

Planning Approval Environmental Review Form

SM-22-00008046

Sydney Metro – Metro Body of Knowledge (MBoK)

Assessment Name:	M12 Corridor Interface Work Areas and Water Utility Installation
Prepared by:	Parklife Metro
Prepared for:	Sydney Metro – Western Sydney Airport, Stations, Systems, Trains, Operations and Maintenance Works (SSTOM)
Assessment number	PLM ER005
Type of assessment:	EP&A Act 1979, Division 5.2 / EPBC Act 1999, Part 8 and 9
Version:	Final 1.0
Planning approval No. (where relevant):	SSI_10051 Infrastructure approval / EPBC 2020/8687 (Cth)
Date required:	July 2025
iCentral number	SM-25-00091042

Form information – do not alter

Form number	SM-22-00008046
Applicable to:	Sydney Metro
Document Owner:	Director, Planning Approvals
System Owner:	Executive Director, Environment, Sustainability & Planning
Status:	Final
Version:	2.0
Date of issue:	AUGUST 2023
Review date:	As required
© Sydney Metro 2023	

Table of Contents

Environmental Review.....	3
1. Proposed works and justification.....	3
2. Consistency with Conditions of Approval	6
3. Environmental review	9
4. Recommendation	11
5. Certification	11
6. Endorsement.....	12
Appendix A – Figures.....	13
Appendix A – AHIMS Search Results	18

Environmental Review

1. Proposed works and justification

An environmental review is applicable to design changes which are consistent with the conditions of approval and would have negligible additional impacts on the community and/or the environment. This environmental review is required to demonstrate compliance with the conditions of approval and the Sydney Metro – Western Sydney Airport (SM-WSA) Environmental Impact Statement (EIS), Submissions Report and EPBC Act Final Environmental Impact Assessment of off-airport proposed action (off-airport Final EIA). A description of activities is listed in Table 1 and an assessment provided in Section 2.

Table 1 Description of proposed works

Description	Overview
Location of works	<p>The work areas addressed in this environmental review are within the M12 construction project footprint at two locations where the SM-WSA Project shares a boundary with the M12 project as shown in Appendix A (Figure 1). The works will occur within M12 work footprint at two locations:</p> <ul style="list-style-type: none"> • Area 1: At the M12 Elizabeth Drive offramp, just north of Construction Area K-PS1 and K-PS1a (SCAW Portion 3). The location of works is shown in Appendix A (Figure 2). • Area 2: At Elizabeth Drive just north of Construction Area L-TA1 (SCAW Portion 5) and the Western Sydney Airport boundary. The location of works is shown in Appendix A (Figure 3 and 4).
Scope of works	<p>The scope of work includes batter installation, road and infrastructure construction and necessary tie-ins to align with the interfaces of the M12 works. Works in the proposed buffer zones will allow better integration to be achieved between the M12 construction project and SM-WSA.</p> <p>Specific works are also required in Area 2 comprising investigation and construction work for watermain utility works including connection to an existing watermain. The work includes:</p> <p><u>Investigations</u></p> <ul style="list-style-type: none"> • Utility investigations will supplement “Dial Before You Dig” (DBYD) information and may include field inspection, survey and potholing as required <p><u>Construction</u></p> <ul style="list-style-type: none"> • Standard open trench pipelaying construction methods will generally be used. If required non-destructive dig (NDD) techniques may be used close to existing utilities • Construct approximately 60m of 300dia Ductile Iron Cement Lined (DICL) pipes to connect with existing watermain • Construct dual 250dia watermain (hydrant tees) for future fire services connections • Decommission approximately 20m of existing pipeline to allow for new works.
Justification for works	<p>Performance outcome (transport) requires the design of the project to be compatible with existing infrastructure and future infrastructure corridors. In addition, performance outcome (cumulative impact) requires cumulative impacts are managed through coordination of construction activities and communication processes with nearby projects including the M12 Motorway.</p>

