

CoA A5 Consultation Report – Groundwater Management Sub-plan

Western Harbour Tunnel

Stage 3B Approach and Integration

April 2023

THIS PAGE LEFT INTENTIONALLY BLANK

Contents

1	Introduction	1
1.1	Background	1
1.2	Scope and staging	1
1.3	Purpose	1
1.4	Consultation Process	2
2	Stakeholder and agency consultation	3
2.1	North Sydney Council	3
2.2	Inner West Council	3
2.3	Department of Planning and Environment Water	4
2.4	Environment Heritage Group	4
2.5	The Environment Protection Authority.....	4
2.6	Sydney Water	4
	Appendix A Combined comments register	6
	Appendix B North Sydney Council consultation evidence	7
	Appendix C Inner West Council consultation evidence	8
	Appendix D DPE Water consultation evidence	9
	Appendix E EHG (Biodiversity & Conservation) consultation evidence	10
	Appendix F EPA consultation evidence	11
	Appendix G Sydney Water consultation evidence	12

Tables

<i>Table 1-1 MCoA A5 compliance.....</i>	<i>2</i>
<i>Table 1-2 Consultation Requirements</i>	<i>2</i>
<i>Table 2-1 Engagement log - North Sydney Council.....</i>	<i>3</i>
<i>Table 2-2 Engagement log – Inner West Council</i>	<i>3</i>
<i>Table 2-3 Engagement log - DPE Water</i>	<i>4</i>
<i>Table 2-4 Engagement log - EHG</i>	<i>4</i>
<i>Table 2-5 Engagement log - EPA.....</i>	<i>4</i>
<i>Table 2-6 Engagement log – Sydney Water.....</i>	<i>5</i>

Document status

Revision	Date	Description	Approval
0	20/03/2023	To support GMP lodgement to DPE	E. Woodward
1	14/04/2023	For DPE review	E. Woodward
2	20/04/2023	Updated following DPE comments	E. Woodward

1 Introduction

1.1 Background

The Groundwater Management Sub-Plan (GMP) forms part of the Construction Environmental Management Plan (CEMP) for the Western Harbour Tunnel (WHT) (the Project), a component of the Western Harbour Tunnel and Warringah Freeway Upgrade project.

The GMP has been prepared to address the groundwater requirements of the Minister's Conditions of Approval (MCoA) for the Western Harbour Tunnel and Warringah Freeway Upgrade project (SSI #8863), the Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement dated January 2020 (the EIS), the Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions report dated September 2020 (the RtS), and applicable guidelines and legislation.

1.2 Scope and staging

As described in Transport for New South Wales (TfNSW) Staging Report, this Project will be managed in stages with the CEMP. The GMP applies only to Phase Stage 3B of the WHT Project, which includes the following scope:

- Excavation of twin mainline tunnels about 2.5 kilometres long and each accommodating three lanes of traffic in each direction, connecting portals adjacent to the Cammeray Golf Course to the Harbour Crossing section of the tunnel at Berrys Bay.
- Excavation of Falcon Street off-ramp tunnel.
- Excavation of Berry Street on-ramp tunnel.
- Cut and cover infrastructure surface construction at the Ridge Street North construction support site (WHT9), Berry Street and the Warringah Freeway portals.
- Integration works including Mechanical and Electrical (M&E) fit out for the Southern and Northern tunnelling sections, paving, surface connections, ventilation cavern fitout, integration and fitout of the Motorway Operation Centre (MOC) and Motorway Control Centre (MCC)
- Establishment and operation of White Bay (WHT3 – southern portion. The northern portion of WHT3 as described in the EIS will not be used); Ridge Street North (WHT9), and Cammeray Golf Course (WHT10) construction support sites.
- Operation of the City West Link Portal tunnelling support site (WHT12) after the completion of Stage 3A.

For more details on staging refer to the Staging Report, which has been prepared in accordance with MCoA A10.

1.3 Purpose

This Consultation Report has been prepared to meet MCoA A5, which outlines the requirements for undertaking and documenting consultation required as part of the preparation the Plan. These are included in *Table 1-1* including a description of where these have been addressed within this Report.

Table 1-1 MCoA A5 compliance

Requirement	How addressed
(a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval;	Refer to evidence of consultation in Appendix B to G
(b) a log of the dates of engagement or attempted engagement with the identified party;	Refer to each Sub-section within Section 2.
(c) documentation of the follow-up with the identified party where engagement has not occurred to confirm that they do not wish to engage or have not attempted to engage after repeated invitations;	Refer to each Sub-section within Section 2.
(d) outline of the issues raised by the identified party and how they have been addressed; and	Refer to Combined Comments Register in Appendix A
(e) a description of the outstanding issues raised by the identified party and the reasons why they have not been addressed.	Refer to Combined Comments Register in Appendix A

This Consultation Report has been prepared to consolidate the consultation undertaken during the development of this Plan and Monitoring Program as detailed in *Table 1-2*.

Table 1-2 Consultation Requirements

CoA ID	Document	Consultation requirement
C4(f)	Groundwater Management Sub-plan	• North Sydney Council • Inner West Council • DPE Water • EHG (formerly EESG) • EPA • Sydney Water
C11(d)	Groundwater Monitoring Program	• DPE Water • EPA

1.4 Consultation Process

Consultation with stakeholders and agencies was undertaken using the following means:

- Formal correspondence (DPE Portal notifications)
- Formal correspondence (standard email)
- Phone Calls.

2 Stakeholder and agency consultation

This Section of the Consultation Report provides detail of consultation undertaken with each stakeholder in the preparation of the GMP. In particular it contains an engagement log that identifies:

- Consultation dates (actual and attempted)
- Form of consultation
- Whether responses and / or comments were received

A full register of all comments received and how they have been addressed, or outstanding issues raised by the identified party and the reasons why they have not been addressed, is included in Appendix A.

Documentary evidence of all the correspondence received and sent through the consultation phase is contained in Appendices B through G at the end of this Report. The Appendices and this Section are grouped by stakeholder, not by issue, and in the same order as presented in the Sections below.

2.1 North Sydney Council

Consultation with North Sydney Council (NSC) commenced on 30 January 2023 and concluded 1 March 2023.

Table 2-1 Engagement log - North Sydney Council

#	Date	Correspondence		From	Recipient
		Form / Type	Purpose		
1	30/01/2023	Portal	For review	TfNSW	North Sydney Council
2	01/03/2023	Email	Council comments	North Sydney Council	ACCIONA

2.2 Inner West Council

Consultation with Inner West Council (IWC) commenced on 30 January 2023 and concluded 19 February 2023.

Table 2-2 Engagement log – Inner West Council

#	Date	Correspondence		From	Recipient
		Form / Type	Purpose		
1	30/01/2023	Portal	For review	TfNSW	Inner West Council
2	19/02/2023	Email	Council comments	Inner West Council	ACCIONA

2.3 Department of Planning and Environment Water

Consultation with the Department of Planning and Environment (DPE) Water commenced on 30 January 2023 and concluded 13 March 2023.

Table 2-3 Engagement log - DPE Water

#	Date	Correspondence		From	Recipient
		Form / Type	Purpose		
1	30/01/2023	Portal	For review	TfNSW	DPE Water
2	13/03/2023	Letter	DPE comments	DPE Water	TfNSW

2.4 Environment Heritage Group

Consultation with the Environment and Heritage Group (EHG) (Biodiversity & Conservation) commenced on 30 January 2023 and concluded 27 February 2023.

Table 2-4 Engagement log - EHG

#	Date	Correspondence		From	Recipient
		Form / Type	Purpose		
1	30/01/2023	Portal	For review	TfNSW	EHG
2	27/02/2023	Email	EHG comments	EHG	ACCIONA

2.5 The Environment Protection Authority

Consultation with the Environment Protection Authority (EPA) commenced on 30 January 2023 and concluded 28 February 2023.

Table 2-5 Engagement log - EPA

#	Date	Correspondence		From	Recipient
		Form / Type	Purpose		
1	30/01/2023	Portal	For review	TfNSW	EPA
2	28/02/2023	Email	EPA comments	EPA	ACCIONA

2.6 Sydney Water

Consultation with Sydney Water commenced on 1 February 2023 and concluded 22 February 2023.

Table 2-6 Engagement log – Sydney Water

#	Date	Correspondence		From	Recipient
		Form / Type	Purpose		
1	1/02/2023	Portal	For review	TfNSW	Sydney Water
2	22/02/2023	Email	Sydney Water comments	Sydney Water	ACCIONA

