted as described in the Seqwater Engineering Standard D-SPE-STD-001 "Network Planning, Design and Construction <u>SPE-00395</u>". (Seqwater Supplementary Manual to Water Supply Code of Australia: WSA03 Version 3.1, 2011, Water Supply Association of Australia, updated August 2018) which can be obtained from Seqwater or downloaded from "Working Near Water Infrastructure" page on the Seqwater the website http://www.seqwater.com.au. The Water Supply Code of Australia is available from the Water Supply Association of Australia website http://www.wsaa.asn.au.

The 'As Constructed' drawings are to be provided to Seqwater prior to Seqwaters final acceptance of the works.

11.6.1. Works within an Easement or in Close Proximity to Seqwater Infrastructure

Where the specific works are within an easement or within 5m of Seqwater infrastructure, Seqwater requires submission of RPEQ signed copies of 'As Constructed' drawings for those works.

The drawings must provide sufficient information for Seqwater to confirm that any requirements as set out in Seqwater's written consent, particularly those related to surface covers and any required vertical and horizontal separations, have been complied with.

11.6.2. Works on Seqwater Infrastructure

Where specific works are undertaken on Seqwater infrastructure, e.g. the replacement, relocation or concrete encasement of its pipelines, Seqwater requires the submission of RPEQ

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 20 of 37



signed copies of the last version of the approved 'Design' drawings and detailed 'As Constructed' drawings, and other such supporting information associated with those Seqwater infrastructure works.

This information is to be provided in compliance with the requirements of the Seqwater Engineering Standard D-SPE-STD-001 "Network Planning, Design and Construction <u>SPE-00395</u>" (Seqwater Supplementary Manual to Water Supply Code of Australia: WSA03 Version 3.1, 2011, Water Supply Association of Australia, updated August 2018), specifically:

- Part 1 clause 9.4 Recording of 'Work As Constructed' Information
- Part 2 clause 24 'Works As Constructed Details'

12. Further Information

If there are any specific queries regarding the consent process or information contained within these guidelines, please contact Sequater as follows:

12.1 Contact Details

Web:http://www.seqwater.com.auEmail:consents@seqwater.com.auPost:SeqwaterAttention: Consent ApplicationsPO Box 328Ipswich QLD 4305Telephone:(FREE CALL) 1800 771 497

12.2 Disclaimer

These guidelines provide a general background and information regarding Seqwater's requirements when works are proposed to be carried out near Seqwater assets.

Any consent to works provided by Seqwater does not alter or remove any obligation the applicant has to obtain consent or approval for those works from other authorities or agencies.

These guidelines are correct at the time of issue. Seqwater reserves the right to amend the guidelines at any time.

13. Changes from previous version

These Guidelines will be regularly reviewed and updated in accordance with Seqwater Procedure X-PRO-STD-004 Development and Review of Asset Standards.

Section Number	Change
General Converted to Segwater Controlled Document.	
7.6.1	Category 1B added.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 21 of 37



14. Verification

Compliance with this document may be verified by internal audit.

15. Further Information

For further information please contact the owner of this document.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 22 of 37



APPENDIX A:

Specific Requirements for Activity Types

Sections 2 to 11 of these guidelines cover the requirements and associated processes for obtaining Seqwater consent for works. This section addresses more specific matters that may be relevant to persons or entities considering the need for consent.

A.1. Billboards, Signs and Similar Structures

The construction of billboards, signage and similar structures will require consent from Seqwater. In general, no part of any billboard or sign, including footings, will be permitted within the Seqwater easement. Any works which are to occur outside of the Seqwater easement but are within 5m from the outermost edge of the Seqwater pipeline should be submitted to Seqwater for consent.

A.2. Blasting / use of Explosives

Consent from Sequater is required for blasting or the use of explosives within 200m of Sequater's infrastructure.

Consent for blasting or the use of explosives may be given if the applicant demonstrates compliance with relevant legislation, has obtained local and state government permits, and meets the applicable Australian Standards including AS2187.

The maximum vibration at the pipe shall not exceed 50mm/s peak particle velocity.