OFFICIAL

	<p>Consultation with M12 Project, Sydney Metro and PLM has been ongoing. The watermain works form part of the water delivery strategy to the Airport Business Park station and the wider Precinct area.</p> <p>Sydney Water has issued a Notice of Requirements which determines the scope of work to be delivered. The design for this work complies with Sydney Water's technical requirements and standards. Construction of the watermain is required to meet Sydney Water technical requirements.</p> <p>The SM-WSA EIS outlines the approach that should be taken to identifying and selecting additional utility works. This review addresses that process in Section 2 below.</p>																		
Timeframe for works	<p><u>Earthworks, roads and tie-ins</u></p> <p>Works in the M12 construction corridor may take place for the duration of construction works which are anticipated to be completed in 2026.</p> <p><u>Works for water utility installation</u></p> <p>Investigations</p> <ul style="list-style-type: none">• 5 days. Commencing in June 2025 (pending approvals) <p>Watermain Construction</p> <ul style="list-style-type: none">• 4 weeks. Commencing in July 2025 (pending approvals)																		
Work hours, workforce and equipment / machinery	<p><u>Batters, roads and tie-ins.</u></p> <table><tr><th>Works</th><th>Method</th><th>Personnel and equipment</th></tr><tr><td>Earthworks and batter construction</td><td>-Minor areas for earth moving, cut/fill/grading as required</td><td>1 x 10 – 20t Excavator 1 x 12t Tipper Up to 10 workers may be on site</td></tr><tr><td>Roads and tie-ins</td><td>Standard road construction methods</td><td>1 x Asphalt Paver 1 x 12t Tipper 1 x 5-12t Excavator 1 x Grader 1 x Drum Roller</td></tr></table> <p><u>Water Utility Investigations</u></p> <table><tr><th>Works</th><th>Method</th><th>Personnel and equipment</th></tr><tr><td>Survey</td><td>-Standard survey equipment -Survey would include inverts of utility pits where required and pit lids to be lifted as required -No removal of vegetation for access or survey</td><td>1 x surveyor 1 light vehicles 1 x total survey station / jigger 1 x utility search operator</td></tr><tr><td>Potholing as required</td><td>-Hand dig or vacuum truck if required -Expose utility and survey -Backfill and make good surface</td><td>1 x Vacuum Truck 1 x 5t Excavator 1 x Rammer 1 x Vibrating plate Survey Equipment</td></tr></table>	Works	Method	Personnel and equipment	Earthworks and batter construction	-Minor areas for earth moving, cut/fill/grading as required	1 x 10 – 20t Excavator 1 x 12t Tipper Up to 10 workers may be on site	Roads and tie-ins	Standard road construction methods	1 x Asphalt Paver 1 x 12t Tipper 1 x 5-12t Excavator 1 x Grader 1 x Drum Roller	Works	Method	Personnel and equipment	Survey	-Standard survey equipment -Survey would include inverts of utility pits where required and pit lids to be lifted as required -No removal of vegetation for access or survey	1 x surveyor 1 light vehicles 1 x total survey station / jigger 1 x utility search operator	Potholing as required	-Hand dig or vacuum truck if required -Expose utility and survey -Backfill and make good surface	1 x Vacuum Truck 1 x 5t Excavator 1 x Rammer 1 x Vibrating plate Survey Equipment
Works	Method	Personnel and equipment																	
Earthworks and batter construction	-Minor areas for earth moving, cut/fill/grading as required	1 x 10 – 20t Excavator 1 x 12t Tipper Up to 10 workers may be on site																	
Roads and tie-ins	Standard road construction methods	1 x Asphalt Paver 1 x 12t Tipper 1 x 5-12t Excavator 1 x Grader 1 x Drum Roller																	
Works	Method	Personnel and equipment																	
Survey	-Standard survey equipment -Survey would include inverts of utility pits where required and pit lids to be lifted as required -No removal of vegetation for access or survey	1 x surveyor 1 light vehicles 1 x total survey station / jigger 1 x utility search operator																	
Potholing as required	-Hand dig or vacuum truck if required -Expose utility and survey -Backfill and make good surface	1 x Vacuum Truck 1 x 5t Excavator 1 x Rammer 1 x Vibrating plate Survey Equipment																	