Appendix A Combined comments register

WHT - Stage 3B - Acciona - Management Plan Review Sheet

Project	TfNSW - WHT Stage 3B									
Document Name	230215 IWC - Comments 230222 Sydney Water - comments 230228 EPA - Comments 230301 SSWMP - NSC - no comments									
ID	Document	Document Revision	Section Ref.	Reviewer Org. / Team	Reviewer	Reviewer Title	Issue / Comment	Comment Date	Response Date	Response
0001	GWMP	Rev B		Inner West Council	Kendall Banfield	Senior Transport Planner	Council continues to be concerned about damage to property from soil settlement resulting from groundwater drawdown, movement of contaminated groundwater and 'spills & incidents'. This is relevant to this CEMP, and Council is keen to ensure these impacts are minimised and there is adequate compensation to owners of properties damaged by tunnelling.	15/02/2023	7/03/2023	Noted. Impacts to properties will be addressed through the completion of independent property impact assessments as well as pre/post construction surveys in line with REMM conditions SG3 & SG4 (referenced in Table 3-2 & addressed in Section 7.2 & GWMM12 of this plan). Contaminated groundwater will be further investigated as part of the projects Detailed Site Investigations, with further mitigation / management measures to be included in the CEMP if applicable based on the DSI report findings. Spills and incidents will primarily be addressed through vigilant onsite management, noting that the proposed footprints within the Inner West Council aras are industrial or existing construction areas.
0002	GWMP	Rev B		Department of Planning and Environment (BCD)	Susan Harrison	Senior Team Leader Planning	EHG recommends the GWMP clarifies upfront in the Introduction if this management plan applies to the WHT Stage 3B. Stage 3B is only mentioned once in Section 5 of the GWMP. It is suggested a scaled figure is included in the GWMP which clearly identifies/locates the Stage 3B construction work and support sites/project area and the area that is potentially impacted by the Stage 3B works.	27/02/2023	7/03/2023	Section 1.3 has been updated to provide context to staging of the project, with reference to CEMP section 1.3 for further detail. Scaled figure of project and construction support site included as new figure in Section 5 (Figure 5-1).
0003	GWMP	Rev B	Section 9.2	Department of Planning and Environment (BCD)	Susan Harrison	Senior Team Leader Planning	Section 9.2 of the GWMP states "if monitoring results indicate that groundwater inflows and water table drawdown will be greater than the refined model impact, then feasible and reasonable measures will be implemented" but it is unclear what these measures may include. It suggested potential measures are identified in Section 9.2 that could be implemented to mitigate such impacts	27/02/2023	7/03/2023	Potential measures will be informed by the outcomes of the Groundwater modelling (required under MCoA E218) and including into the Groundwater Modelling Report as required under MCoA E219(q) which requires: "documentation of any additional measures that would be implemented to manage and/or mitigate groundwater impacts not previously identified or identified but at a smaller scale"
0004	Monitoring Program	Rev B	Appendix F	Department of Planning and Environment (BCD)	Susan Harrison	Senior Team Leader Planning	The Table of Contents needs to be amended as it commences at section 5.5 and does not list the Introduction etc	27/02/2023	7/03/2023	Table of contents updated
0005	Monitoring Program	Rev B	App. F Section 4.3.4	Department of Planning and Environment (BCD)	Susan Harrison	Senior Team Leader Planning	Section 4.3.4 of Appendix F1 notes that in the event groundwater drawdown is substantially different to predictions in the Groundwater Model a review shall be undertaken to determine if there are any unacceptable project impacts. Should such impacts be identified, mitigation measures will be developed and implemented. It is unclear what these measures may include, and it is suggested these are identified.	27/02/2023	7/03/2023	Potential measures will be informed by the outcomes of the Groundwater modelling (required under MCoA E218) and including into the Groundwater Modelling Report as required under MCoA E219(q) which requires: "documentation of any additional measures that would be implemented to manage and/or mitigate groundwater impacts not previously identified or identified but at a smaller scale"
0006	Monitoring Program	Rev B	App. F Section 6.1.2.	Department of Planning and Environment (BCD)	Susan Harrison	Senior Team Leader Planning	Section 6.1.2 notes the Groundwater Model will be updated following the collection of 24 months of groundwater level data. It indicates should the model update indicate additional risk to groundwater users (GDEs and supply bores) or increased drawdown extents, the groundwater monitoring network will be reviewed to establish if further monitoring points are required. If there is an increase to the extent of groundwater drawdown, then depending on the extent an assessment of potential impacts on GDEs, watercourses, water dependent vegetation in the vicinity may need to be undertaken, particularly as Section 5.6.1 of the GWMP notes GDEs associated with Quarry Creek and Flat Rock Creek have been identified within 1km of modelled groundwater drawdown.	27/02/2023	7/03/2023	Noted. The Groundwater Modelling Report (and, subsequently, the updated Groundwater Modelling Report) is required to consider (as per MCoA E219(n)): <i>assessment of impacts of groundwater drawdown, taking into consideration the NSW Aquifer Interference Policy (DPI, 2012), including potential impacts on licensed bores and groundwater dependent ecosystems.</i> .

0007	GWMP	Rev B	Table 7-1	EPA	Anna Timbrell	Senior Planner	GWMM13 notes that that there is a high risk of contaminated groundwater that may be encountered during construction. Should this be identified, there must be a plan to manage this water in the event that it drains to the tunnel and is pumped through water treatment plants.	28/02/2023	7/03/2023	Noted. The presence of contaminated groundwater will be investigated as part of the projects Detailed Site Investigations, for medium/high risk areas as required under MCoA E117. These are separete documents to the Goundwater Management Plan and findings of these investigations will be used to inform additional management and treament measures, including for the management, treatment or disposal of contaminated groundwater.
0008	GWMP	Rev B	Table 7-1	EPA	Anna Timbrell	Senior Planner	Water Treatment discharges appears to be to a marine environment (GWMM14) so marine criteria are considered for assessing the discharge.	28/02/2023	7/03/2023	Noted. Parameters and criteria for water treatment plant discharge will be defined by the project's Environmental Protection License (EPL) as informed by the Water Pollution Impact Assessment prepared under MCoA E210.
0009	GWMP	Rev B	Table 7-1	EPA	Anna Timbrell	Senior Planner	GWMM16 outlines that a site specific trigger value will be derived for EC to detect changes in salinity. Then what actions are triggered when the EC data continuously exceeds the SSTV over a period of 3 months and then if it exceeds the SSTV at any time by more than 100%. This specific trigger would be useful in the appended GWMP, where "substantially different" " EC values triggers action and neither the trigger nor the management actions required are defined.	28/02/2023	7/03/2023	Noted. Results from ongoing (construction phase) groundwater monitoring will be used to inform the Groundwater Modelling Report. This is required as per MCoA E220, which states: <i>The groundwater model must be updated once 24 months of Groundwater monitoring data are available and the results of the updated modelling (assessed against all predicted outcomes of the Groundwater Modelling Report that accompanied the final detailed design of the tunnels) be provided to the Planning Secretary and DPIE Water in an updated Groundwater Modelling Report.</i> As such the reference to SSTVs and their for a rapid response is not accurate and has been removed.
0010	GWMP	Rev B	Section 3.1.1	EPA	Anna Timbrell	Senior Planner	There is an observation that EC can be very high (as noted in discussions about sea water ingress and groundwater in Ashfield Shale), is this anticipated to be an issue for the water treatment plants? Results are said to be shown in Appendix D, however there is no Appendix D to this plan. TRH and BTEX are noted as positive results, but as no results are shown, it is assumed that these are detections, but not above guideline values.	28/02/2023	28/02/2023	Noted. Parameters and criteria for the design of proposed water treatment plants will be defined by the project's Environmental Protection License (EPL) as informed by the Water Pollution Impact Assessment prepared under MCoA E210. Reference to Appendix D was an error and has been removed.
0011	Monitoring Program	Rev B	App. F1 Section 4.2	EPA	Anna Timbrell	Senior Planner	This section notes that the water treatment plants would need to remove iron, manganese, suspended solids, hydrocarbon compounds, as well as pH correction and management of salt loads and ammonia. However this list of contaminants of concern does not align with the monitoring parameters and criteria outlined in the next section.	28/02/2023	7/03/2023	Section 4.2.2 removed to prevent confusion, noting that the EPL will provide the required water discharge parameters and criteria. Section 4.2.1 updated to state that: <i>Parameters to be analysed for as part of the project are subject to the requirements of the projects Environmental Protection License (EPL). Once an EPL is provided this plan will be updated to include specific concentration limits & criteria for selected parameters as well as monitoring frequency.</i>

0012	Monitoring Program	Rev B	App. F1 Section 4.2.1	EPA	Anna Timbrell	Senior Planner	As per MCoA E208, the discharge water from the construction WRP to surface waters will align with the ANZECC Guidelines for physical and chemical stressors, the ANZG (2018) 90% species protection levels for toxicants with the exception of those known to bioaccumulate, which would be treated to 95% species protection levels; and the draft ANZG (2018) default guideline values for iron and zinc. However, in Table 6-2 Water treatment plant monthly monitoring, many of the criteria are not from these sources. •Arsenic limit – unsure of the source for this criteria, it is known to bioaccumulate. The low reliability default guideline value (DGV) for AsV is 0.0023 mg/L, for AsIII the criterion is 0.0045 mg/L. •Chromium (VI) – unsure of why the 90th%ile concentration limit is proposed to be used. Also unsure of source for this criterion, the DGV is 0.02 mg/L for marine. •Chromium (III) – unsure of source for this criterion, 90% species protection DGV is 0.049 mg/L. •Copper – unsure of justification for 90th%ile concentration limit proposed. Also unsure of source for this criterion, 90% species protection is 0.003 mg/L •Lead – unsure of source for this criterion, 90% species protection is 0.0066 mg/L for marine •Manganese – it is noted that the freshwater criterion has been used for this contaminant, which is two orders of magnitude over the marine criterion. •Mercury – the 90% species protection criterion is used, but mercury is bioaccumulative. •Zinc – unsure of the source for this criterion, the 90% species protection DGV is 0.012 mg/L.	28/02/2023	7/03/2023	Section 4.2.2 removed to prevent confusion, noting that the EPL will provide the required water discharge parameters and criteria. Section 4.2.1 updated to state that: <i>Parameters to be analysed for as part of the project are subject to the requirements of the projects Environmental Protection License (EPL). Once an EPL is provided this plan will be updated to include specific concentration limits & criteria for selected parameters as well as monitoring frequency.</i>
0013	Monitoring Program		App. F1 Section 4.2.1 continued	EPA	Anna Timbrell	Senior Planner	Given that ammonia and hydrocarbons are also potential contaminants of concern, the EPA considers criteria and monitoring for these contaminants should be included. Also, cobalt has been noted in Section 5.7 Potential Groundwater contamination as already being identified at concentrations above the marine guideline values and this contaminant has not been included in monitoring or with discharge limits. Also, as outlined in Section 5.7, further investigations into areas of interest with a moderate or high risk to groundwater resources are required, for example the former bulk fuel storage area, where groundwater quality has not yet been assessed. Given the potential for further contaminants to be added to feed water for water treatment plants, it is anticipated that these will need to be included in monitoring and discharge limits.	28/02/2023	7/03/2023	Section 4.2.2 removed to prevent confusion, noting that the EPL will provide the required water discharge parameters and criteria. Contaminated groundwater impacts will be considered during Detailed Site Investigations with further mitigation measures & monitoring points to be included in the GWMP if required.
0014	Monitoring Program	Rev B	App. F1 Section 4.3.4	EPA	Anna Timbrell	Senior Planner	Unsure if “substantially different to predictions in the groundwater model” has been defined (unless this is with reference to the 2m decline in water supply bores or 10% cumulative variation in the water table). EPA recommends that the plan is clear about what the trigger is for mitigation measures.	28/02/2023	7/03/2023	This section has been reworded to more clearly refer to the process required under the MCoA, being: <i>The results of the construction phase groundwater monitoring will be used to inform an updated of the groundwater model (required under MCoA E218), and an updated Groundwater Modelling Report which must be updated once 24 months of groundwater monitoring data are available.</i> <i>In accordance with MCoA E219, the revised Groundwater Modelling Report will include documentation of any additional measures that would be implemented to manage and/or mitigate groundwater impacts not previously identified or identified but at a smaller scale.</i> It is noted that the Groundwater Modelling Report, including design mitigations, must be independantly reviewed.

