Transport Roads & Maritime Services

Construction Water Reuse Strategy

M4-M5 Link Mainline Tunnels

May 2019

lendlease | SAMSUNG C&T | BOUYGUES CONSTRUCTION AUSTRALIA

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Glossary/Abbreviations

Abbreviation	Expanded text
CoA	Condition of Approval
CSSI	Critical State Significant Infrastructure
CWRS	Construction Water Reuse Strategy
DPE	Department of Planning and Environment
EIS	Environmental Impact Statement
EPL	Environment Protection Licence
ER	Environmental Representative
GMP	Groundwater Management Plan
GWMP	Groundwater Monitoring Program
IS	Infrastructure Sustainability
ISCA	Infrastructure Sustainability Council of Australia
Kl	Kilolitre
LSBJV	Lendlease Samsung Bouygues Joint Venture
NSW	New South Wales
OWRS	Operational Water Reuse Strategy
Project, the	M4-M5 Link Mainline Tunnels
SMC	Sydney Motorway Corporation
SMP	Sustainability Management Plan
WTP	Water Treatment Plant

Document control

Approval and authorisation

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Version Control

Revision	Date	Description
Rev 00	14/01/19	Draft for Review
Rev 01	25/01/19	Responses to RMS and SMC comments
Rev 02	7/02/19	Responses to RMS and SMC comments
Rev 03	11/02/19	For DPE review
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Internal review

	Name	Position	Date	Signed/Authorised
Author	[redacted]			
Review				
Authorised				

1 Introduction

1.1 Purpose

The purpose of the Construction Water Reuse Strategy (CWRS, this Strategy) is to identify and evaluate the options for reuse of collected rain, storm and groundwater during construction of the M4-M5 Link Mainline Tunnels (the Project) in accordance with the Condition of Approval (CoA) E198.

The purpose of the CWRS is to:

- Evaluate water reuse options;
- Identify the preferred re-use options;
- Identify a timeframe for the implementation of the preferred reuse options; and
- Address the requirements of the CoA.

An Operational Water Reuse Strategy (OWRS) will be prepared separately prior to commencement of operation of the project in accordance with CoA E198.

1.2 Project Description

The WestConnex M4-M5 Link project is being constructed in two stages (refer to Figure 1-1):

- Stage 1 (the Project and subject of this document): M4-M5 Link Mainline tunnels
- Stage 2: Rozelle interchange.

Sydney Motorway Corporation (SMC) has engaged Lendlease Samsung Bouygues Joint Venture (LSBJV) to design and construct Stage 1 of the project. The key features of the Mainline tunnels project include:

- Twin mainline motorway tunnels between the M4 East at Haberfield and the New M5 at St Peters. Each tunnel would be around 7.5 kilometres long and would generally accommodate up to four lanes of traffic in each direction
- Connections of the mainline tunnels to the M4 East project, comprising:
  - A tunnel-to-tunnel connection to the M4 East mainline stub tunnels east of Parramatta Road near Alt Street at Haberfield
  - Entry and exit ramp connections between the mainline tunnels and the Wattle Street interchange at Haberfield (which is currently being constructed as part of the M4 East project)
  - Minor physical integration works with the surface road network at the Wattle Street interchange including road pavement and line marking
- Connections of the mainline tunnels to the New M5 project, comprising:
  - A tunnel-to-tunnel connection to the New M5 mainline stub tunnels north of the Princes Highway near the intersection of Mary Street and Bakers Lane at St Peters
  - Entry and exit ramp connections between the mainline tunnels and the St Peters interchange at St Peters (which is currently being constructed as part of the New M5 project)
  - Minor physical integration works with the surface road network at the St Peters interchange including road pavement and line marking

- Construction of tunnel stubs to provide for future underground connection of the mainline tunnels to the Rozelle interchange and Iron Cove Link
- A motorway operations complex at St Peters (Campbell Road) (MOC5). The types of facilities that would be contained within the motorway operations complexes would include substations, water treatment plants, ventilation facilities and outlets (the Campbell Road ventilation facility), offices, on-site storage and parking for employees
- Tunnel ventilation systems, including ventilation supply and exhaust facilities, ventilation fans, ventilation outlets and ventilation tunnels
- Fitout (mechanical and electrical) of part of the Parramatta Road ventilation facility at Haberfield (which is currently being constructed as part of M4 East project) for use by the M4-M5 Link project
- Drainage infrastructure to collect surface and groundwater for treatment at dedicated facilities
- Water treatment would occur at the Project operational water treatment facility
- Ancillary infrastructure and operational facilities for electronic tolling and traffic control and signage (including electronic signage)
- Emergency access and evacuation facilities, including pedestrian and vehicular cross and long passages and fire and life safety systems
- Utility works, including protection and/or adjustment of existing utilities, removal of redundant utilities and installation of new utilities
- Temporary construction ancillary facilities to facilitate construction of the project at the following locations:
    - Northcote civil and tunnel site, Haberfield
    - Parramatta Road East civil site, Haberfield
    - Parramatta Road West civil site, Ashfield
    - Wattle Street civil and tunnel site, Haberfield
    - Pyrmont Bridge Road tunnel site, Camperdown/Annandale
    - Campbell Road civil and tunnel site, St Peters
    - White Bay civil site, Rozelle.