Water Utility Construction

Works	Method	Personnel and equipment
Excavation	-Traffic management as per M12 and construction agreement requirements -Excavation to required depth and placement of bedding material	1 x 5t Excavator 1 x Vacuum Truck (if required) 1 x 8t Tipper Up to 10 workers may be on site
Pipelaying and backfill	-Pipes will be hand lifted or placed with excavator -Pipe joining and fixtures to be installed -Length of open trench to be minimised and backfilled on completion of section	1 x 5t Excavator 1 x Franna crane (pipe delivery) 1 x Delivery trucks Up to 10 workers may be on site
Testing and commissioning	In conjunction with Sydney Water	2 x Sydney Water truck Up to 10 workers may be on site
Final connection and cutover (pending Sydney Water approvals)	In conjunction with Sydney Water	2 x Sydney Water truck 2 x Traffic control vehicles Up to 10 workers may be on site

Work would be carried out during standard work hours as set out in Condition E38 of the Conditions of Approval.

- (a) 7:00am to 6:00pm Mondays to Fridays, inclusive;
- (b) 8:00am to 1:00pm Saturdays; and
- (c) at no time on Sundays or public holidays

Out of hours works (OOHW) are not anticipated for these works. Any road occupancy licence ROLs would be organised as required in conjunction with M12 constructor.

2. Consistency with Conditions of Approval

The following table outlines whether the proposed changes would be consistent with the relevant Conditions of Approval.

Table 2 Comparison of the proposal with relevant elements of the Approved Project

Relevant elements of the Approved Project			Proposed Change
<p><i>Chapter 8 of the EIS (Project description – construction)</i></p> <p>Section 8.11.5 of the EIS allows for additional utility works that are required outside of the construction footprint for the project provided the works are consistent with the following performance criteria:</p> <ul style="list-style-type: none"> the works connect to the construction footprint or to a point adjacent to the construction footprint the works have no direct impact on heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts assessed in the Environmental Impact Statement the works can be carried out and managed consistent with the performance outcomes identified in Chapter 27 (Synthesis) or as revised 			<p>The water utility connection is adjacent to the construction footprint at Elizabeth Drive as shown in Figure 2 and 3 in Appendix A. The works are also located within the boundary as originally assessed in the EIS although the area has not been included in the site access handover schedule for either SCAW or SSTOM contractors.</p> <p>The works would have no direct impact on heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts assessed in the Approved Project.</p> <p>The works can be carried out and managed consistent with the Approved Project performance outcomes.</p>
<p><i>Chapter 12 of the EIS (Non-Aboriginal heritage)</i></p> <p><i>Section 12.5.3 Off-airport construction corridor study area (Heritage items and conservation areas)</i></p> <p>McGarvie-Smith Farm, Penrith LEP 2010 I857, Local significance.</p> <p>Overall impact on significance = Major</p> <p>This section outlines heritage items within the off-airport construction corridor study area and discusses the potential impacts of the projects on these items.</p>			<p>The curtilage of the McGarvie Smith Farm (listed as item I857 as a site of local heritage significance in the Penrith City Council Local Environment Plan) is approximately 50m to the north of Elizabeth Drive. The curtilage of Mc Masters Farm is located to the north west of the M12 intersection. The heritage items in have both areas have been subject to disturbance and development. Due to the extent of disturbance non-Aboriginal heritage items are highly unlikely to be in the vicinity of the work areas. The Unexpected Heritage Finds Procedure would be implemented during work.</p> <p>The works would have no direct impact on heritage items (including areas of archaeological sensitivity), beyond the impacts assessed in the Approved Project.</p>
<p><i>Chapter 13 of the EIS (Aboriginal heritage) and Appendix J Aboriginal Cultural Heritage Management Plan of the Submissions Report</i></p> <p>Three Aboriginal heritage items have been identified within 200m of the watermain works and M12 buffer zone in Area 2 of the proposal.</p>			<p>A search of the Aboriginal Heritage Information Management Sydney (search date 29/05/25) confirmed no new sites in the vicinity of the work areas.</p> <p>The work area in the M12 work corridor has been highly disturbed for road work and other utilities (including telecommunications, electrical, gas, sewer and water). The extent of disturbance and evidence of prior investigation in this location indicates a very low probability of unknown Aboriginal objects occurring in the work areas. The Unexpected Heritage Finds Procedure would be implemented during work.</p>
AHIMS site	Description	Site Status and mitigation measures	
45-5-5087 – B165	Site is described as an artefact scatter, located approx. 250m south-east of the work area.	Within stage 1 WSI site. Assumed destroyed.	