0015	Monitoring Program	Rev B	App. F1 Section 4.4.1	EPA	Anna Timbrell	Senior Planner	The EPA recommends that ACCIONA define what “substantially different to predictions in the groundwater model” means in this section for this document (so it can stand alone). This has been defined in Table 7-1 of the Groundwater Management Plan GWMM16, though.	28/02/2023	7/03/2023	As above
0016	GWMP	Rev B	Section 4.1	Sydney Water	Ta Christian Duong	Development Consultant	Section 4.1 – notes that ‘In the event water is discharged to Sydney Water assets consultation will be undertaken to confirm if the receiving asset has flow rate constraints and any applicable discharge criteria, to be captured within a Trade Waste Agreement’. Please clarify and confirm that this consultation will be undertaken prior to discharge.	22/2/2023	22/02/2023	Acciona will consult prior to discharging
0017	GWMP	Rev B		North Sydney Council	Gavin McConnell	Public Projects Interface Manager	No comment	1/3/2023	1/03/2023	Noted
0018	GWMP	Rev B	1.1	DPE Water	L Rogers	Manager, Assessments, Knowledge Division	Recommendation: That the proponent updates Section 7.3 (Management and mitigation measures) to include response timeframes and site-specific trigger values which take account of the completed numerical modelling for final detailed design including the 12 months of monitoring data required in Condition of Approval E218. Explanation: Table 7-1 titled Groundwater management and mitigation measures lacks timeframes and site-specific trigger values other than for groundwater quality and drawdown impacts under the NSW Aquifer Interference Policy (2012)(NSW AIP). The management and mitigating measures need to be updated following consideration of the completed numerical modelling for final detailed design.	13/3/2023	17/03/2023	The results of the construction phase groundwater monitoring will be used to inform an updated of the groundwater model (required under MCoA E218), and an updated Groundwater Modelling Report which must be updated once 24 months of groundwater monitoring data are available. In accordance with MCoA E219, the revised Groundwater Modelling Report will include documentation of any additional measures that would be implemented to manage and/or mitigate groundwater impacts not previously identified or identified but at a smaller scale. As such, these mitigations, including their timeframes and any relevant site-specific values are not known at this stage, and will be informed by the initial, and then updated, Groundwater Modelling Report.
0019	GWMP	Rev B	1.2	DPE Water	L Rogers	Manager, Assessments, Knowledge Division	Recommendation: That the proponent includes the Environmental Protection Licence (EPL) requirements criteria for Water Treatment Plant discharge in the Groundwater Management Plan (GMP) once the EPL is granted. Explanation: The Environmental Protection Licence has not yet been granted and may have differing requirements for the Water Treatment plant discharge criteria than is currently presented in the GMP. The GMP will need to be updated to reflect the Environmental Protection Licence requirements criteria once approved.	13/3/2023	17/03/2023	Reference to EPL and parameters to be analysed is included in section 4.2.1 of the GW Monitoring Program: <i>"Parameters to be analysed for as part of the project are subject to the requirements of the projects Environmental Protection Licence (EPL)"</i> As the license is not yet obtained, the confirmed criteria can not be included, however reference to compliants with the license is deemed sufficient.
0020	GWMP	Rev B	1.3	DPE Water	L Rogers	Manager, Assessments, Knowledge Division	Recommendation: That the proponent includes the bore status report used to determine the need to consider potential impact on mapped bores. Explanation: Three domestic bores GW109209, GW107764 and GW108991 have been modelled to be impacted in the long term under the NSW AIP (2012) minimum impact criteria. The proponent has had an assessment of the status of these bores conducted by a professional consultancy, which found the bores to be either not in use, or not able to be located and assumed defunct. However, the supporting evidence, the consultants report, was not provided to enable further consideration of the need to consider these bores for possible impact	13/3/2023	17/03/2023	Assessment has been conducted, however the consultants report is not intended to be appended to the GWMP. However, the consultants report can be made available to DPE Water upon request.
0021	GWMP	Rev B	2.1	DPE Water	L Rogers	Manager, Assessments, Knowledge Division	Recommendation: That the proponent ensures: • a table of mitigation measures as shown in Table 7-1 is included in future GMPs. • that barometric pressure readings are measured at one control point and applied correctly. Explanation: The inclusion of Table 7-1 detailing how the mitigation measures will be implemented was greatly appreciated and enabled an understanding of the mitigating actions to be applied. In relation to the proposed collection of barometric pressure readings from data loggers representative of elevation changes, DPE-Water observes that the elevation range is less than 100m AHD over a distance variation of less than 2km. This change is considered to be acceptable for barometric pressure readings /corrections in this instance. DPE Water suggests the barometric pressure readings be measured at one control point and applied correctly.	13/3/2023	17/03/2023	Noted. Barometric readings and corrections will be calculated in line with section 4.3.1 of the GW Monitoring Report. This section has been updated to identify that one barometric data logger is proposed however additional loggers may be included as required for detailed design and to inform the groundwater modelling report. This response was prepared in consultation with the Projects Groundwater consultant.

Appendix B North Sydney Council consultation evidence

Comment from North Sydney Council

WHT Groundwater Management Plan

March 13, 2023

Dear Erran

North Sydney Council raises no objections to the Groundwater Management Plan prepared by Acciona for the Western Harbour Tunnel.

Regards,

Gavin McConnell

Public Projects Interface Manager,

North Sydney Council

Appendix C Inner West Council consultation evidence

From: Ajnesh Sharma <ajnesh.sharma@innerwest.nsw.gov.au>
Sent: Monday, 20 February 2023 10:40 AM
To: Woodward, Erran
Subject: EXT: FW: Construction Environmental Management Plan (CEMP) - Western Harbour Tunnel
Attachments: WHT December 2022 Community Update.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Erran,

For your information below. I'll give you a call to discuss

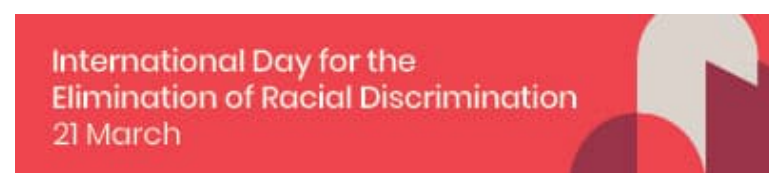
Regards

Ajnesh Sharma

Road Access Engineer
p +61 2 93925334 e ajnesh.sharma@innerwest.nsw.gov.au



Council acknowledges the Traditional Custodians of these lands, the Gadigal-Wangal people of the Eora Nation.



From: Kendall Banfield <Kendall.Banfield@innerwest.nsw.gov.au>
Sent: Wednesday, 15 February 2023 3:42 PM
To: Ajnesh Sharma <ajnesh.sharma@innerwest.nsw.gov.au>
Cc: David Paton <David.Paton@innerwest.nsw.gov.au>; Davide Torresan <Davide.Torresan@innerwest.nsw.gov.au>; Manod Wickramasinghe <Manod.Wickramasinghe@innerwest.nsw.gov.au>; George Tsaprounis <George.Tsaprounis@innerwest.nsw.gov.au>; Sunny Jo <sunny.jo@innerwest.nsw.gov.au>; Kendall Banfield <Kendall.Banfield@innerwest.nsw.gov.au>; Ken Welsh <Ken.Welsh@innerwest.nsw.gov.au>; Brigid Kelly <brigid.kelly@innerwest.nsw.gov.au>
Subject: RE: Construction Environmental Management Plan (CEMP) - Western Harbour Tunnel

Hi Ajnesh

Thanks for sending through. My comments below are focused on the TTAMP (CEMP Appendix B), but I've also made a brief general comment on each of the other sub-plans.

As you probably know, WHT has been divided into stages. I called Erran (WHT contract) yesterday to ensure I was looking at the correct stage when commenting on these draft plans. Her response is copied below. These CEMPs only deal with "approach and integration" to a later harbour crossing stage.

As per Erran's response and the attached community notice, we won't be dealing with any surface impacts from the harbour crossing at all if the proposed modification is approved. So all that leaves is impacts from construction activity at the WHT portal in the Rozelle Rail Yards (RRY) and at White Bay plus any impacts from tunnelling & utilities works. There'll still be impacts, but a lot less than if the project was going ahead according the original EIS design.

Hope that helps, and happy to discuss – Kendall

General

As was the case for WestConnex, Council opposes this project, preferring public transport solutions to traffic congestion issues. Notwithstanding, Council will continue to work with project contractors, State agencies and the wider community to ensure impacts are minimised and benefits obtained wherever possible.

all CEMP sub-plans appear to be comprehensive and acknowledge need for compliance with relevant standards. Base

on a long-standing experience with WestConnex, Council seeks reassurance that NSW Government agencies will closely monitor contractors and strictly enforce compliance.

Appendix B: Traffic, Transport & Access Management Sub-plan

It is noted that further detail on traffic, transport & access for individual sites will be included in traffic management plans for individual sites – Council is willing to assist with development of these plans

The list of guidelines in this draft plan could include the TfNSW road user hierarchy policy, key TfNSW walking/cycling guidelines and Council's Integrated Transport Strategy

It is noted that IW Council will be represented on the project's Traffic Control Group (TCG) and Traffic & Transport Liaison Group (TTLG), as has been the case for other major projects

It is noted that worker parking will be available at the Rozelle Rail Yards (RRY) site & White Bay, no street parking to be removed by the project and WCX 3B, WHT 3A & Metro major spoil operations will have been completed before this stage of WHT commences. Although this means that a working parking demand 'spike' is not likely, Council seeks reassurance that this will be the case - particularly as worker parking has been a major issue in relation to WestConnex. Due to the sheer number of major projects and activities that are proposed and underway in the Lilyfield, Rozelle and White Bay areas over a long period, Council has been concerned about cumulative impacts. The cumulative impact assessment (Section 5.6) correctly states that sustained cumulative impacts are likely for residents around White Bay & the RRY site. Council would like to see evidence from the NSW Government that all these major projects are being managed and co-ordinated to minimise cumulative impacts.

In Section 6.3 it is noted that truck marshalling areas are to be provided at Glebe Island and at the portal at the RRY site. Based on Council's experience with WestConnex, it is critical that all trucks use these marshalling areas and don't layover in residential areas.

In Table 6-2 & Fig 8-5 it is noted heavy vehicle use of The Crescent, Balmain Road & Catherine Street will be "infrequent". It is critical that heavy vehicle movements on these streets is minimised as they include sensitive uses including residential areas and schools.

Appendix C: Flora & Fauna Management Sub-plan – Council's main concern has been impacts on flora & fauna in the harbour & on terrestrial flora & fauna around Yurulbin Point. As this CEMP doesn't deal with the harbour crossing, these issues are not relevant.

Appendix E: Soil & Surface Water Management Sub-plan – Council's main concern has been water pollution of the harbour from spoil &/or dredging of contaminated sediment. As this CEMP doesn't deal with the harbour crossing, these issues are not relevant.

Appendix F: Groundwater Management Sub-plan – Council continues to be concerned about damage to property from soil settlement resulting from groundwater drawdown, movement of contaminated groundwater and 'spills & incidents'. This is relevant to this CEMP, and Council is keen to ensure these impacts are minimised and there is adequate compensation to owners of properties damaged by tunnelling.

Appendix H: Non-Aboriginal Heritage Management Sub-plan – Council requests strict monitoring of impacts and adherence to heritage management procedures.