An overview of the project footprint and ancillary facilities is presented in the CEMP.

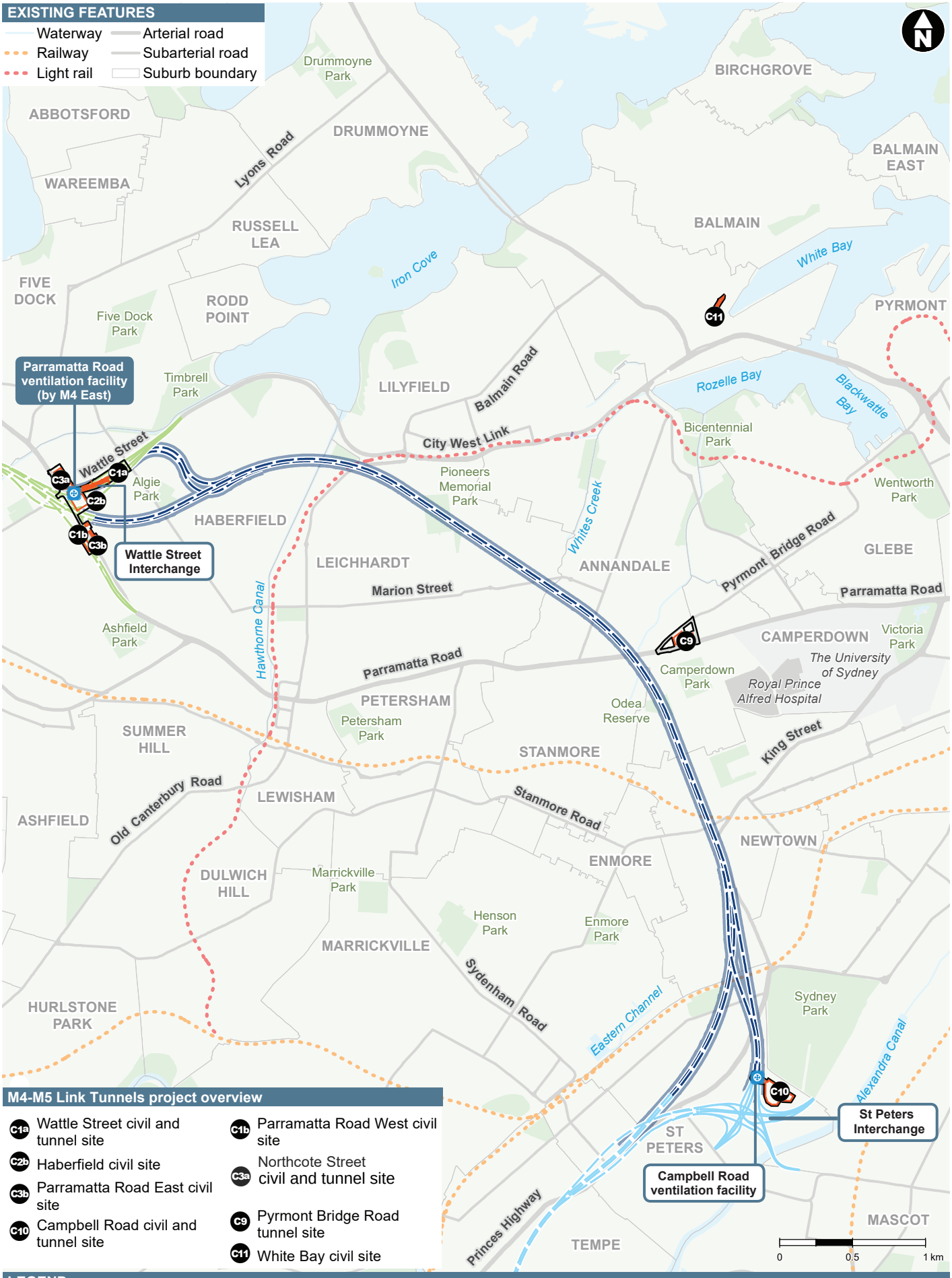

Figure 1-1 Overview of Stage 1 (the Project)

1.3 Scope

This CWRS addresses the water use requirements and reuse options for the construction phase of the Project. This strategy is focused on the reuse of groundwater and rainwater collected during construction.