OFFICIAL

		No additional mitigation	
45-5-5068 – B131	Site is described as an isolated artefact, located approximately 200m south of the work area	Within stage 1 WSI site. Assumed destroyed. No additional mitigation	
45-5-2763 – B87	Site is described as an artefact scatter, located approx. 250m south-west of the work area.	Within stage 1 WSI site. Assumed destroyed. No additional mitigation	
One Aboriginal heritage items was identified within 200m of the watermain works and M12 buffer zone in Area 1 of the proposal.			
Site	Description	Site Status and mitigation measures	
SMWSA-AS8	Site is described in the ACHMP as an artefact scatter, located approx. 170m south of the work area.	No management measures required for this item and is now assumed destroyed due to its location within construction corridor. No additional mitigation	
CSSI CoA E2 – Minimising clearing of native vegetation			No clearing of vegetation would be required and no areas of remnant vegetation remain within the M12 work corridor.
CSSI CoA E36 – The Unexpected Heritage Finds and Human Remains Procedure must be implemented			The proposed works will be subject to the Sydney Metro Unexpected Heritage Finds and Human Remains Procedure.
CSSI CoA E38 Construction Hours Work must only be undertaken during the following hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; (b) 8:00am to 1:00pm Saturdays; and (c) at no time on Sundays or public holidays.			All construction works will be undertaken during standard construction hours, in accordance with this condition.
CSSI CoA E109 Construction Parking and Access Management Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles) must be managed to: (a) minimise parking on public roads; (b) minimise idling and queueing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive use (s); (d) not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided; and			Traffic management will include work being carried out in accordance with the approved Traffic Management Plan or Traffic Guidance Scheme. All works will comply with the approved ROL where required. No idling, queuing or marshalling of vehicles will be required. Spoil haulage is not applicable to these works.