Appendix J: Air Quality and Odour Management Sub-plan – it is noted there are many potential 'receivers' of these impacts. Council requests strict monitoring of impacts and adherence to air quality and odour management procedures.

Hi Kendall,

I received your voicemail re: clarity around scope.

Essentially, the plans you are currently reviewing (the Western Harbour Tunnel Stage 3B - Approach and Integration) address: the surface footprints at:

White Bay

Rozelle Portal (part of the current Rozelle Interchange Project – WestConnex 3B)

Ridge Street

Berry Street

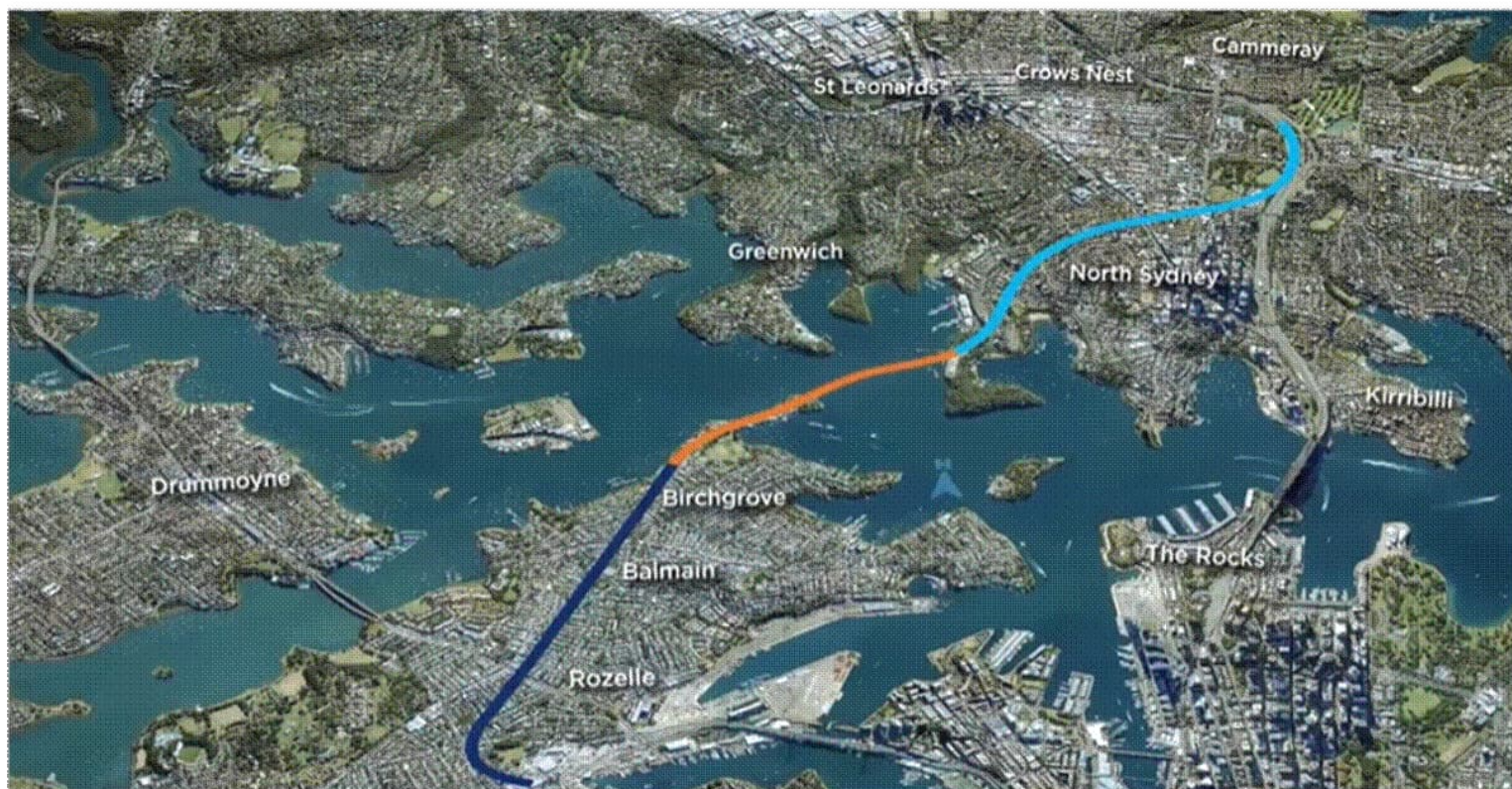
Cammeray

Local area works around North Sydney

the light blue section of tunnelling, as shown in the image below.

The orange section (Western Harbour Tunnel Stage 3B - Harbour Crossing) will be addressed as part of a separate update to the CEMP.

The dark blue section is being addressed as 'Stage 1' and being completed by the same contractor doing the Rozelle Interchange



Thank you,



Erran Woodward
Environment Approvals Manager |
Western Harbour Tunnel
ACCIONA Construction Australia

Level 2, 55 Harrington Street,
The Rocks, NSW, 2000, Australia
+61 437 343 178
erran.woodward.ext@acciona.com
www.acciona.com.au

Kendall Banfield
Senior Transport Planner
p +61 2 9335 2179 e Kendall.Banfield@innerwest.nsw.gov.au m 0417 729 424



Council acknowledges the Traditional Custodians of these lands, the Gadigal-Wangal people of the Eora Nation.

Inner West
Seniors Festival 2023
1 – 12 February

From: Ajnesh Sharma <ajnesh.sharma@innerwest.nsw.gov.au>
Sent: Friday, 3 February 2023 8:49 AM
To: David Paton <David.Paton@innerwest.nsw.gov.au>; Davide Torresan <Davide.Torresan@innerwest.nsw.gov.au>; Manod Wickramasinghe <Manod.Wickramasinghe@innerwest.nsw.gov.au>; George Tsaprounis <George.Tsaprounis@innerwest.nsw.gov.au>; Sunny Jo <sunny.jo@innerwest.nsw.gov.au>; Kendall Banfield <Kendall.Banfield@innerwest.nsw.gov.au>; Ken Welsh <Ken.Welsh@innerwest.nsw.gov.au>; Brigid Kelly <brigid.kelly@innerwest.nsw.gov.au>
Subject: Construction Environmental Management Plan (CEMP) - Western Harbour Tunnel

Hi All,

For the Harbour Tunnel project, please find CEMPs via link below for your comments;

[\\iwc-file02.innerwest.nsw.gov.au\iwcfs\\$\Asset and Environment\RTSF\4 Road Access\Western Harbour Tunnel\CEMPs\230202](#)

The dues date for these comments are tabulated below

Document	Date Submitted via Portal	Date Provided via email	Date comments due
Non-Aboriginal Heritage Management Plan (NAHMP)	20 January	2 February (Email 1)	17 February
Flora and Fauna Management Plan (FFMP)	23 January	2 February (Email 1)	20 February
Air Quality and Odour Management Plan Air Quality and Odour Monitoring Program	25 January	2 February (Email 2)	22 February
Soil and Surface Water Management Plan Surface Water Monitoring Program	30 January	2 February (Email 2)	27 February
Groundwater Management Plan	30 January	2 February (Email 2)	27 February
Traffic, Transport and Access Management Plan	Pending		
Noise and Vibration Management Plan	Pending		

There is a register in the same folder

Thanks

Ajmesh Sharma

Road Access Engineer

p +61 2 93925334 e ajmesh.sharma@innerwest.nsw.gov.au



Council acknowledges the Traditional Custodians of these lands, the Gadigal-Wangal people of the Eora Nation.



Appendix D DPE Water consultation evidence

Department of Planning and Environment

Our ref: OUT23/3718

Kerry Radford
Senior Environment & Sustainability Officer
Transport for NSW
Email: kerry.radford@rms.nsw.gov.au

13 March 2023

Subject: **Western Harbour Tunnel (Ground Water Management Plan) - SSI-8863-PA-333**

Dear Kerry Radford

I refer to your request for advice sent on 30 January 2023 to the Department of Planning and Environment (DPE) Water about the above matter.

DPE Water has reviewed the Groundwater Management Plan and recommends that the Trigger Action Response Plan takes account of the completed numerical modelling of the final detailed design. Please see Attachment A for the complete list of recommendations and supporting explanation.

Should you have any further queries in relation to this submission please do not hesitate to contact DPE Water Assessments water.assessments@dpie.nsw.gov.au or the following coordinating officer within DPE Water:

Maddy Gunethilake - Project Officer
E: maddy.gunethilake@dpie.nsw.gov.au
P: 02 9338 6911

Yours sincerely,



Liz Rogers
Manager, Assessments, Knowledge Division
Department of Planning and Environment: Water

Attachment A

Detailed advice regarding the Western Harbour Tunnel (Ground Water Management Plan) - SSI-8863-PA-333

1.0 Groundwater Management and Mitigation

1.1 Recommendation - Prior to start of construction

That the proponent updates Section 7.3 (Management and mitigation measures) to include response timeframes and site-specific trigger values which take account of the completed numerical modelling for final detailed design including the 12 months of monitoring data required in Condition of Approval E218.

Explanation

Table 7-1 titled Groundwater management and mitigation measures lacks timeframes and site-specific trigger values other than for groundwater quality and drawdown impacts under the NSW Aquifer Interference Policy (2012)(NSW AIP). The management and mitigating measures need to be updated following consideration of the completed numerical modelling for final detailed design.

1.2 Recommendation

That the proponent includes the Environmental Protection Licence (EPL) requirements criteria for Water Treatment Plant discharge in the Groundwater Management Plan (GMP) once the EPL is granted.

Explanation

The Environmental Protection Licence has not yet been granted and may have differing requirements for the Water Treatment plant discharge criteria than is currently presented in the GMP. The GMP will need to be updated to reflect the Environmental Protection Licence requirements criteria once approved.

1.3 Recommendation

That the proponent includes the bore status report used to determine the need to consider potential impact on mapped bores.

Explanation

Three domestic bores GW109209, GW107764 and GW108991 have been modelled to be impacted in the long term under the NSW AIP (2012) minimum impact criteria. The proponent has had an assessment of the status of these bores conducted by a professional consultancy, which found the bores to be either not in use, or not able to be located and assumed defunct. However, the supporting evidence, the consultants report, was not provided to enable further consideration of the need to consider these bores for possible impact

2.0 Data presentation and analysis

2.1 Recommendation

That the proponent ensures

- a table of mitigation measures as shown in Table 7-1 is included in future GMPs.
 - that barometric pressure readings are measured at one control point and applied correctly.
-

Explanation

The inclusion of Table 7-1 detailing how the mitigation measures will be implemented was greatly appreciated and enabled an understanding of the mitigating actions to be applied.