This Strategy addresses and details the following issues:

- Water use requirements for surface and tunnelling works
- Rainwater collection, management and discharge during surface works construction activities
- Groundwater management throughout tunnelling works, including treatment, storage and discharge.

This Strategy does not consider the:

- Treatment and reuse of sewerage
- Treatment and reuse of leachate 'contaminated groundwater'
- Operational water reuse – an Operational Water Reuse Strategy (OWRS) will be prepared separately prior to commencement of operation of the project in accordance with CoA E198.

The CWRS will be submitted to the Secretary for approval prior to the commencement of tunnelling works and will be implemented throughout construction as applicable.

1.4 Project Water Use and Water Reuse Requirements

1.4.1 Conditions of Approval

A CWRS is required by the project CoA E198. A description of compliance with the requirements of this CoA is provided in Table 1.

Table 1 Compliance with CoA E198

CoA E198 Requirement	Reference	How Addressed
The Proponent must prepare a Water Reuse Strategy which sets out options for the reuse of collected storm water and groundwater during construction and operation of the Critical State Significant Infrastructure (CSSI). The Water Reuse Strategy must include, but not be limited to:	This document	This CWRS has been prepared in accordance with this condition and describes the options for reuse of ground water and storm water during construction of the Project. An operational CWRS will be prepared in accordance with this condition.
(a) evaluation of reuse options	Section 3.2	This Strategy evaluates each reuse option. The evaluation is summarised primarily in Section 3.2.
(b) details of the preferred reuse option(s), including volumes of water to be reused, proposed reuse locations and/or activities, proposed treatment (if required), and any additional licences or approvals that may be required; and	Section 2 Section 3.3	This CWRS has been prepared to address the details listed in this condition, where required.

CoA E198 Requirement	Reference	How Addressed
(c) a time frame for the implementation of the preferred reuse option(s).	Section 3.3	Details regarding the timeframe in which LSBJV propose to implement the preferred reuse option is provided in this CWRS.
The Water Reuse Strategy must consider public health risks from water recycling and must be managed to avoid misuse of recycled water as potable. The Water Reuse Strategy must be undertaken following best practice and advice sought from relevant agencies as required.	Section 3.1.2 Section 3.1.3	Details regarding how LSBJV propose to manage public health risks are described in this CWRS. This plan was prepared in accordance with best practice and advice as outlined in Section 3.1.2 and Section 3.1.3.
Justification must be provided in the event that it is concluded that no reuse options prevail.	N/A	Preferred reuse options have been selected as described in this plan.
A copy of the Water Reuse Strategy must be submitted to the Secretary for approval prior to commencement of tunnelling works. Nothing in this condition prevents the Proponent from preparing separate Water Reuse Strategies for the construction and operational phases of the SSI. Where a separate Strategy is prepared for the operation of the SSI, this must be submitted to the Secretary for approval at least six months prior to the commencement of operation of the SSI.	This Strategy addresses the construction phase of the project. The operational phase Water Reuse Strategy will be submitted for approval at least 6 months prior to the commencement of operation	This CWRS has been prepared and submitted in accordance with this condition.

1.4.2 Project Environment Protection Licence

Environment Protection Licence (EPL 21149) is currently in place which specifies the range of water quality performance criteria the Water Treatment Plants (WTP) must comply with. In accordance with CoA E186, the discharge requirement for iron has been developed in accordance with ANZECC (2000) recreational water quality criteria.

Discharge will be carried out in accordance with the relevant approvals including an EPL or Trade Waste Agreement with Sydney Water. Preference will be given to reusing as much water as practicable before discharging to the environment.

1.5 Project Objectives and Targets

1.5.1 Project Sustainability Objectives

In line with the WestConnex Sustainability Strategy and Policy, LSBJV water-related sustainability objectives include:

- Implement processes to monitor and minimise material, energy and water use throughout the project life cycle
- Efficient resource use (energy, water, materials), avoiding and reducing waste and pollution
- Identify opportunities to reduce water use (in particular potable water use) and reuse water (e.g. rainwater, groundwater) during construction and operation.
- Reuse, recycle and reclaim water (e.g. storm water, waste water, tunnel-inflow water) generated/collected.