The applicant must provide sufficient evidence to Seqwater to demonstrate that the integrity and safe operation of the pipeline will be maintained during the blasting operations. Seqwater reserves the right to withdraw its consent if, in its opinion, the blasting process becomes hazardous or is likely to result in the integrity of the pipeline being compromised.

Seqwater also requires vibration monitoring of its infrastructure, at the applicant's expense, to be undertaken as part of the blasting protocols to ensure compliance and that damage has not been caused to its infrastructure.

As a minimum, a condition of any consent given will be that the applicant must give at least 10 business days' prior notice to Seqwater of the commencement of any blasting.

A.3. Building

A.3.1. Building within or Proximate to Easements

Consent will not be given unless it can be shown that the construction, maintenance and operational activities on the current and future Seqwater infrastructure within the easement will be unaffected. Further, as excavation may be required anywhere within the existing easement; Seqwater may require that proposed works proximate to the outer edge of the easement will sustain the effects of any excavation within the easement.

An application must be submitted for all structures associated with the proposed works.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 23 of 37



A.3.2. Buildings not in Easements

Consent must be obtained for all construction within 5m of Seqwater infrastructure at a minimum. As a guide, the structure, including any associated footings, piles, roofs and slabs, must not:

- Impact on the structural integrity of Seqwater infrastructure
- · Hinder access within the infrastructure corridor for plant and machinery
- Impact on the safe operations and maintenance of Seqwater infrastructure
- Overhang a Seqwater easement

An application must be submitted for all structures associated with the proposed works.

The applicant must demonstrate by submission of a RPEQ certified report that the influence of loadings associated with the foundations of any proposed structure is clear of Seqwater infrastructure to ensure structural integrity of the Seqwater infrastructure is maintained.

Seqwater reserves the right not to approve any structures that compromise the safe operation of, and access to, any of its infrastructure.

A.3.3. Plan of Survey

On completion of the building work for the structure, a detailed survey plan certified by a licensed surveyor showing building footprint, fence lines, etc. in relation to the infrastructure corridor and pipeline must be prepared at the applicant's expense and a copy forwarded to Seqwater for inclusion in its records.

A.4. Cultivation, Cropping and Similar Agricultural Activities

Cultivation, cropping and other similar agricultural activities proposed within the infrastructure corridor will require consultation and consent from Seqwater where those activities are located within 5m of the bulk water infrastructure. This consultation is to ensure that the proposed works do not impede safe access; or pose a threat of damage to the infrastructure including the pipeline, communications conduits, fibre optic cables, pit structures, cathodic protection anodes and test points.

To adequately assess an application for cultivation, cropping, or similar agricultural activities, Seqwater requires the following supporting information:

- Type of cultivation / cropping activities to be undertaken
- Details of machinery operating over or adjacent to infrastructure
- Depth of cultivation or soil disturbance required
- Alternative access arrangements that can be made available if Seqwater's direct access along the infrastructure corridor is affected
- · Plan showing where agricultural activities are to occur

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 24 of 37



In certain instances where consent is provided to the applicant to undertake ongoing agricultural activities across the infrastructure corridor, Seqwater may require the applicant to enter into an access agreement where the parties agree to a safe alternative access path to avoid damaging crops when undertaking required inspections, maintenance works, or other such operations on its infrastructure.

A.5. Earthworks, Excavations and Modifications to Surface Levels

Earthworks, excavations and modifications to the land surface level within the infrastructure corridor require Seqwater's consent. Surface level changes within 5m either side of the outermost projection of the pipeline must meet the criteria detailed below:

- A.5.1 Generally, no filling over an existing Seqwater Trunk Water Main will be approved due to the adverse effect on operational/maintenance activities. Seqwater may approve filling over an existing Trunk Water Main within easements and open areas, subject to maximum cover of 2.0 metres.
- A.5.2 Excessive cover over the pipeline (i.e. in excess of 2.0 metres) may be approved subject to the applicant's submission of a detailed RPEQ signed engineering and risk assessment indicating that such modifications will not cause damage to Seqwater's infrastructure; nor interfere adversely with Seqwater Operations personnel safely accessing the Trunk Water Main for Operational/Maintenance activity. Seqwater will liaise with the applicant on potential effects to operational capability. Seqwater requires concrete encasement or relocation of the Trunk Water Main at the applicant's expense where requirements cannot be met.
- **A.5.3** Applications for Consent Approval will require the submission of detailed plans showing the extent of the works, elevation levels of all infrastructure (pipelines, communication conduits, etc.) and the proposed finished surface levels.
- A.5.4 The applicant will be required to meet all costs associated with the adjustment of Seqwater's surface level fixtures including valve chambers, access covers, air vents, access paths and other bulk water infrastructure affected by the works.
- A.5.5 Where cutting of the existing surface is proposed; the minimum cover requirements from the finished surface level to the top of underground infrastructure are:

•	Parkland/private property	900mm
•	Road reserves/car parks	1200mm
•	Industrial areas	1200mm
•	Farmlands requiring deep ploughing	1500mm

A.5.6 In all cases, vibration from earthmoving equipment and compaction shall not exceed 50 mm/second at the Seqwater Trunk Water Main.

A.6. Fences and Gates

Seqwater requires access at all times to its infrastructure. A landowner must seek Seqwater's consent to erect a fence across land that falls within Seqwater's infrastructure corridor. Placements of post holes and similar improvements have the potential to cause significant damage to the pipeline and associated communication cables and conduits.

Where fences restrict access (whether permanent or temporary) along the pipeline corridor, Seqwater may require a gate, suitable for vehicular access, to be installed. This gate arrangement must be designed and installed to Seqwater's requirements.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 25 of 37



Access paths to and through any required gating arrangement are to be reasonably available at all times and must be kept clear of obstructions, improvements and/or plantings which may affect physical access or the operation of the gate.

If a gate is to be locked, a system of interlocking padlocks must be used to secure the gate. Seqwater will install its own lock to the gate to ensure unrestricted access through the locked gate.

A.7. Grazing of Livestock

The grazing of livestock and other similar animals within the infrastructure corridor, where Seqwater is not the landowner, does not require Seqwater's consent. However, Seqwater requires safe access to its infrastructure within the corridor for operational and maintenance activities.

A.8. Lighting of Fires / Burning-off

Seqwater's written consent must be sought before lighting fires within the infrastructure corridor where there is above-ground infrastructure e.g. facilities, valves, cathodic protection, markers, etc. Seqwater should be consulted prior to burning-off on land adjacent to its landholdings, easements and infrastructure corridors.

The lighting of fires or 'burning-off' within the infrastructure corridor, or in the vicinity of any Seqwater infrastructure, must be in accordance with all applicable laws, guidelines, regulations, codes and other requirements.

Information regarding the lighting of fires can be obtained from your local Rural Fire Service or Fire Brigade station.

Any resulting damage to Seqwater's above-ground infrastructure caused by a burn-off must be rectified to Seqwater's standards at the applicant's cost.

A.9. Machinery and Vehicles Operating within 5m of Either Side of Pipeline

A.9.1. Ground Conditions

Where ground conditions within 5m of the pipeline have been affected by external factors such as wet weather or erosion, any loadings approved by Seqwater relating to vehicle and heavy machinery movements over the pipeline should be adjusted to ensure that the operation of any of those vehicles, machinery, plant and equipment within that area does not damage the pipeline or place its continued safe operation at risk. In extreme events, Seqwater may impose a hold on works until ground conditions cease to pose a risk to infrastructure.

Disturbed ground surface, Seqwater vegetation and built assets are to be left as specified in special conditions to prevent erosion and satisfy Seqwater's environmental requirements.

A.9.2. General Approval

For foot–traffic, horses and stock, bicycles and motor-bikes – no restriction applies providing that damage will not be caused or likely to be caused:

- To any surface fixtures such as pit covers, air vents, marker posts, etc.
- To the surface coating of the pipe where that pipeline is aboveground

Seqwater <u>must</u> be contacted where the surface coating or pipe has been damaged.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 26 of 37



A.9.3. Vehicles and Equipment Generally

Unless otherwise confirmed by Seqwater, no vehicles are to cross over the pipeline where the depth to the top of the pipeline is less than 750mm.