(e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMP.	
CSSI CoA E110 – Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.	All work to deliver the water utility work will be carried out in conjunction with Sydney Water through the accredited Water Services Provider. Coordination with the M12 construction contractor will be through the TfNSW M12 Interface Agreement and subsequent construction licences.
Revised performance outcome (Transport) The project is designed to be compatible with existing infrastructure and future transport corridors	The proposed works, located within the existing infrastructure corridor for the M12 Motorway project, include road and utility construction to support integration with the M12 and SM-WSA developments, along with watermain investigations and connections to existing services. The proposed works have been designed to ensure full compliance with Sydney Water's technical requirements and standards for water utility infrastructure, while also facilitating integration with the M12 Motorway project.
Revised performance outcome (Cumulative impacts) Cumulative impacts are managed through coordination of construction activities and communication processes with nearby projects (Western Sydney International, M12 Motorway, The Northern Road, St Marys Intermodal and St Marys Commuter Car Park Expansion)	The proposed works would be located within the existing infrastructure corridor for the M12 Motorway project. Cumulative impacts would be managed through coordination with the M12 construction contractor, in accordance with the TfNSW M12 Interface Agreement and subsequent construction licences.
Revised performance outcome (non-Aboriginal heritage) Impacts on non-Aboriginal heritage items and archaeology are minimised or where possible avoided	The curtilage of the McGarvie Smith Farm (listed as item I857 as a site of local heritage significance in the Penrith City Council Local Environment Plan) is approximately 50m to the north of Elizabeth Drive. The curtilage of Mc Masters Farm is located to the north west of the M12 intersection. The heritage items in have both areas have been subject to disturbance and development. Due to the extent of disturbance non-Aboriginal heritage items are highly unlikely to be in the vicinity of the work areas. The Unexpected Heritage Finds Procedure would be implemented during work.
Revised performance outcome (Aboriginal heritage) The heritage significance of Aboriginal objects and places are protected, conserved and/or managed in order to ensure the project does not diminish the story and cultural understanding associated with the objects and places of Aboriginal people in New South Wales	A search of the Aboriginal Heritage Information Management Sydney (search date 29/05/25) confirmed no new sites in the vicinity of the work areas. The work area in the M12 work corridor has been highly disturbed for road work and other utilities (including telecommunications, electrical, gas, sewer and water). The extent of disturbance and evidence of prior investigation in this location indicates a very low probability of unknown Aboriginal objects occurring in the work areas. The Unexpected Heritage Finds Procedure would be implemented during work.
EPBC 2020/8687	Not considered further as the works would not impact protected matters or extend into or affect Commonwealth Land.

3. Environmental review

The following table provides a risk review of the potential environmental impacts of the proposed works.

Table 3 Environmental review

Environmental review	Yes / No	Description of impacts (including consideration of safeguards required by the Approved Project)
Is the proposal to take place outside of the construction footprint of the project	Yes	Works are largely within the construction footprint assessed by the Approved Project however they are outside the SSTOM site access schedule and are within the M12 construction project footprint at two locations where the SM-WSA Project shares a boundary with the M12 project. No additional impacts are predicted for these works outside the construction boundary.
Is the location of works within the existing EPL premise boundary	No	EPL no 21807 has been issued to Webuild S.P.A for the Sydney Metro Western Sydney Airport - Stations, Systems, Trains, Operations and Maintenance Package. The EPL premise boundary will be amended to incorporate any works approved under this Environmental Review.
Will the works take longer than 2 weeks to complete.	Yes	Utility construction works may take 4 weeks to completed. Batters and tie ins are also anticipated to take longer than 2 weeks. No potential community impacts are anticipated however will be managed through the consultation. OOHW are not anticipated for the proposed works, however, if OOHW are stipulated by ROL conditions or other requirements, additional assessment and approval separate to this Environmental Review would be required. Potential traffic management will be managed through the traffic management process, CTMP and include all works in accordance with required ROLs.
Does the work require OOHW approval	No	OOHW are not anticipated for the proposed works. However, if OOHW are stipulated by ROL conditions or other requirements, additional assessment and approval processes would be followed, in accordance with the PLM OOHW Procedure for the project.
Will the works impact an EEC or threatened species	No	The clearing of EEC and impacts to threatened species are not required for the proposed works.
Will works impact on native vegetation	No	The work areas have been fully cleared of all vegetation as part of the M12 and Elizabeth Drive works. Some landscaping of the areas is now underway. The work will avoid impacts on vegetation and there will be no impact to biodiversity from the works. The clearing of native vegetation is not required for the proposed works.
Will the works impact on habitat trees	No	Clearing habitat trees is not required.
Will clearing of non EECs or ground disturbance be of High / moderate condition vegetation. What is the area of impact	No	The clearing or ground disturbance in areas of high or moderate value vegetation is not required for the proposed works.