1.5.2 Infrastructure Sustainability (IS) Target Credits

LSBJV are targeting the following IS Rating benchmarks (provided in Table 2) relating to the Water Category as part of achieving 'Excellent' Design and As-Built IS Ratings. Note that the targeted credits and levels may alter throughout the life of the Project.

Table 2 Indicative IS targets

Credit	Name of credit	Materiality Score	Target Level		Target Score		Comments
			D	AB	D	AB	
Wat-1	Water use monitoring and reduction	2	2.5	2.5	4.19	3.13	Ongoing monitoring of water usage to be undertaken to compare against design usage modelling. Options to reduce potable water use may be achieved through reuse of treated water. Other potential initiatives that may be implemented include use of rainwater tanks attached to site compounds, smart metering of water usage and reuse of captured water for dust suppression and wash-down.
Wat-2	Replace potable water	2	0.5	0.5	0.47	0.35	

1.6 Associated Plans and Reference Documents

- WestConnex M4-M5 Link Environmental Impact Statement (EIS)
- WestConnex M4-M5 Link Submissions and Preferred Infrastructure Report (SPIR)
- M4-M5 Link Mainline Tunnels Construction Environmental Management Plan (CEMP)
- M4-M5 Link Mainline Tunnels Sustainability Strategy
- M4-M5 Link Mainline Tunnels Sustainability Management Plan (SMP)
- M4-M5 Link Mainline Tunnels Soil and Surface Water Management Plan (SSWMP)
- M4-M5 Link Mainline Tunnels Groundwater Management Plan (GMP)
- M4-M5 Link Mainline Tunnels Groundwater Monitoring Program (GWMP)
- M4-M5 Link Mainline Tunnels Water Quality Plan and Monitoring Program

- Environment Protection Licence (EPL).

2 Project Water Sources

During construction a number of water sources are available. LSBJV will adopt the Water Use and Sourcing Hierarchy illustrated in Figure 2-1 during construction of the project.

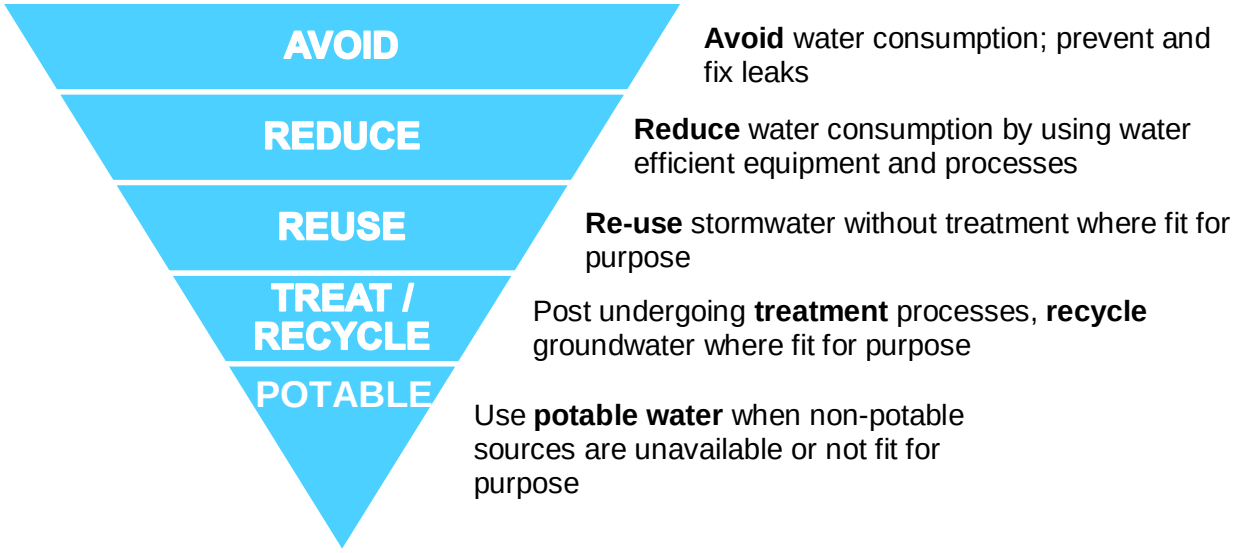

Figure 2-1 Water Use and Sourcing Hierarchy

Opportunities for the use of non-potable water in place of potable water have been assessed in accordance with the WestConnex Sustainability Strategy. During delivery, the final use of the non-potable water will depend upon workplace health and safety considerations, economic feasibility, any relevant manufacturer's or design specifications and the availability and quality of non-potable water.