A.9.4. Light Vehicles

Subject to having a minimum 750mm cover over the pipeline, any light vehicle (up to 4.5 tonne Gross Vehicle Mass), with or without attached trailers, which can be legally driven by the holder of a 'C' Class Driver's licence on the open road, can cross over the pipeline.

A.9.5. Registered3 Heavy Vehicles Operating Within Legal Load Limits

Subject to having a minimum 750mm cover over the pipeline, any heavy vehicle (over 4.5 tonnes Gross Vehicle Mass), with or without attached trailers, which can be legally driven with the intended level of loading on the open road, can cross over the pipeline.

A.9.6. Unregistered Heavy Vehicles, Earthmoving, Construction Machinery and/or Equipment

The use and operation of unregistered heavy vehicles, earthmoving, construction machinery and/or similar equipment within 5m of the pipeline infrastructure will require consent from Seqwater to ensure the continued safe operation of the pipeline.

Machinery not permitted to cross the pipeline without Seqwater's consent include:

- Tracked machinery and equipment with a gross operating weight over 40 tonnes
- Wheeled machinery and equipment with a load above 8 tonnes per axle
- Vehicles or equipment that exceed the maximum legal load limit for that particular type of vehicle/equipment and would not be permitted to drive on an open Queensland road

Unregistered Heavy vehicles operating over pipelines may require protective measures to be undertaken to the area immediately adjacent and over the pipeline. Any protective measure will be at the applicant's expense and will require Seqwater's approval.

Detailed Safe Work Method Statements and RPEQ signed engineering analysis regarding the proposed works will be required by Seqwater for assessment and approval before the proposed works can proceed.

All Seqwater infrastructure on or above ground level should be barricaded and clearly marked as an exclusion zone.

A.10. Mining, Undermining, Quarrying, Substantial Excavation And Dam Construction

If not identified in other approvals or management plans, it is a requirement that if the proposed activity is to be conducted within 200m of Seqwater's easement area or infrastructure corridor,

³ Holding suitable Registration in Queensland under the *Transport Operations (Road Use Management) Act 1995*



the proposal should be forwarded to Seqwater for assessment as to whether it will cause interference to Seqwater's infrastructure.

A.11. Overhead Services – Powerlines And Telecommunication Lines

Applications for installation of overhead powerlines or telecommunications lines near Seqwater infrastructure or within an easement will be considered based on the following criteria:

- If there is to be a change in powerline operating conditions, installation of a new powerline, or changes to the existing powerlines or earthing systems, then the applicant must determine the impacts of those changes to Seqwater's infrastructure and identify appropriate mitigation measures. The applicant must notify Seqwater of those impacts and any required mitigation measures necessary for Seqwater's consideration and approval
- Applications must be accompanied with detailed design drawings and plans with appropriate dimensions/co-ordinates where services run near Seqwater infrastructure
- A minimum separation distance of 5m between any proposed structures and the outermost projection of the pipeline or associated infrastructure must be maintained
- Any new structures must be earthed in accordance with industry standards to avoid induced voltages occurring in the pipeline
- The location, design, and construction method of any installations must consider the impact on the pipeline's lateral and longitudinal restraints i.e. anchor blocks and in-situ ground support

A.12. Pavement Requirements

Pavements include roadways, footpaths, parking areas, storage areas, sealed playing fields and other similar types of improvements.