Will the works result in medium / high noise or vibration impacts Will noise and vibration impacts on sensitive receivers be greater than that predicted in the EIA	No	In the context of the surrounding construction the works will be low impact and no impacts to residential or other sensitive receivers are expected. Management of noise impacts will be communicated to the workforce during specific survey team toolbox talks.
Will the works result in medium/ high air quality impacts	No	Possible air quality impacts include dust and particulates generated from plant and equipment as well as excavation activities. With the implementation of mitigation measures included in the Air Quality Management Sub-Plan impacts would be managed.
Will the activity be located adjacent to or in close proximity to sensitive receivers	No	The works are not in close proximity to residential receivers.
Would there be additional impact from what was predicted in the EIS on an Aboriginal / Historic heritage site as a result of the works	No	There are no known Aboriginal or non-Aboriginal heritage within the works areas. Due to the highly disturbed nature of the work areas the potential for impact to any heritage site is considered negligible. The Unexpected Heritage Finds Procedure will be implemented for the works. Management of heritage and the Unexpected Finds Procedure will be communicated to the workforce during specific survey team toolbox talks.
Are works within 10m of a watercourse	No	The proposed works are not within 10m of a watercourse.
Are works in an area of known contamination	Yes	The proposal would not result in any change to the location of areas of environmental concern, potential contamination sources and overall risk ratings, compared to the approved project. The Contamination and Asbestos Unexpected Finds Procedure will be implemented during the construction.
Will the works result in temporary or long-term traffic impacts	No	Traffic controls will be installed in accordance with the approved TMP and approved ROL where applicable and in conjunction with the M12 constructor. There are no anticipated long-term traffic impacts and access to properties would be maintained at all times. Temporary impacts would be localised and can be managed appropriately by the existing conditions of approval, REMMs and performance outcomes.
Will the works result in visual impacts to sensitive receivers	No	No change from the approved Project
Will the works involve significant earthworks	No	The works will involve minor earthworks and are consistent with the scope of work originally approved. No additional mitigation measures required

4. Recommendation

Based on the above assessment, and with reference to the SM-WSA EIS and Submissions Report, including the conditions of approval and associated CEMP and plans, it is recommended that:

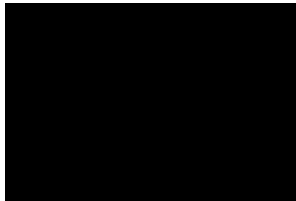


The proposed design/construction change is consistent with the Approved Project SM-WSA EIS and Submissions Report, including the conditions of approval, has negligible impacts on the community and environment and no further assessment is required.

5. Certification

The above information provides a true and fair review of the proposed works.

Prepared by (signed):



Date: 17/6/25

Name: 

Position: Parklife Metro D&C Environment Manager

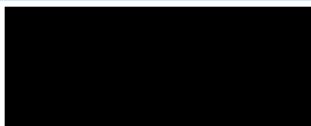

6. Endorsement

I have reviewed the above review and provide the following endorsement:

✓	The proposed design/construction change is consistent with the Approved Project SM-WSA EIS and Submissions Report, has negligible impacts on the community and environment and no further assessment or modification of the planning approval is required.
	The proposed design/construction change is likely to be consistent with the Approved Project SM-WSA EIS and Submissions Report, however more than negligible impacts are expected on the community and environment and further assessment is required.
	The proposed design/construction change constitutes a project modification and requires further assessment and approval.

This endorsement is conditional on the following:

1. All works will be carried out in accordance with the Approved Project SM-WSA EIS and Submissions Report and the Project Conditions of Approval.
2. All works will be carried out in accordance with the approved Construction Environmental Management Plan and any relevant sub plans.