2.1 Construction water sources

A range of water sources are available during construction. These are described below.

2.1.1 Potable Water

All construction sites will have access to potable water supplies through metered connections to the Sydney Water network. During construction, potable water will supply the site offices and amenities and be used to supplement non-potable water supplies as needed. Where manufacturers' or technical specification require, potable water will also be required for certain construction activities.

2.1.2 Groundwater

Groundwater will enter the tunnel from the water table during tunnel excavation and fitout. Once tunnelling commences the groundwater and any residual construction water (from rock bolting activities, for example) will be combined and pumped to the surface as one stream.

Groundwater inflow into the tunnels presents the greatest opportunity amongst the water source options for water reuse due to the volume and consistency of supply. As such, the capture and reuse of this water source is the primary focus of this strategy.

WTPs will be established at three tunnel sites to treat the groundwater from the project in line with the requirements of the Project's EPL as described in Section 1.4.2. These WTPs will be used throughout construction of the project and will be located at:

- Haberfield civil and tunnel site
- Pyrmont Bridge Road tunnel site
- Campbell Road tunnel site.

Treated groundwater may be reused, as further detailed in Section 3.3.

2.1.3 Rain water harvesting

Rain water is a highly variable water source and provides negligible volumes compared to other source options.

2.1.4 Surface water

Due to the restricted nature of the surface sites and existing hardstand conditions surface water will not be captured for reuse and will be diverted to the storm water system.

3 Evaluation and Selection of Preferred Water Reuse Options

LSBJV have evaluated the water reuse opportunities for the construction phase of the Project. The considerations and justifications for site specific water reuse strategies, are detailed below.

The use of reused water will be prioritised over the use of potable water on all sites where suitable quality and quantity is available. The supply of re-used water will be dependent on rainfall, groundwater inflow, construction activities, and availability of storage at each site.

3.1 Considerations for Water Reuse

3.1.1 NSW drought

Water resources in New South Wales (NSW) are currently scarce as most of the state is classified as being drought affected. Drought conditions are having serious economic, social and environmental impacts on rural industries and communities.

Considering this context, LSBJV is committed to efficient water consumption inclusive of reuse on the Project.

3.1.2 Public health risks

The potential health risks associated with recycling treated water on site have been considered and appropriate strategies have been identified to mitigate these risks. Following best practice and lessons learnt from previous projects, these risks are best avoided by separating the recycled water system from the potable water system, or by controlling the direction of flow where potable water is required to top up the recycled waste supply. Further effective controls including securing the systems against unauthorised access, clear labelling of pipes and outlets, and clear instruction about the hazard to onsite workers.

The public will not have contact with treated or reused water under the above system, therefore public health risks are considered negligible and advice was not required from the relevant agencies.

3.1.3 Best Practice and Advice

This Strategy has considered water use practices and advice from similar infrastructure projects in NSW. For example, data from the NorthConnex Project has been used inform the assumptions used in this Strategy. Advice from relevant agencies and other projects will be sought as required during the implementation of this Strategy.

Water reuse opportunities that have been utilised by other tunnelling projects in the area have been considered during the preparation of this Strategy. While there is the potential for construction water reuse on the Project, there are other factors such as groundwater contamination, economic feasibility plant manufacturer water quality specifications and construction material water quality specification which require ongoing consideration.

3.1.4 Anticipated reuse volumes

Actual volumes of water available for reuse for the project will depend on the amount of rain and groundwater ingress. Further, water demand is directly linked to the tunnelling operations occurring at any one time. For example, demand for water increases with the number of road headers operating from any one compound.

3.1.5 Water Balance

The balance of water quality and availability is an essential component of construction. Water is a valuable resource in the construction of the Project, and is required to sustain the health and well-

being of the project workforce. Water used and reused during construction will follow the general water cycle illustrated in Figure 3-1.