Consent for the construction of pavements is required within Seqwater's easement or within 5m from the outermost projection of the pipeline. Consent will be subject to the following requirements:

- Any pavement within 5m from the outermost projection of the pipeline must be designed as a flexible pavement. Rigid (concrete) pavements may not be acceptable within 5m of the pipeline, unless it can be demonstrated to Seqwater's satisfaction that there are suitable construction joints to facilitate removal for emergency operational/maintenance access.
- Any loads applied within the pavement area must be compliant with the maximum allowable pipeline load capacity as per Australian Standard AS/NZS 2566.1 Buried & Flexible Pipelines Structural Design
- Vehicle access for Seqwater must be maintained at all times to pipeline fixtures including air valves, drain down valves, manholes and other such associated pipeline infrastructure
- The layout and operation of the pavement area shall be designed to avoid the storage of materials directly over the pipeline unless consent is otherwise provided by Seqwater
- Seqwater Easements provide for access to Seqwater Trunk Water Mains within the Easement for operational/maintenance activities. This requires the use of large excavators, cranes and large trucks. Applicants are reminded of this for the design and construction of pavements and structures permitted by Seqwater within the Easement. Seqwater shall be released from liability associated with damage to any infrastructure within the Easement during Seqwater's maintenance/operational activities.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 28 of 37



A.13. Planting of Vegetation

Generally, the planting of trees/shrubs which encroach within 5m of the outermost projection of a Seqwater pipeline (the clear zone) or within a Seqwater easement is not permitted.

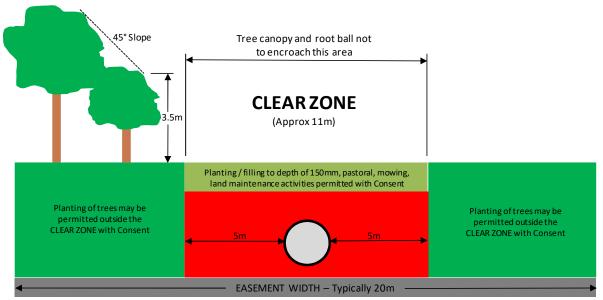


Figure A.13-1 Vegetation Planting and Management - Clear Zone

Planting of trees and shrubs outside of the clear zone is permitted subject to ensuring that, at maturity, the above and below ground elements of those plantings do not encroach into the clear zone, and that adequate vehicular and equipment access to Seqwater infrastructure is maintained at all times.

Planting within the infrastructure corridor may also be subject to other service authority requirements and these requirements should also be taken into consideration before any planting is undertaken.

All land above the pipeline and within 5m either side of the outermost projection of the pipeline must be stabilised at all times and free of erosion and erosion source points. The access and clear zones must be kept free of all environmentally significant and government listed non-native weed species at all times.

The planting of small crops, gardens, etc. with a maximum nominal root depth of 300mm may be permitted within the clear zone. However, cultivation activities within the clear zone are generally restricted to a nominal depth of 150mm.

Where cultivation is to be undertaken or depth of till is greater than 150mm, Seqwater will require the details of those cultivation activities and plantings to be submitted for assessment to ensure that its infrastructure is protected, and any operational access routes are preserved.

A.13.1. Plant Selection

To source which plant growth habits comply with this criterion within a particular area, enquiries should be directed to local plant nurseries, or the local government.

All vegetation placed or managed within the clear zone must conform to the following parameters:

• Have an average mature above ground vegetation height less than one (1) metre

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 29 of 37



- Must not belong to, or be part of, the Angophora, Corymbia, Eucalyptus, Ficus, Lophostemon or Melaleuca genus as classified by the International Code of Botanical Nomenclature
- Have a mature calliper diameter less than 40mm at a height of 1.2 metres. Plant calliper width must not exceed, or be allowed to exceed, this parameter

A.13.2. Removal of Vegetation

Where necessary, Seqwater reserves the right to remove vegetation or anything else within the infrastructure corridor to ensure the safe operation of, and access to, its infrastructure is maintained.

A.14. Recreational Activities

Recreational activities may include, but are not limited to, sporting activities, horse riding, motorbike riding, bicycle riding, four-wheel driving, walking, etc.

Recreational activities that do not require construction of permanent or temporary structures, earthworks, or the like may be undertaken at any time within the infrastructure corridor without the need for written consent from Seqwater.

All recreational activities should be undertaken with due care and should not damage the pipeline, surface and above ground appurtenances such as valve pits, air vents, markers, etc., and the land within the pipeline easement.