Signed:	
Endorsed by:	 A/Senior Manager Planning Approvals
Date:	17/06/2025

Appendix A – Figures

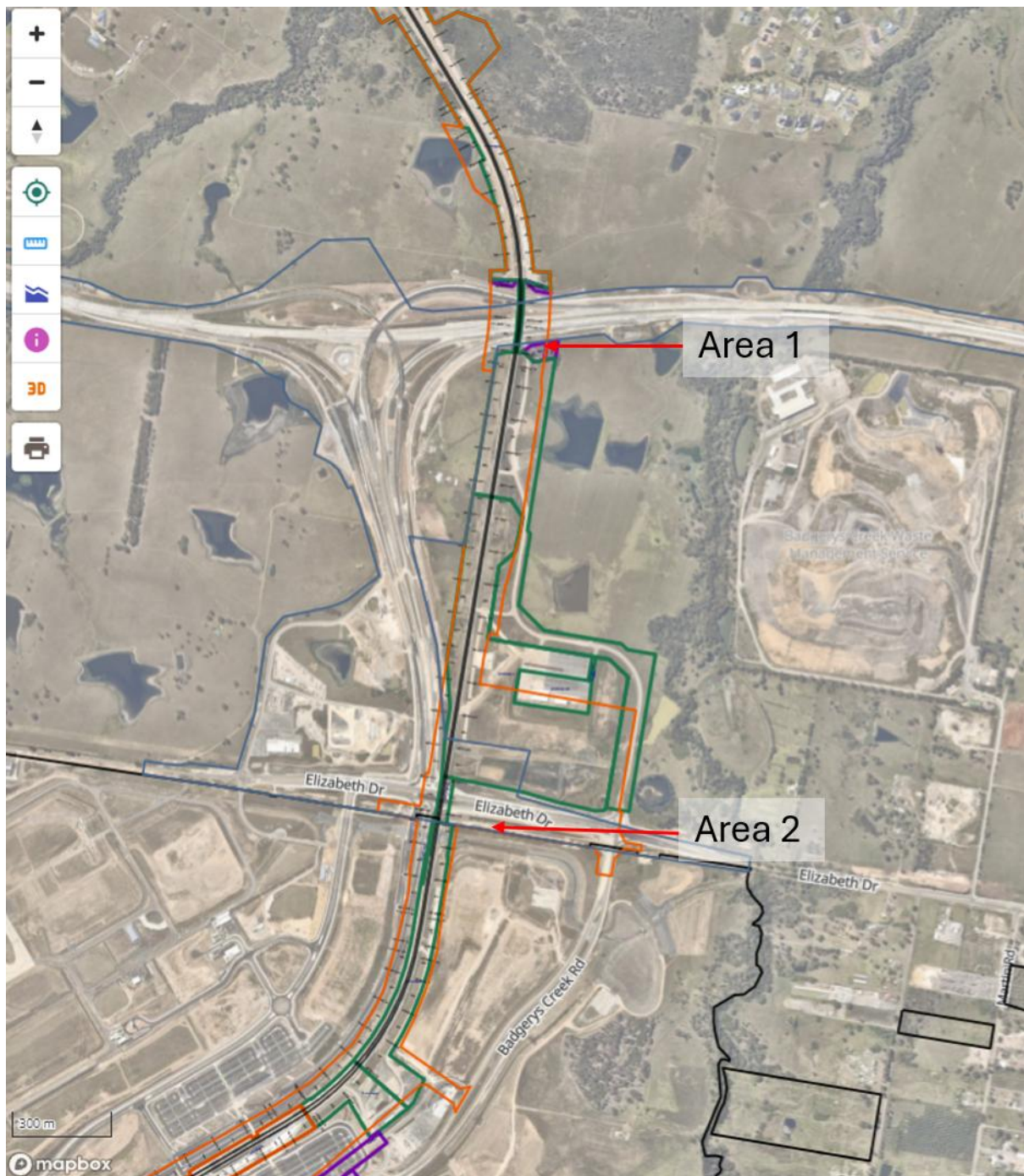


Figure 1 Approximate location of proposed buffer areas and water utility works. Located outside Western Sydney Airport boundary (black) and within M12 Construction Boundary (blue) but within SMWSA EIS Construction Boundary (orange) and the updated construction boundary (green).