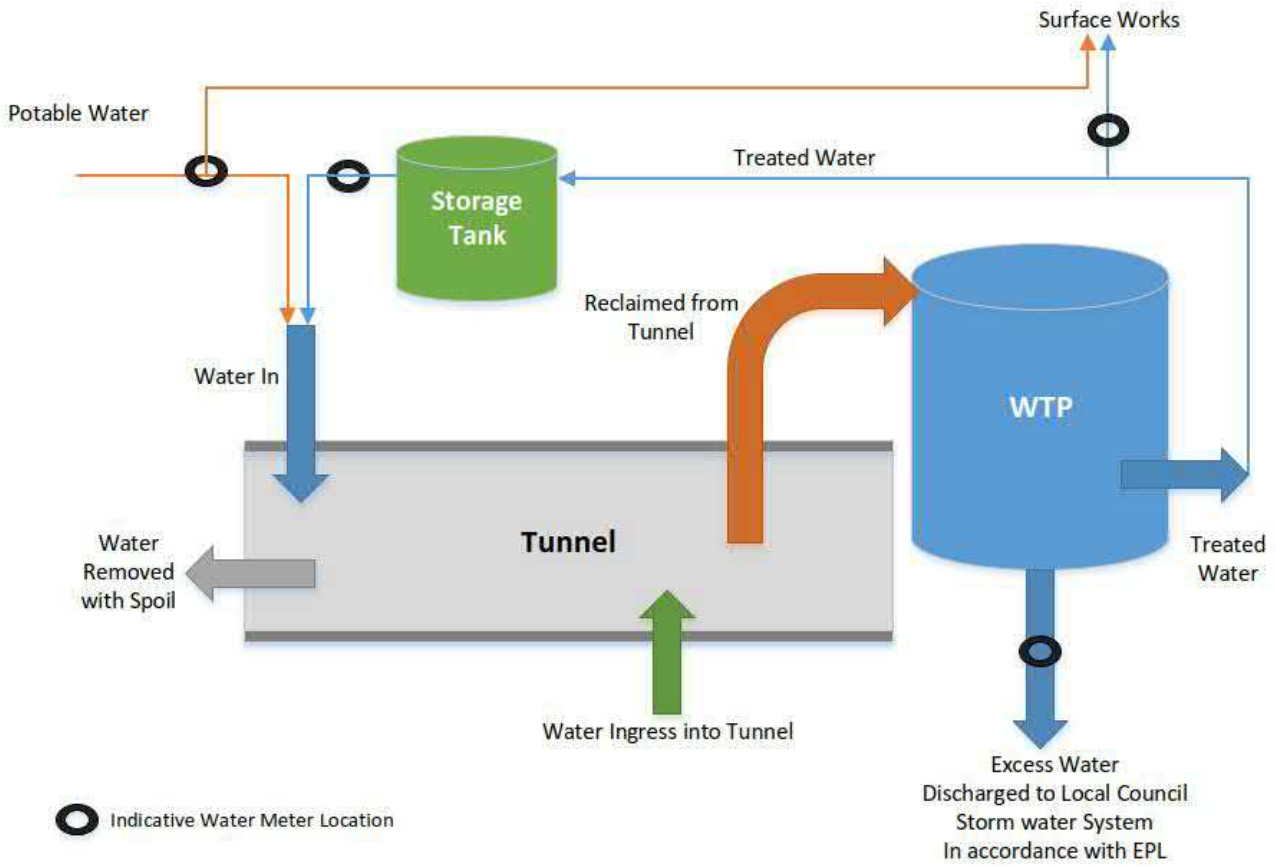

Figure 3-1 Construction Water Use and Reuse Cycle

Surface water discharge will be managed in accordance with the Soil and Surface Water Management Sub-plan (SSWMP). Groundwater including treatment using the WTP, testing and discharge of the water will be undertaken in accordance with the Groundwater Management Sub-plan (GMP).

3.2 Evaluation of Reuse Options

Allowing for the considerations in section 3.1 above, LSBJV remains committed to maximising the use of reused, treated and/or recycled options wherever possible in place of potable water.

LSBJV have evaluated the water reuse opportunities for the construction phase of the Project and the outcome of this evaluation is summarised in Table 3.

Table 3 Evaluation of Reuse Options for Non-potable water sources

Non-potable water source	Evaluation of reuse option	Justification
Surface water	Unsuitable	Due to the restricted nature of the surface sites and existing hardstand conditions surface water will not be captured for reuse and will be diverted to the storm water system.

Non-potable water source	Evaluation of reuse option	Justification
Groundwater	Preferred	Due to the volume and consistency of supply there is significant opportunity for reuse of groundwater for tunnelling operations. Section 3.3.1 provides further detail on this option.
Rain Water	Unsuitable	As noted, the focus of this strategy is the collection and reuse of groundwater, due to the volume and consistency of supply. The reuse of harvested rainwater presents additional challenges such as the potential to be contaminated with faecal coliforms from wildlife, the need for additional facilities for storage and treatment, and the high variability of supply. The latter means this source is not a reliable source of reuse water. Therefore, limited space available for water storage and treatment at each tunnelling compound means that priority is given to the most beneficial resource, groundwater.