A.15. Roads

A.15.1. General Road Requirements

Road design requirements are as follows:

- Unless demonstrated otherwise that the pipeline and associated infrastructure's integrity is not compromised by a lesser cover, the minimum cover for road formations constructed over a Seqwater pipeline shall be 1200mm.
- Road crossings over the pipeline should preferably be at right angles to the pipeline alignment.
- Where roadway is proposed near Seqwater's pipeline zone of influence, the roadway is to be positioned above the pipeline on the kerbside lane of the carriageway. The road reserve must provide enough space to allow Seqwater the ability to operate and maintain its assets, plant and machinery whilst diverting traffic.
- Any roadway section located over the pipeline is to be constructed as a flexible pavement.
- Mechanical protection (e.g. concrete encasement) of the Seqwater pipeline may be required where the future maintenance activities of the pipeline are likely to be affected by the proposed works.

A.15.2. Design Traffic Loadings

Vehicle crossings will require an engineering assessment in accordance with Australian Standard AS/NZS 2566.1 Buried Flexible Pipelines – Structural Design. A RPEQ certified assessment must be submitted to Seqwater to demonstrate that the integrity and operations of the water assets will not be compromised as a result of the proposed road.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 30 of 37



Details relating to any new roads to be constructed within the infrastructure corridor, or over Seqwater's pipeline infrastructure, must be provided to Seqwater for assessment and acceptance.

A.16. Retaining Walls

Retaining walls and their footings shall not:

- Place any additional loads on the pipeline that are outside of the structural design capacity of the pipeline
- Be located within 5m of the outer most projection of the pipeline or within the easement unless accompanied by RPEQ signed engineering calculations which provide evidence that the structural integrity of the pipeline is not affected
- Impede access to infrastructure

A.17. Underground Service Installations

Persons installing services within 5m of Seqwater infrastructure or within a Seqwater easement must seek approval.

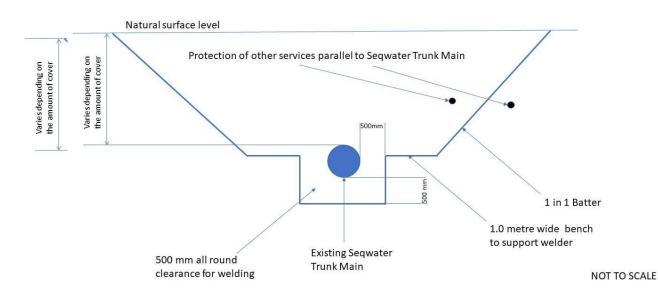
Due to limitation of Seqwater's operational capability, services will not be permitted in Seqwater Easements parallel to the Easement/Trunk Water Main within the Easement. Seqwater may accept services crossing an Seqwater Easement at 900, but this requires prior application to Seqwater & Consent Approval Accordingly.

Due to its commitment to Safety in Design, Seqwater will require new services crossing over a Trunk Water Main to be installed in/as a rigid material capable structurally of spanning over potential excavations of the Trunk Water Main by Seqwater for operational or maintenance purposes. Seqwater engineers will liaise with applicants for Consent Approval in this regard. Applicable requirements will be dependent on specific site circumstances, which include size of Trunk Water Main, existing depth of cover over the Trunk Water Main, soil types and type of service bridging over the Trunk Water Main.

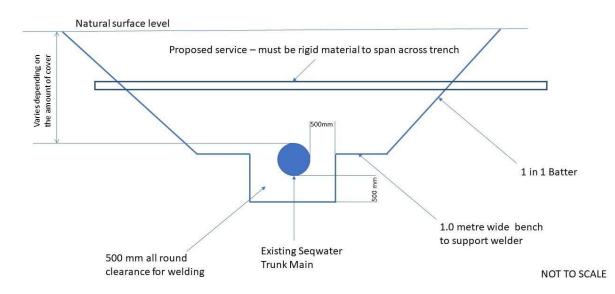
Please Note: At no time during installation of new services crossing the Seqwater Trunk Water Main will Seqwater permit 'propping off' the Trunk Water Main of the new service. Such activity may introduce point-loads to the Trunk Main Pipe which can result in damage to the internal cement-lining; with resultant loss of internal corrosion protection.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 31 of 37