In relation to the proposed collection of barometric pressure readings from data loggers representative of elevation changes, DPE-Water observes that the elevation range is less than 100m AHD over a distance variation of less than 2km. This change is considered to be acceptable for barometric pressure readings /corrections in this instance. DPE Water suggests the barometric pressure readings be measured at one control point and applied correctly.

End Attachment A

Appendix E EHG (Biodiversity & Conservation) consultation evidence

From: Janne Grose <Janne.Grose@environment.nsw.gov.au>
Sent: Monday, 27 February 2023 2:37 PM
To: Kerry Radford
Cc: Woodward, Erran
Subject: EXT: EHG submission on the draft Groundwater Management Plan for the Western Harbour Tunnel - SSI-8863
Attachments: EHG response - WHT Stage 3B -GMP - 27 Feb 2023.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Kerry and Erran
Please find attached a copy of EHG’s comments on the draft Groundwater Management Plan for the Western Harbour Tunnel.

I’ve also attached a copy of EHG comments on the draft Groundwater Management Plan and the draft Soil and Water Management Plan to the Major Projects portal

kind regards from
Janne
27/2/2023
Janne Grose
Senior Conservation Planning Officer
Greater Sydney
Biodiversity & Conservation|Environment and Heritage
Department of Planning and Environment
T 02 8837 6017 | E janne.grose@environment.nsw.gov.au
Level 6, 12 Darcy Street, 4 Parramatta Square, Parramatta NSW 2150 | Locked Bag 5022
www.dpie.nsw.gov.au

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

--
This email is intended for the addressee(s) named and may contain confidential and/or privileged information.
If you are not the intended recipient, please notify the sender and then delete it immediately.
Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the NSW Office of Environment, Energy and Science.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

Department of Planning and Environment

Our ref: DOC23/74639

Your ref: SSI-8863

Ms Kerry Radford
Transport for NSW

27 February 2023

Subject: EHG comments on the draft Groundwater Management Plan for the Western Harbour Tunnel – Stage 3B (SSI-8863)

Dear Ms Radford

Thank you for your email of 30 January 2023 requesting advice from Environment and Heritage Group (EHG) on the draft Appendix F - Groundwater Management Sub Plan (GWMP) (dated 25 January 2023, Rev B) for the Western Harbour Tunnel (WHT) State significant infrastructure proposal SSI-8863.

EHG notes Condition C4(f) of the project approval for SSI-8863 assigns EHG a consultation role in the preparation of the GWMP. EHG provides the following comments.

EHG recommends the GWMP clarifies upfront in the Introduction if this management plan applies to the WHT Stage 3B. Stage 3B is only mentioned once in Section 5 of the GWMP where it states, “The main areas for concern for Stage 3B construction include:

- Landfill and contaminated sites at Rozelle, Birchgrove and Waverton
- Registered groundwater bores in Rozelle, Birchgrove and Waverton”.

EHG has also received a draft Soil and Surface Water Management Sub Plan and a draft Flora and Flora Fauna Management Plan for WHT for review which both apply to Stage 3B but it is unclear if the GWMP applies to Stage 3B. It is suggested a scaled figure is included in the GWMP which clearly identifies/locates the Stage 3B construction work and support sites/project area and the area that is potentially impacted by the Stage 3B works.

9.2 Groundwater model update

Section 9.2 of the GWMP states “if monitoring results indicate that groundwater inflows and water table drawdown will be greater than the refined model impact, then feasible and reasonable measures will be implemented” but it is unclear what these measures may include. It suggested potential measures are identified in Section 9.2 that could be implemented to mitigate such impacts.

Appendix F1 – Groundwater Monitoring Program

The Table of Contents needs to be amended as it commences at section 5.5 and does not list the Introduction etc.

Department of Planning and Environment

Section 4.3.4 of Appendix F1 notes that in the event groundwater drawdown is substantially different to predictions in the Groundwater Model a review shall be undertaken to determine if there are any unacceptable project impacts. Should such impacts be identified, mitigation measures will be developed and implemented. It is unclear what these measures may include, and it is suggested these are identified.

Section 6.1.2 notes the Groundwater Model will be updated following the collection of 24 months of groundwater level data. It indicates should the model update indicate additional risk to groundwater users (GDEs and supply bores) or increased drawdown extents, the groundwater monitoring network will be reviewed to establish if further monitoring points are required. If there is an increase to the extent of groundwater drawdown, then depending on the extent an assessment of potential impacts on GDEs, watercourses, water dependent vegetation in the vicinity may need to be undertaken, particularly as Section 5.6.1 of the GWMP notes GDEs associated with Quarry Creek and Flat Rock Creek have been identified within 1km of modelled groundwater drawdown.

Please note that this is the only review of the draft GWMP that EHG can provide given its major project workload. It is EHG's expectation that its comments be addressed. The Department as the consent authority needs to be satisfied with the applicant's GWMP.

If you have any queries regarding this matter, please email rog.gsrplanning@environment.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink that reads "S. Harrison".

Susan Harrison

Senior Team Leader Planning
Greater Sydney Branch
Biodiversity and Conservation

Appendix F EPA consultation evidence

From: Anna Timbrell <Anna.Timbrell@epa.nsw.gov.au>
Sent: Tuesday, 28 February 2023 1:52 PM
To: Woodward, Erran
Cc: Kerry Radford; Coetzee, Laureenne; Mark Russell; Olivia Patterson; Damon Bolton; Aleksandra Young
Subject: EXT: Western Harbour Tunnel Stage 3B - EPA comments on draft CEMP sub plans

Hi Erran

The EPA received the following DRAFT documents:

Appendix D – *Noise and Vibration Management Sub Plan*, Rev B, dated 31.01.23 (NVMP)
Appendix D3 – *Out of Hours Works Protocol*, dated January 2023 (OOHWP)
Appendix E – *Soils and Surface Water Management Plan*, Rev B, dated 23.01.23, prepared by Acciona (SWMP)
Appendix F – *Groundwater Management Sub-Plan*, Rev B, dated 25.01.23, prepared by Acciona (GWMP)
Appendix J – *Air Quality and Odour Management sub-Plan*, Rev B, 24.01.22, prepared by Acciona (AQMP)

These documents reference the CEMP for the entire Western Harbour Tunnel works, rather than the Early Works for this package. It is not clear why the CEMP sub plan documents have not focused on the relevant works package – and treat construction of the tunnel as a separate package. Especially as the approval will be subject to a well-publicised future modification.

The EPA recommends the CEMP subplans focus on the Scope of works for this specific works package (*Western Harbour Tunnel Package 3B*) as the above documents are very difficult to understand and incorporate seemingly redundant work. The EPA regards it as a waste of resources to describe how a redundant works package will be managed and can see no valid reason for why the entire WHT has to be provided (despite what was said in the meeting of Friday 24 February).

Regarding all of the main 4 documents, these should provide a clear and detailed description of the proposed works of this package – beyond what is written in section 1.3 of the NVMP – which is not clear. The EPA requests the proponent clearly describe the current scope of works, clearly identifying the location of the works, supported by maps that clearly identify work boundaries; the interface with other contractor work locations; any transition premises from one boundary to another.

Regarding both the GWMP and SWMP, you should note that the EPA recommends early engagement of an EPA-accredited site auditor to ensure matters in relation to contamination are satisfactorily addressed as early as possible. This is in your interest. Further comments are provided in the sections below on SWMP and GWMP.

For your benefit, the EPA has provided more detailed consideration of the NVMP, AQOMP, SWMP, and GWMP as follows:

1. Noise & Vibration (NVMP)

If this NVMP must encompass the WHT project in its entirety (as stated during the meeting with Acciona on Friday, 24 February), then it would be useful if the document **highlighted** the relevant sections pertaining to this package of works – examples follow:

- in section 5 – **highlight** the relevant Monitoring location ID and NCA's for these works.
- in section 6 – **highlight** the relevant equipment that will be used in this package.
- in section 7 – **highlight** the relevant works within e.g. 'Construction Activity' – highlight 'Utilities works including overhead and underground utilities relocation'. Please provide corresponding Maps showing those works locations and the highlighting the receivers in the NCA's affected.

in section 8, **highlight** the relevant support sites for this package of works, and specify the construction duration of activities involving those construction works – not just whether standard or 24 hours – but for how many weeks / months / years these works will occur. Identify areas of potential cumulative impacts with other construction projects or adjacent contractors on this package.

Supporting maps should also identify the location of adjacent construction sites; and identify the receivers that may be subject to cumulative impacts.

Table 3-1 – Minister's Conditions of Approval:

- CoA E82 states all cumulative impacts will be coordinated as identified in the OOHWP. That document in turn references KNOWnoise. There are no details on how this tool assists with cumulative impacts from other projects. E.g. is it a tool used by other contractors to assist with coordinating out of hours works? Is it coordinated by TfNSW? Cumulative noise impacts must be managed by contractors actively coordinating with each other, not just about respite, but about the days being proposed for out of hours works.
- It is recommended condition A9 is included.

Section 7.2.1 – Potential impacts – It is recommended including other additional key factors which determine impacts on noise sensitive receivers, including worker behaviour, types of noise mitigation measures deployed, maintenance/monitoring of mitigation measures and the specific construction methods or work practices employed.

Section 8.2 – Construction noise impacts – It is noted that CNVISs *will include specific mitigation measures identified through consultation with affected sensitive land user(s) which will be implemented for the duration of the works*. Each CNVIS should identify the receivers that may be impacted and be supported by maps; and identify what reasonable and feasible work practices – as outlined in the ICNG – will be applied to reduce noise levels to the NMLs. These should also be supported by maps as relevant – e.g. showing strategic location of plant to reduce noise, location of noise barriers etc. – and updated as required and as construction scenarios change. They should also provide details of quieter equipment shown; how much noise is reduced by; what residual impacts there will be after all R&F mitigation measures are applied; and how these will be managed.

Table 9-1 – Noise and vibration management and mitigation measures – It is recommended including details on the methods used for selecting specific controls and the assessment process used for selecting these controls. Also recommend including details on how all plant, vehicles and equipment are assessed and subject to ongoing review to ensure they are utilising best practice in regards to minimising noise and/or vibration.

Section 9.2.1 – Noise Insulation Program – It is recommended identifying if and how information on the status of the NIP for impacted receivers will be communicated to the EPA in the event that works outside of standard construction hours are requested under condition L5.10 <Project specific condition for works outside of standard construction hours> of the Model Transport Licence.