3.3 Preferred Water Reuse Options

3.3.1 Groundwater reuse in tunnelling operations

During construction, the wastewater generated in the tunnel (including collected groundwater) would be captured and treated at the WTP prior to storage for reuse or discharge, or disposal offsite if required. The WTPs will be located at the proposed reuse locations:

- Haberfield civil and tunnel site;
- Pyrmont Bridge Road tunnel site; and
- Campbell Road tunnel site.

Treated water contained in the storage tanks will be transferred via a “non-potable” line to the tunnelling activities underground, where it can be used for activities such as:

- Dust suppression and lubrication for underground operations;
- Dust suppression during rock saw cutting;
- Fill conditioning and compaction;
- General surface and equipment washing; and
- Wheel wash.

Surplus treated groundwater will be discharged to storm water in accordance with Section 6.1 of the GWMP, the Project EPL requirements or to sewer in accordance with Trade Waste Agreement with Sydney Water.

Surface storage tanks will also be supplemented with potable supplies if the non-potable supplies are insufficient or unsuitable for the activities occurring. The storage tanks can't be supplemented by other non-potable sources due to site constraints (the very small size of the tunnelling ancillary facilities) and ongoing construction activities, potential contamination that can't be treated, and the variable nature of other non-potable supply.

The timeframe for implementation of this non-potable water option depends on both the availability of WTPs and the extent of excavation. Groundwater will become available for reuse after the

WTPs have been installed, tested and commissioned and when groundwater ingress is occurring within the excavated tunnel tubes.

Table 4 details estimated volumes of water that could be reused (potential non-potable water demand) compared to estimated groundwater supply processed through WTP (potential non-potable water supply) at each of the tunnelling compounds. The potential non-potable water demand is estimated according to machine usage rates and programmed machine shift hours. The potential non-potable water supply represents the indicative water volumes available for consumption for each construction area assuming water quality meets the requirements for each activity and that reused water is available. Potential non-potable water supply estimates are based on observed flowrate measurements at the M4 East project presented as a range of possibilities, with the lower limit being the median of the averages observed at M4E (0.20 L/ sec/ km), and with the upper limit being the average of the maxima observed at M4E (1.12 L/ sec/ km). The range of M4E values used for these estimates include the nominated groundwater inflow of 1 L/sec/km identified in CoA E190.

Table 4 Groundwater Reuse volumes

Compound	Haberfield civil and tunnel site	Pyrmont Bridge Road tunnel site, Camperdown/ Annandale	Campbell Road tunnel site, St Peters
Indicative timing, subject to commissioning of WTP, length of tunnel open, and substantial groundwater inflows	Within 3 months of site establishment	Within 3 months of site establishment	Within 3 months of site establishment
Potential maximum water demand (based on machine programme)	312 kL per day	94 kL per day	95 kL per day
Potential water supply (based on median of averages observed at M4E)	101 kL per day	141 kL per day	101 kL per day
Potential water supply (based on average of maxima observed at M4E)	565 kL per day	788 kL per day	565 kL per day

4 Identifying and Implementing Opportunities

As outlined in Section 4.1 of the Sustainability Management Plan (SMP), LSBJV will monitor and review risks and opportunities on a regular basis, at key stages of the project and at least annually. LSBJV will utilise a risk based approach to identify and mitigate against environmental, social and economic risks and capitalise on available opportunities.

Key decisions, such as those made during design and constructability analysis, will use value engineering or multi-criteria analysis techniques to assess design options and key factors such as cost, design (product), safety, sustainability and energy consumption. The Project will monitor water consumption throughout construction using the following control methods:

- Smart metering at key locations to allow site water consumption to be monitored and recorded
- Flow meters on WTPs to continuously monitor discharge volumes.

4.1 Opportunities Register

As detailed in Section 4.1.6 of the SMP, identified sustainability opportunities will be recorded in the Sustainability Opportunities Register. This register will be a 'live' document throughout Project delivery with opportunities that may be identified during the design and construction of the Project. Opportunities will be assessed as outlined in the SMP.

4.2 Construction Water Reduction Initiatives

During construction, LSBJV will progress opportunities to further reduce water consumption and prioritise water reuse by:

- Delivering educational campaigns for the workforce to encourage water efficiency
- Investigating innovation opportunities identified in the Opportunities Register throughout construction

Future opportunities for water use reduction are already being investigated by LSBJV, in line with the Water Use and Sourcing Hierarchy and SMP. These include initiatives such as:

- Compartmentalising dusty activities and utilisation of dry scrubbers to minimise the need to use water in dust suppression
- Utilisation of guidance systems during roadheader operation to minimise the need for dust suppression
- Utilisation of groundwater for dust suppression in spoil transported offsite.