Pc Potential Excavation to Conduct Emergency Repair of Seqwater Trunk Water Main; with Services Parallel to Seqwater Trunk Water Main



Potential Excavation to Conduct Emergency Repair of Seqwater Trunk Water Main

All underground service installations must be carried out such that continuous access to Seqwater infrastructure is provided and maintained. In certain instances, where Seqwater will be unable to access its Trunk Water Main; Seqwater may require its pipeline to be protected or concrete encased for 5m either side of the underground service crossing, at the applicant's expense.

Identification and marking of underground services (cables, conduits, pipelines, etc.) within the easement and in the immediate vicinity of Seqwater's pipeline are required and must comply with the following:

 As above; Seqwater will not permit other services within an Seqwater Easement, Parallel to the Easement. In non-easement situations; where services run generally parallel to the pipeline, service markers must be installed at maximum 100m spacing at alternate property boundaries and at any changes in direction

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 32 of 37



- Where services cross the pipeline, markers must be placed 5m (or as near as is practical) on each side of the pipeline
- Marker posts, or appropriate symbols set in concrete, to be used to mark alignments
- Services must be marked with appropriate service marker tape located immediately above and no closer than 150mm from the installed service
- Services must be marked to indicate ownership

Seqwater will not be responsible for any costs associated with protection/encasement, and/or any subsequent damage caused to other underground installations in the course of Seqwater carrying out its activities on the pipeline.

A.17.1. Cables and Conduits

- For the installation of underground cables and conduits within 5m from the outer most projection of Seqwater's infrastructure, the applicant must provide Seqwater with detailed design drawings and plans with appropriate dimensions, levels and co-ordinates for assessment. The following conditions will apply to any works:
- Vertical and horizontal clearances shall comply with Seqwater's Supplementary Manual to Water Services Association of Australia Water Supply Code of Australia (WSA 03 – 2011 Third Edition Version 3.1)- 'Clearance requirements'
- Confirmation that the proposed works/activity will not interfere with or change the operating conditions of the water pipeline, pipeline earthing, cathodic protection or signal systems

A.17.2. Irrigation Equipment

Installation of irrigation systems and similar works will require consultation with Seqwater to ensure that the works do not pose a threat to, or impede access to Seqwater's infrastructure. Information to be provided should include details of proposed works to clearly indicate the pipeline size, material, location and depth.

A.17.3. Pipelines

Service crossings should preferably be at right angles to Seqwater pipelines unless the applicant can otherwise demonstrate that:

- Those crossings are consistent with relevant industry standards
- The crossings will not impact on the integrity of the Seqwater pipeline
- Seqwater's operational and maintenance activities and future works are not limited or impeded

Vertical and horizontal clearances shall comply with Seqwater's Supplementary Manual to Water Services Association of Australia, Water Supply Code of Australia (WSA 03 – 2011 Third Edition Version 3.1) – 'Clearance requirements'

Unless otherwise authorised by Seqwater in writing, parallel co-location is limited to alignments greater than 5m from the outermost projection of the pipeline.

Reduced separations may be considered by Seqwater after consideration of adequate performance of the pipeline and any associated infrastructure, including communication conduits and/or cathodic protection facilities. The final separation distance must allow

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 33 of 37



reasonable maintenance and operational access by Seqwater and sufficient space for the renewal and repair of the pipeline when necessary.

Approval may also be conditional upon RPEQ signed analysis of potential impact of the proposed pipeline from machinery movement both over and near Seqwater's pipeline.

A.18. Piling

Seqwater will not consent to driving of piles within 15m of the outermost projection of Seqwater's pipeline and associated infrastructure unless Seqwater's *operational and maintenance activities and future works are not limited or impeded.*

The maximum vibration at the pipe shall not exceed 50mm/s peak particle velocity. Seqwater may require an RPEQ certified analysis to ensure there is no adverse impact on Seqwater's infrastructure.