Appendix D2 – Noise and Vibration Monitoring Program – Western Harbour Tunnel

- Section 1.2 – Scope of the monitoring program – The scope should include a specific requirement that “monitoring” will extend to an assessment of the adequacy, completeness and effectiveness of the noise mitigation measures being used, and whether additional mitigation should be deployed.
- Sections 3.1.2 and 3.1.3 – It is recommended including further details on the use of unattended noise monitoring, including processes for the identification/investigation of noise levels above the Best Achievable Noise Performance Objectives.
- Section 5 – Calibration, QA and competency – The competency requirements for staff undertaking noise monitoring should be clearly presented in the NVMonP, and more importantly the procedural checks and balances and training requirements to ensure that competency is achieved. Reference should be made to Model EPL licencing requirements – see ‘Competent Person’ section in Model Transport Licence Appendix B Guidance Notes.
- Section 7 - Continual improvement and corrective action: It is recommended that where noise and vibration monitoring identifies an exceedance of predicted N&V level in CNVIS documents, that the actions include notifying the AA to seek advice.

Appendix D3 – Out of hours work protocol – Warringah Harbour Tunnel

- General comment – Once an EPL has been issued, all works and activities within the licenced premises will be subject to the conditions of the licence. The conditions of the licence are to be ‘substantially consistent’ with the Conditions of Approval, however the OOHWP protocol should identify that works outside of standard construction hours must be in accordance with the EPL requirements.
- Section 4 – Types of OOHWs – This section should more clearly articulate that the OOHWs approved under E88 are subject to EPA requirements which only permit works during these periods if they are required under one or more of the scenario’s in L5.7 a)-e) of the Model Transport Licence.
It is essential that the relationship between the E88 works and works approved by the OHWP is established to avoid confusion on permitted OOHW’s.
- Update figure 4.1:
 - ‘Oversized deliveries’ – should include reference to EPA licence notification and reporting requirements; and
 - ‘OOHWs subject to an EPL’ – should include that the works can only commence subject to EPA approval.

Section 7.1 – Mitigation – The EPA recommends including details on the procedures/systems/practices that will be implemented to ensure effective monitoring and review of selected noise mitigation measures for works outside of standard construction hours.

Section 7.2 – Consultation – While it is noted that the CoA E83 refers to these requirements as consultative, these are largely notification requirements. It is recommended including further details on other consultation pathways, including Community Agreements (conditions E1.1 – E1.7 of the Model Transport Licence) and consultation undertaken to comply with the requirements of condition of L5.10 (Model Transport Licence).

Section 8 - Coordination of out-of-hours works and respite:

This section states that “Works undertaken as part of this OOHWP Protocol will be scheduled to minimise or avoid any reduction in respite due to other works”. Recommend noting here that any reduction in respite must be avoided as this may constitute a breach of the EPL and CoA conditions; and

Recommend including further details on the specific procedures that will implemented to ensure effective coordination of respite with other projects (i.e. EPL 21619, EPL 21528).

Section 9 – Notification requirements – It is recommend including that any works approved under condition L5.10 <Project specific condition for works outside of standard construction hours> of the Model Transport Licence, may require different notification periods and the EPA should be consulted early on to obtain further advice in this regard.

Sections 10 and 11 – Completing OOHWP and Reporting – It is recommended including the need to comply with EPA

2. Air Quality (AQOMP)

The AQOMP outlines the dust mitigation measures for the project in Table 7.1. The table includes the measure, the resources needed, the responsible personnel and the methods by which evidence will be presented. Broadly, the mitigation measures are comprehensive, covering communications, site management, equipment and vehicles, construction activities, monitoring and review. However, the proposed mitigation measures in Table 7.1 lack specific details regarding the site-specific mitigation measures for the project. This lack of specific detail on the mitigation measures for the project does not provide confidence in the application or the auditability of the proposed mitigation measures. Site-specific mitigation measures should include the metrics, criteria or triggers with which the measures would be enabled. Site specific details of the mitigation measures are also missing to determine if best practice principles are being employed. Examples of lack of detailed site-specific measures include:

AQOMP1 reasonable and feasible dust suppression and/or management measures – no site-specific details about which actual measures will be employed onsite

AQOMP2 equipment and handling techniques that minimise dust generation – no site-specific details on the equipment or material handling that requires dust minimisation technique and the appropriate measures associated with each specific activity/equipment

AQOMP3 adjust activities based on dust levels and unfavourable weather conditions – no metrics or criterion for when activities will be adjusted, and no specific actions of adjusted activities are provided. Additionally, as the monitoring program only includes dust gauges, this measure does not allow for timely reactionary mitigation measures

AQOMP5 management of unexpected odours likely to cause impacts – no metric or criterion for when an odour is deemed offensive that will trigger the use of proposed resources, also no mention on the qualification of personnel to identify and quantify odours (Information provided in Appendix J2 – or should that be J3? – but this may not be relevant anymore due to the proposed Mod. Section 4.2 of that appendix states “*Odour monitoring will be implemented for works identified in the EIS as having potential construction related odour impacts, being dredging, handling and management of harbour sediments within Sydney Harbour and at the White Bay construction support site (WHT3).*”

AQOMP6 site inspections to monitor compliance – no frequency of inspections specified or if frequency changes based on weather forecasts

AQOMP7 regular inspection and maintenance of equipment – no frequency of inspections or maintenance specified

AQOMP8 minimising engine idling – no metric for how long plant must be stationary before switching off

Table 8.1 outlines the monitoring and inspection details, locations, record, responsible personnel and the frequency. Some of the detail provided here may pertain to the mitigation measures outlined in Table 7.1, including:

Informal visual inspections during daily site inspections (AQOMP6) – not specific about the metric used (average wind speeds or max gust speed)

Weekly site inspections (AQOMP6) – frequency of these inspections will not permit timely reactionary mitigation measures

The EPA recommends the proponents could improve the AQOMP by specifically identifying the site-specific mitigation measures and the metrics/criteria/triggers that certain actions will be undertaken, particularly the proactive and reactive measures.

Further, the EPA recommends the proponents undertake a gap analysis to determine if the site-specific mitigation measures include all best practice mitigation measures for a construction site. The AQOMP should be updated to include any additional best practice mitigation measures.

Monitoring Program

Appendix J2 of the AQOMP includes the proposed monitoring program for the project. The monitoring program proposes to install three dust deposition gauges and provides the specific locations (Figures 3-1* and 3-2). The siting of the dust deposition gauges does not refer to AS/NZS 3580.1.1. **Incorrectly referenced in text as Figures 3-2 and 3-2*

As no baseline data is available, the monitoring program proposes to use the EPA's assessment criterion of $4 \text{ g/m}^2/\text{month}$ of total deposited dust as the performance criteria. The results from the monitoring will be reported every 6 months. Exceedances will result in a review to determine possible causes and identify if any improvements in dust mitigation can be made.

While the monitoring program proposes to use an Australian Standard for dust monitoring, the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (NSW EPA, 2017) and a NATA accredited laboratory for testing of samples, the AQOMP includes the reactive mitigation measure of adjusting activities onsite based on dust levels (AQOMP3). As dust deposition gauge samples are collected every 30 ± 2 days, the ability to adequately manage activities onsite based on the proposed monitoring is not feasible.

The EPA do not consider dust deposition monitoring to be appropriately fit-for-purpose in managing the day-to-day dust issues onsite. Dust deposition gauges do not allow for real-time information to understand the short-term dust impacts nor allow for immediate actions and responses to be undertaken to reduce or eliminate dust emissions.

The EPA recommends the proponent consider a monitoring method that is fit-for-purpose for adequate dust mitigation and management and is appropriately time resolved and quality assured, such as particulate monitors capable of continuous real-time

monitoring and reporting of particulate concentrations.

Odour Monitoring

The rationale for odour to be included in the Air Quality Management Plan and Monitoring Program, as identified in the EIS, appears to be related to dredging, handling and management of harbour sediments within Sydney Harbour and at the White Bay construction support site (WHT3). Given the scope of the AQOMP (Stage 3B) does not include zone 4 (the harbour crossing), the EPA questions the need to include odour in the management plan and monitoring program.

Furthermore, the EPA note the Nasal Ranger is being used for management purposes. AS4323.3 is the reference test method as per the *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (NSW EPA, 2022). The NASAL ranger is not specifically listed an approved method. However, it may be useful as a screening tool or to compliment any measurements taken in accordance with AS4323.3

The EPA recommends the proponent confirm the validity of including odour in the AQOMP and review the approved methods for odour monitoring in the relevant guideline.

3. Soils and Water (SWMP)

The SWMP is an overarching plan and therefore general. Key issues are as follows and discussed further below.

The proposed site specific and progressive Erosion and Sedimentation Control Plans will need to be adequately detailed with descriptive operational procedures to demonstrate adequate controls will be in place and maintained, including basin sizing, discharge criteria, managed overflow conditions, reuse storage, enhanced erosion control methods and flocculant management/toxicity.

Management of water discharges from potentially contaminated areas will require greater water discharge controls than clean sediment areas, e.g. increased basin sizing, suitable contaminant treatment systems.

The proposed methodology for developing specific trigger values is not appropriate for developing controlled discharge criteria.

Discharges to water will be managed through the preparation of a separate Water Pollution Impact Assessment (WPIA) as required by MCoA E210, and accepted by the EPA for specific criteria to be included into the Project EPL. Discharges from the Construction Water Treatment Plants (WTP) is proposed to be managed in accordance with the Groundwater Management Plan and Monitoring Program. Where water has encountering contaminated material this is also proposed to be managed via the construction WTPs and in accordance with the Groundwater Monitoring Program. Measures specific to the management of marine impacts will be updated into the SWMP document prior to the Harbour Crossing phase.

It is recommended that the various plans are properly cross-referenced, as currently surface water discharges will be managed across the overarching SWMP, Site Specific or Progressive Erosion and Sedimentation Control Plans, Environmental Work Method Statements for contamination risks, Discharge Impact Assessments as required under the Consent and via the Groundwater Management Plan and Monitoring Program.

Erosion and Sedimentation Control Plans

The SWMP proposes a series of detailed Site Specific or Progressive Erosion and Sedimentation Control Plans (ESCP's) for different stages of construction and specific work areas prepared in accordance with the Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004) and Volume 2D (NSW Department of Environment and Climate Change, 2008). The SWMP states that ESCPs will be prepared prior to the construction activity generally using drainage or general arrangement drawings.

Drawings alone are unlikely to be adequate to fully describe the necessary management procedures and descriptive details should be included on the management procedures, trigger-action-response plans, basin sizing, discharge criteria, managed overflow conditions, reuse storage facilities, enhanced erosion control methods, flocculant management/toxicity and contingency actions.

Site specific trigger values (SSTVs)

Section 4.3 of the Surface Water Monitoring Program (Appendix E2, dated January 2023) refers to "Performance criteria" as follows.

"Baseline monitoring shows that some surface water quality parameters exceed the default ANZG (2018)/ANZECC (2000) water quality trigger values for slightly to moderately disturbed ecosystems. This is not unexpected given the highly urbanised and disturbed Project area and receiving waterways.