5 Measuring and Reporting

Revisions of this strategy will be informed by reuse data collected and reviewed throughout the Project. As construction progresses, opportunities for reuse will be investigated and updates will be provided.

5.1 Monthly Internal Performance Update

The Sustainability Manager will provide the Environment and Sustainability Manager a monthly sustainability performance update. These updates may be used to inform the Project Monthly Report. The update will include information on the Project's performance towards the achievement of the sustainability requirements and may include an update on objectives and targets set out in this Strategy.

5.2 Quarterly External Sustainability Report

From the date of the Deed until construction completion, the Sustainability Manager will prepare a quarterly sustainability report. The following water reuse related metrics will be included in each report:

- LSBJV's performance towards the achievement of the Sustainability Objectives and Targets (as set out in the WestConnex Sustainability Strategy) and the contract requirements LSBJV's performance towards the achievement of the IS Rating for the design and as-built stages
- Volume of water (total, potable and non-potable, reused/recycled) used during construction.

Please refer to the Section 4.1.7 of the SMP for further detail regarding this report.

5.3 Annual Sustainability Report

From the date of the deed until Construction Completion, the Sustainability Manager will undertake an annual review of sustainability performance. Water re-use related metrics will be considered in each review to drive continual improvement and strengthen sustainability targets. This report will be provided to the Project Director, LSBJV Leadership team and SMC.

5.4 Audit and Review

Water use and reuse will be reviewed as part of quarterly internal sustainability audits. Annual external sustainability audits will also be conducted and will review water reuse performance against Project Targets.

Please refer to the Section 4.1.7 of the SMP for further detail regarding this report.

6 Roles and Responsibilities

Table 5 provides details of the roles and responsibilities specific to the implementation of this CWRS. A detailed summary of positions with responsibility for managing overall sustainability requirements on the Project is presented in Table 8 of the SMP.

Table 5 Construction Water Reuse Strategy Roles and Responsibilities

Project Role	Responsibilities
Project Director	• Overall delivery of the project including satisfaction of the contractual and CoA including the sustainability requirements and water reuse. • Approve quarterly sustainability report for external issue to SMC.
Design & Construction Director	• Drive the implementation of this strategy during the design and construction of the Project.
Tunnelling Director	• Ensure that resources and direction is provide to the workforce to facilitate the re-use water options described in this strategy
Temporary Works Designer	• Ensure that water supply and recirculation designs incorporate the pipework to facilitate the re-use water options described in this strategy
Tunnel Superintendent	• Ensure teams are trained in the water supplies available within the tunnel (i.e. potable and non-potable) and the suitable uses of each water source.
Environment & Sustainability Manager	• Oversight of the implementation of the Sustainability Plan and achievement of an ISCA IS Tool Design and As Built 'Excellent' Rating. • Ensure relevant information from this Strategy is incorporated into project inductions. • Ensure all data is captured and reported according to requirements. • Support identified water reuse opportunities and their implementation. • Review quarterly sustainability report for external issue.

Project Role	Responsibilities
Sustainability Manager	• Develop, monitor, review and update the implementation of the Sustainability Plan. • Implement this strategy from a day-to-day perspective and ensure the requirements of this strategy are addressed. • Prepare internal performance reports and submit through internal reporting chain. • Prepare quarterly sustainability reports and issue to Environment and Sustainability Manager for review. • Facilitate internal consultative forums with design and construction teams on an as-needs basis to identify water reuse opportunities and communicate the requirements of this strategy. • Identify the relevant legal, parent JV Company, contractual, ISCA and other requirements as applicable to this strategy and ensure they are addressed within this strategy. • Ensure Contractor documentation captures the requirements of this Strategy.
Sustainability Advisor	• Collection of water use data relevant to sustainability requirements. • Maintenance of sustainability records. • Support for the development of ISCA IS Rating documentation.

7 Record Management

A variety of water management related documents, reports and data will be generated and collected by LSBJV throughout the Project life cycle. These records and documents must be accessible during and following Project completion and be of sufficient detail and quality to allow formal auditing of performance levels described in reports and assessments:

- Assessments and Reports required by the Deed (e.g. Quarterly Sustainability Reports) will be archived in accordance with Section 3.1.1 of the SMP
- Documentary evidence required for the IS Design and As-Built Rating submissions will be identified and tracked using the Project's in-house tracking tool and stored on the Project's server as detailed in Section 3.4 of the SMP.