For information regarding machinery, refer to "Machinery and vehicles operating within Seqwater corridors"

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 34 of 37



APPENDIX B:

Third Party Consent Application Fees and Reimbursement of Other Costs

- 1. An application fee is payable where the proposed activity is of a commercial nature or an alternative location for the proposed activity is available and the use of the Seqwater corridor is being sought for convenience. The requirement to pay an application fee, and the quantum of that application fee, is dependent on the scope and extent of the works to which the consent relates (and the associated level of assessment required). Applicable application fees for different categories of works and other costs are set out in the table on the following page.
- 2. Having regard to the scope and extent of works and the nature of the assessment required, Seqwater has established four categories of applications. Once the cost determination has been made, Seqwater will provide the applicant with a written response outlining the applicable application fees and payment details.
- 3. Seqwater will not proceed to process an application until the appropriate application fee is received.
- 4. For Category 3 applications, applicants may be liable to reimburse or make a contribution to Seqwater for its technical assessment, monitoring and associated costs associated with the application and provision of consent. As indicated in the table below, Category 3 applications are typically for large scale commercial and/or infrastructure works that have the potential to significantly impact on Seqwater's easements or infrastructure or that cause circumstances where long term, ongoing or multiple assessments may be required. Technical assessment, monitoring and associated costs may include, but are not limited to, Seqwater's costs of engaging external consultants (e.g. engineers, geotechnical advisors and legal advisors) to consider the potential impact of the proposed activity and to address risks associated with provision of consent.
- 5. Note that technical assessment, monitoring and associated costs are additional to the application fee for Category 3 applications.
- 6. Upon receipt of a Category 3 application (and the associated application fee), Seqwater will conduct an initial assessment of the application and liaise with the applicant prior to incurring any further technical assessment, monitoring and associated costs. In some circumstances, Seqwater may require that the applicant enters a formal arrangement to secure the payment of the technical assessment, monitoring and associated costs.

Applicants should note that application fees are not refundable, and reimbursement of technical assessment, monitoring and associated costs is not dependent on the provision of consent by Seqwater.

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 35 of 37

Technical Support & Improvement - Guidelines D-GDE-STD-001 Seqwater Network Consent



Application Category	Application Fee	Additional Assessment & Monitoring Associated Costs	Category Description	Criteria / Consent Application Type	
Category 1A	Nil	N/A	Generally minor/low impact private/domestic/rural work/s with low potential to impact on Seqwater's easements and/or infrastructure.	 Including but not limited to: Fences Gates Self-assessable Retaining walls Access tracks Recreational activities Agricultural activities Planting trees, shrubs, vegetable gardens, turf Grazing Lighting of fires/burning off Requests for information 	
Category 1B	\$500 (+GST)	N/A	Minor works including underground services (up to 80mm diameter) crossing Trunk Mains which require basic engineering assessment (up to 1 hour) and a site pre-start meeting.	May include but not limited to: • Underground services • Water • Drainage • Sewerage • Power • Telecommunications	
Category 2	\$2,300 (+GST)	N/A	Medium scale commercial infrastructure work(s) with one or more proposed works with potential to impact on a Seqwater easement and/or infrastructure – generally requiring a detailed engineering assessment and a site prestart meeting.	May include but not limited to: Underground services Water Drainage Sewerage Power Telecommunications Earthworks and excavations Earthworks Earthworks	
Category 3	\$2,300 (+GST)	Refer to <i>Appendix B</i> , items 4-6	Large scale commercial/ and or infrastructure works with high impact on Seqwater easement and/or infrastructure and long term, ongoing or multiple assessments required – generally where significant engineering and other assessments are required.	At the discretion of the Principal Engineering Standards and Assurance	

Ver. no.	Doc No.	Doc Owner	Version Date	Doc Approver	
3	GDE-00348	Lead Civil Engineer	21/07/2021	Principal Engineering Standards and Assurance	Page 36 of 37

Seqwater Head Office 117 Brisbane St Ipswich QLD 4305

Telephone:(07) 3035 5600Facsimile:(07) 3229 7926

Email: consents@seqwater.com.au