As such, EIS Appendix O, Section 4.6 confirmed the default trigger values are not suitable for comparison with ambient water quality.

A more suitable approach is to determine site specific trigger values (SSTVs) from a local reference data set for physical and chemical stressors. This approach would involve calculating the 80th percentile of baseline data (and the 20th percentile where water quality would fall within a specified range, e.g. pH, dissolved oxygen and electrical conductivity)."

This is not a suitable approach for discharge impact assessments (the approach described above may be used for other purposes, e.g. to assess the proponents contribution to instream water quality compared to other existing pollutant sources in the catchment,

however, this is a matter for the proponent). ANZG (2018) states that: “in most cases, the ecological values of highly disturbed ecosystems can be maintained by applying default guideline values (DGVs). There could be situations where the DGVs would be too stringent and a lower level of protection would be sought”.

In this case, for construction stage discharges, a lower level of protection (90% species protection level) for toxicants has been adopted in the Consent for toxicants. Collecting local reference data to derived SSTVs for developing site discharges in not appropriate in this case as the data are likely to reflect a polluted waterway and existing pollution does not provide a basis for poor environmental performance from a licensed premise.

Discharge criteria in discharge impact assessments will need to be developed consistent with the consent conditions (i.e. MCoA E208). Discharges from construction water treatment plants to surface waters must not exceed the criteria defined in MCoA E208, unless the EPL specifies alternate criteria. In line with MCoA E210 if construction stage stormwater discharges are proposed, a Water Pollution Impact Assessment will be required to inform licensing consistent with section 45 of the POEO Act and the National Water Quality Guidelines (ANZG (2018)).

Table 3-2 states that: “as per WQ13 if sediment basins are required, a discharge impact assessment, commensurate with the potential risk and consistent with the National Water Quality Guidelines (ANZG (2018)) and Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004).” (Bluebook). Discharge criteria in the Bluebook are not suitable to inform the discharge criteria for inclusion in the EPL and this is not consistent with the consent. A total suspended solids criteria of 50 mg/L is no longer consistent with best practice. The requirement is for a discharge assessment consistent with the consent.

Highly disturbed systems should not be regarded as ‘pollution havens’. The concepts of adaptive management and continual improvement should always be promoted, to maximise future options for a waterway.

Note that Discharge Impact Assessments for any operational stage discharges must use the default guidelines for slightly to moderately disturbed ecosystem (as per the Consent).

It is recommended that the above advice on site specific trigger values is provided to the proponent at this time to inform the WPIAs and other plans.

Management of water discharges from potentially contaminated areas
Section 7.10.8 refers to “*Environmental Work Method Statements*” (EWMS), where it is proposed that prior to undertaking contamination or remediation works, a suitable EWMS must be prepared to manage risks arising from the work activities and preventing further contamination exacerbation.

These should link in with proposed site specific and progressive erosion and sediment control plans and contamination assessments/RAP process so that appropriate discharge controls are used in areas of contamination risk. Dissolved and sediment-attached contaminants need to be appropriately managed and standard Bluebook erosion and sediment controls in potentially contaminated areas are not adequate to prevent pollution. There should also be appropriate linkages with the required discharge impact assessments, construction WTP assessments and Groundwater Management Plan and Monitoring Program (as it is proposed that water encountering contaminated material this will be managed via the construction WTPs and in accordance with the Groundwater Monitoring Program).

4. Groundwater (GWMP)

It is understood following the meeting on Friday 24 February, that the groundwater management will not change following the expected modification of the below harbour tunnelling construction technique.

The EPA notes that the *Groundwater Monitoring Program* attached in Appendix F1 outlines the details for the monitoring program. There has also been a groundwater model developed as part of the EIS phase of work which will be continually updated with new data from level loggers installed in wells, though currently the number and location of wells to be monitored for groundwater levels has not been identified. The EPA has not reviewed this groundwater model.

Table 7-1 – Groundwater management and mitigation measures
GWMM13 notes that that there is a high risk of contaminated groundwater that may be encountered during construction. Should this be identified, there must be a plan to manage this water in the event that it drains to the tunnel and is pumped through water treatment plants.
Water Treatment discharges appears to be to a marine environment (GWMM14) so marine criteria are considered for assessing the discharge.
GWMM16 outlines that a site specific trigger value will be derived for EC to detect changes in salinity. Then what actions are triggered when the EC data continuously exceeds the SSTV over a period of 3 months and then if it exceeds the SSTV at any time by more than 100%. This specific trigger would be useful in the appended GWMP, where “substantially different” “EC values triggers action and neither the trigger nor the management actions required are defined.

Section 3.1.1 Groundwater Quality Section

There is an observation that EC can be very high (as noted in discussions about sea water ingress and groundwater in Ashfield Shale), is this anticipated to be an issue for the water treatment plants?
Results are said to be shown in Appendix D, however there is no Appendix D to this plan.
TRH and BTEX are noted as positive results, but as no results are shown, it is assumed that these are detections, but not above guideline values.

4.1 Groundwater Management Program (Appendix F1)

Section 4.2 WTP – discharge water quality

This section notes that the water treatment plants would need to remove iron, manganese, suspended solids, hydrocarbon compounds, as well as pH correction and management of salt loads and ammonia. However this list of contaminants of concern does not align with the monitoring parameters and criteria outlined in the next section.

Section 4.2.1 Parameters and Criteria

As per MCoA E208, the discharge water from the construction WRP to surface waters will align with the ANZECC Guidelines for physical and chemical stressors, the ANZG (2018) 90% species protection levels for toxicants with the exception of those known to bioaccumulate, which would be treated to 95% species protection levels; and the draft ANZG (2018) default guideline values for iron and zinc.

However, in Table 6-2 Water treatment plant monthly monitoring, many of the criteria are not from these sources.

Arsenic limit – unsure of the source for this criteria, it is known to bioaccumulate. The low reliability default guideline value (DGV) for AsV is 0.0023 mg/L, for AsIII the criterion is 0.0045 mg/L.

Chromium (VI) – unsure of why the 90thile concentration limit is proposed to be used. Also unsure of source for this criterion, the DGV is 0.02 mg/L for marine.

Chromium (III) – unsure of source for this criterion, 90% species protection DGV is 0.049 mg/L.

Copper – unsure of justification for 90thile concentration limit proposed. Also unsure of source for this criterion, 90% species protection is 0.003 mg/L

Lead – unsure of source for this criterion, 90% species protection is 0.0066 mg/L for marine

Manganese – it is noted that the freshwater criterion has been used for this contaminant, which is two orders of magnitude over the marine criterion.

Mercury – the 90% species protection criterion is used, but mercury is bioaccumulative.

Zinc – unsure of the source for this criterion, the 90% species protection DGV is 0.012 mg/L.

Given that ammonia and hydrocarbons are also potential contaminants of concern, the EPA considers criteria and monitoring for these contaminants should be included. Also, cobalt has been noted in Section 5.7 Potential Groundwater contamination as already being identified at concentrations above the marine guideline values and this contaminant has not been included in monitoring or with discharge limits.

Also, as outlined in Section 5.7, further investigations into areas of interest with a moderate or high risk to groundwater resources are required, for example the former bulk fuel storage area, where groundwater quality has not yet been assessed. Given the potential for further contaminants to be added to feed water for water treatment plants, it is anticipated that these will need to be included in monitoring and discharge limits.

Section 4.3.4 Management and mitigation

Unsure if “substantially different to predictions in the groundwater model” has been defined (unless this is with reference to the 2m decline in water supply bores or 10% cumulative variation in the water table). EPA recommends that the plan is clear about what the trigger is for mitigation measures.

Section 4.4.1 Data analysis methods

The EPA recommends that ACCIONA define what “substantially different to predictions in the groundwater model” means in this section for this document (so it can stand alone). This has been defined in Table 7-1 of the Groundwater Management Plan GWMM16, though.

Kind regards

Anna Timbrell

Senior Planner

Regulatory Operations Metro

NSW Environment Protection Authority

D 02 9274 6345 | E anna.timbrell@epa.nsw.gov.au



www.epa.nsw.gov.au [@NSW_EPA](https://twitter.com/NSW_EPA)

The EPA acknowledges the traditional custodians of the land and waters where we work. As part of the world's oldest surviving culture, we pay our respect to Aboriginal elders past, present and emerging.

Report pollution and environmental incidents 131 555 or +61 2 9995 5555

--

This email is intended for the addressee(s) named and may contain confidential and/or privileged information. If you are not the intended recipient, please notify the sender and then delete it immediately. Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the Environment Protection Authority.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

Appendix G Sydney Water consultation evidence

From: Green, Derek
Sent: Wednesday, 22 February 2023 4:58 PM
To: Ta Christian Duong
Cc: Adam Dalibozek; Vasilaras, Arthur; Charlotte Flynn; Woodward, Erran
Subject: RE: EXT: RE: [External] WHT - Management Plans - Warringah Freeway cases 172630, 173913,177720 & 182489.

Christian,

Thanks for passing on the comments from the review.

Yes, we will consult prior to discharging.

Regards
Derek

From: Ta Christian Duong <TACHRISTIAN.DUONG@sydneywater.com.au>
Sent: Wednesday, 22 February 2023 2:28 PM
To: Green, Derek <derek.green@acciona.com>
Cc: Adam Dalibozek <ADAM.DALIBOZEK@sydneywater.com.au>; Vasilaras, Arthur <arthur.vasilara.ext@acciona.com>; Charlotte Flynn <CHARLOTTE.FLYNN@sydneywater.com.au>
Subject: RE: EXT: RE: [External] WHT - Management Plans - Warringah Freeway cases 172630, 173913,177720 & 182489.

Hi Derek,

As requested, I have received comments from the environmental team (Charlotte Flynn) within Sydney Water regarding the CEMP & management plans for the Western Harbour Tunnel (WHT).

Surface Water Management Plan

- There is reference to potentially requiring a trade waste agreement from Sydney Water for discharging water. If you are intending on discharging to the Sydney Water network then there is requirement to seek appropriate permits - this captured in the management plan and so there are no further comments here.

If you require guidance on the process and water quality requirements – please let me know and I'll contact our trade waste team. Please note that a trade waste agreement will require information about water quality (in accordance with discharge criteria) in addition to water volumes from the affected assets (*Table 5.1*)

Groundwater Monitoring Program

- *Section 4.1* – notes that 'In the event water is discharged to Sydney Water assets consultation will be undertaken to confirm if the receiving asset has flow rate constraints and any applicable discharge criteria, to be captured within a Trade Waste Agreement'. Please clarify and confirm that this consultation will be undertaken prior to discharge.

If you have any questions, please give me a call.

Thanks,
Christian

Ta Christian Duong
Development Consultant
BEng(CivEng)(Hons)
Business Development

Work Mobile 0459 311 525
Personal (Urgent) 0436 347 135
tachristian.duong@sydneywater.com.au

Level 13, 1 Smith Street
Parramatta NSW 2150

Sydney
WATER

We're building a truly Greater Sydney

A thriving, liveable city starts with water



Sydney Water respectfully acknowledges the traditional custodians of the land and waters on which we work, live and learn. We pay respect to Elders past and present.

[Read more](#) about our commitment to reconciliation.



From: Green, Derek <derek.green@acciona.com>

Sent: Thursday, 9 February 2023 6:16 PM

To: Ta Christian Duong <TACHRISTIAN.DUONG@sydneywater.com.au>

Cc: Adam Dalibozek <ADAM.DALIBOZEK@sydneywater.com.au>; Vasilaras, Arthur <arthur.vasilara.ext@acciona.com>

Subject: RE: EXT: RE: [External] WHT - Management Plans - Warringah Freeway cases 172630, 173913, 177720 & 182489.

Christian,

Thanks for the reply. I appreciate your efforts to respond by the date requested.

I understood that the Level Of Service to cover the project was covered by the SWC Interface Deed with TfNSW.

In any case, we are looking to establish a Working Group Interface meeting with yourself, Adrian and TfNSW. We would like to have the first meeting next week. How are you situated next Tuesday morning.

Regards

Derek

From: Ta Christian Duong <TACHRISTIAN.DUONG@sydneywater.com.au>

Sent: Thursday, 9 February 2023 1:32 PM

To: Green, Derek <derek.green@acciona.com>; Adrian Rodriguez <ADRIAN.RODRIGUEZ@sydneywater.com.au>

Cc: Gina Nichols <GINA.NICHOLS@sydneywater.com.au>; Adam Dalibozek <ADAM.DALIBOZEK@sydneywater.com.au>; Vasilaras, Arthur <arthur.vasilara.ext@acciona.com>

Subject: RE: EXT: RE: [External] WHT - Management Plans - Warringah Freeway cases 172630, 173913, 177720 & 182489.

Hi Derek,

Thanks for promptly reaching out to me.

Please note that I have sent the documents to the appropriate contacts within Sydney Water for their review.

Just to quickly touch upon the required date that you have set (27th February 2023) for the review – Sydney Water has no set service level agreements for this type of review and, as such, is not required to respond by a certain date and neither can any actions be ignored by the developer even if issued after the preferred date. Irrespective of this, we will endeavour to get it reviewed as soon as possible but there is no set time frame for this as it will be completed to Sydney Water standard to ensure the protection and safe operation of our assets

By early next week, I will reach out again to catch up on the status of this review & determine whether we require a meeting to discuss the review of the CEMP.

I am forwarding this email to [@Adrian Rodriguez](#) for his awareness. Adrian looks after the TfNSW portfolio from a networks design perspective so any adjustments/deviations will most likely be reviewed by him. While I will be the case manager for any adjustments/deviations, I will generally be more involved in the review of OOS BOA applications.

If you have any questions, feel free to give me a call.

Thanks,
Christian

Ta Christian Duong
Development Consultant
BEng(CivEng)(Hons)
Business Development

Work Mobile 0459 311 525
Personal (Urgent) 0436 347 135
tachristian.duong@sydneywater.com.au

Level 13, 1 Smith Street
Parramatta NSW 2150

Sydney
WATER

**We're building a truly
Greater Sydney**

A thriving, liveable city starts with water



Sydney Water respectfully acknowledges the traditional custodians of the land and waters on which we work, live and learn. We pay respect to Elders past and present.

[Read more](#) about our commitment to reconciliation.



From: Green, Derek <derek.green@acciona.com>
Sent: Monday, 6 February 2023 12:20 PM
To: Ta Christian Duong <TACHRISTIAN.DUONG@sydneywater.com.au>
Cc: Gina Nichols <GINA.NICHOLS@sydneywater.com.au>; Adam Dalibozek <ADAM.DALIBOZEK@sydneywater.com.au>; Vasilaras, Arthur <arthur.vasilara.ext@acciona.com>
Subject: RE: EXT: RE: [External] WHT - Management Plans - Warringah Freeway cases 172630, 173913, 177720 & 182489.

Christian,

Please find below my contact details.
Should you have any queries on the WHT project feel free to reach out.

I understand that TfNSW has already been in consultation with Sydney Water about a couple of potential assets requiring monitoring or adjustments.

The project is in the early stages and we are still developing our designs based on our winning proposal. It would be good to establish our communications and interface early to facilitate effective management of our works around your assets. I suggest that we have an initial catch up in the next week.

Regards



Derek Green
Project Manager
ACCIONA Construction Australia

Level 2, 55 Harrington Street
The Rocks, NSW 2000,
Australia
+61 0414 745 221
derek.green@acciona.com

WWW.ACCIONA.COM.AU



From: Gina Nichols <GINA.NICHOLS@sydneywater.com.au>
Sent: Monday, 6 February 2023 11:20 AM

To: Nga Bui <NGA.BUI@sydneywater.com.au>; Ta Christian Duong <TACHRISTIAN.DUONG@sydneywater.com.au>
Cc: Kathy Pasalich <KATHY.PASALICH@sydneywater.com.au>; Acquisitions <Acquisitions@sydneywater.com.au>; Green, Derek <derek.green@acciona.com>; Adam Dalibozek <ADAM.DALIBOZEK@sydneywater.com.au>
Subject: EXT: RE: [External] WHT - Management Plans - Warringah Freeway cases 172630, 173913,177720 & 182489.

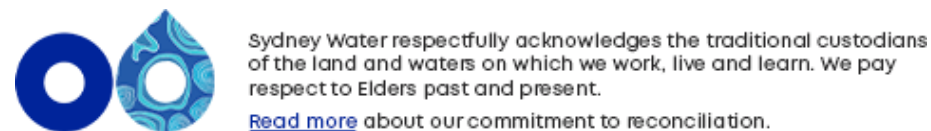
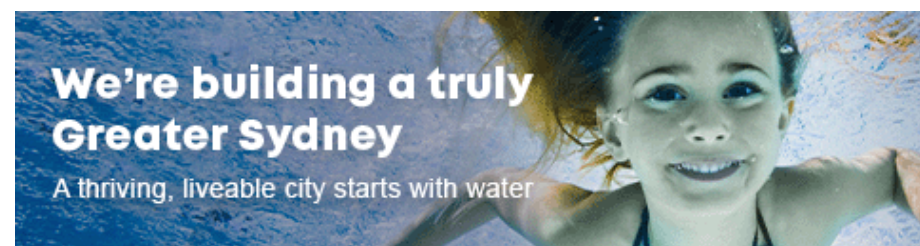
Good Morning Nga,
Christian Ta Duong is managing the WHT project and will be able to action this request.
Thank you

Kind Regards,

Gina

Gina Nichols
Development Project Manager | Infrastructure Development
(City Growth & Development | Business Development)

Mobile 0438 248 994
gina.nichols@sydneywater.com.au



From: Nga Bui <NGA.BUI@sydneywater.com.au>
Sent: Saturday, 4 February 2023 1:34 PM
To: Gina Nichols <GINA.NICHOLS@sydneywater.com.au>
Cc: Kathy Pasalich <KATHY.PASALICH@sydneywater.com.au>; Acquisitions <Acquisitions@sydneywater.com.au>; 'Green, Derek' <derek.green@acciona.com>
Subject: FW: [External] WHT - Management Plans - Warringah Freeway cases 172630, 173913,177720 & 182489.

Hi Gina

Hope you are well.

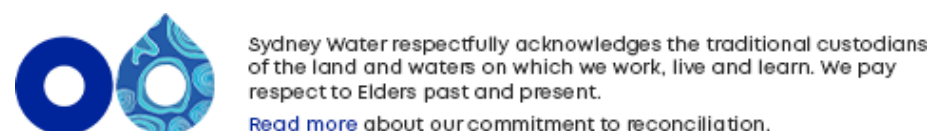
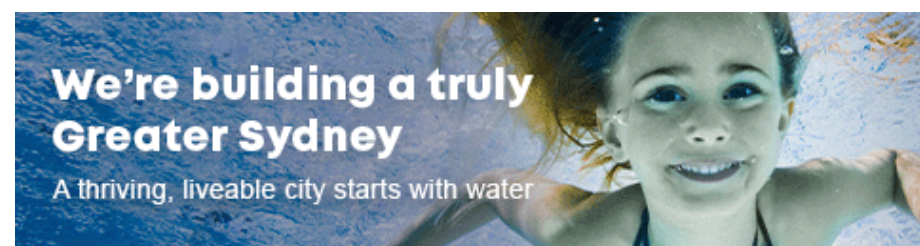
Please refer email below from Derek regarding Warringah Freeway Upgrade Project, could you please arrange with relevant

Networks (asset owners) for review and provide feedback.
I believe this project is linking to relevant eDeveloper cases 172630, 173913, 177720 & 182489.

Thank you

Nga Bui
Property Acquisitions Officer
Property Services, Asset Lifecycle

Mobile 0428 419 972
nga.bui@sydneywater.com.au
1 Smith Street
Parramatta NSW 2150
Note - I don't work on Fridays, and I work flexible hours so please don't feel obliged to respond to an email that I may send outside of normal business hours



From: Green, Derek <derek.green@acciona.com>
Sent: Wednesday, 1 February 2023 8:30 AM
To: Nga Bui <NGA.BUI@sydneywater.com.au>; Kathy Pasalich <KATHY.PASALICH@sydneywater.com.au>
Cc: Woodward, Erran <erran.woodward.ext@acciona.com>; Vasilaras, Arthur <arthur.vasilara.ext@acciona.com>
Subject: [External] WHT - Management Plans

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Nga, Kathy,

Acciona has been awarded the Western Harbour Tunnel (WHT) component of the 'Western Harbour Tunnel and Warringah Freeway Upgrade Project', which comprises a new motorway tunnel connection under Sydney Harbour, and an upgrade of the Warringah Freeway to integrate the new motorway infrastructure with the existing road network and to enable the potential future connection of the Beaches Link and Gore Hill Freeway Connection project.

This CEMP and Sub-plans have been prepared to describe how ACCIONA will comply with all Project requirements during construction of the WHT. In accordance with the Project conditions of approval, Acciona are required to provide documents to Sydney Water for consultation in the following circumstances:

- Groundwater Management Plan - where it is proposed to discharge groundwater into Sydney Water's assets.
- Soil and Surface Water Management Plan - if Sydney Water's assets are affected.
- Surface Water Monitoring Program - if any Sydney Water assets are impacted.

As such, please find attached the management plan for your consultation. We seek a response to these documents by 27 February, noting that any comments received following this date will not be accepted.

Please do not hesitate to contact me with any queries.