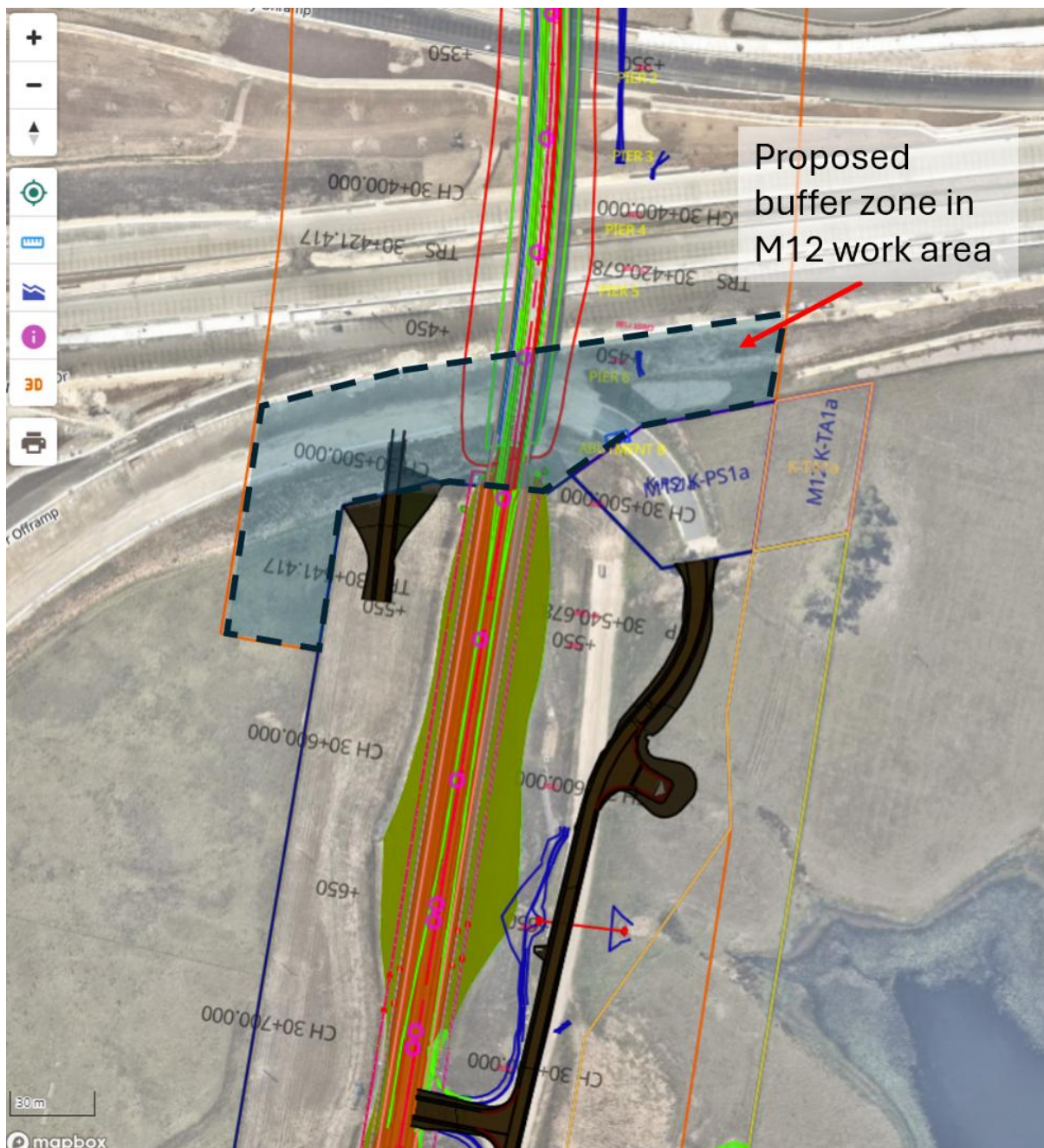


Figure 2 Area 1 Proposed buffer zone in M12 work. Approximately 40m width.



Figure 3 Area 2 Location of proposed water utility works.

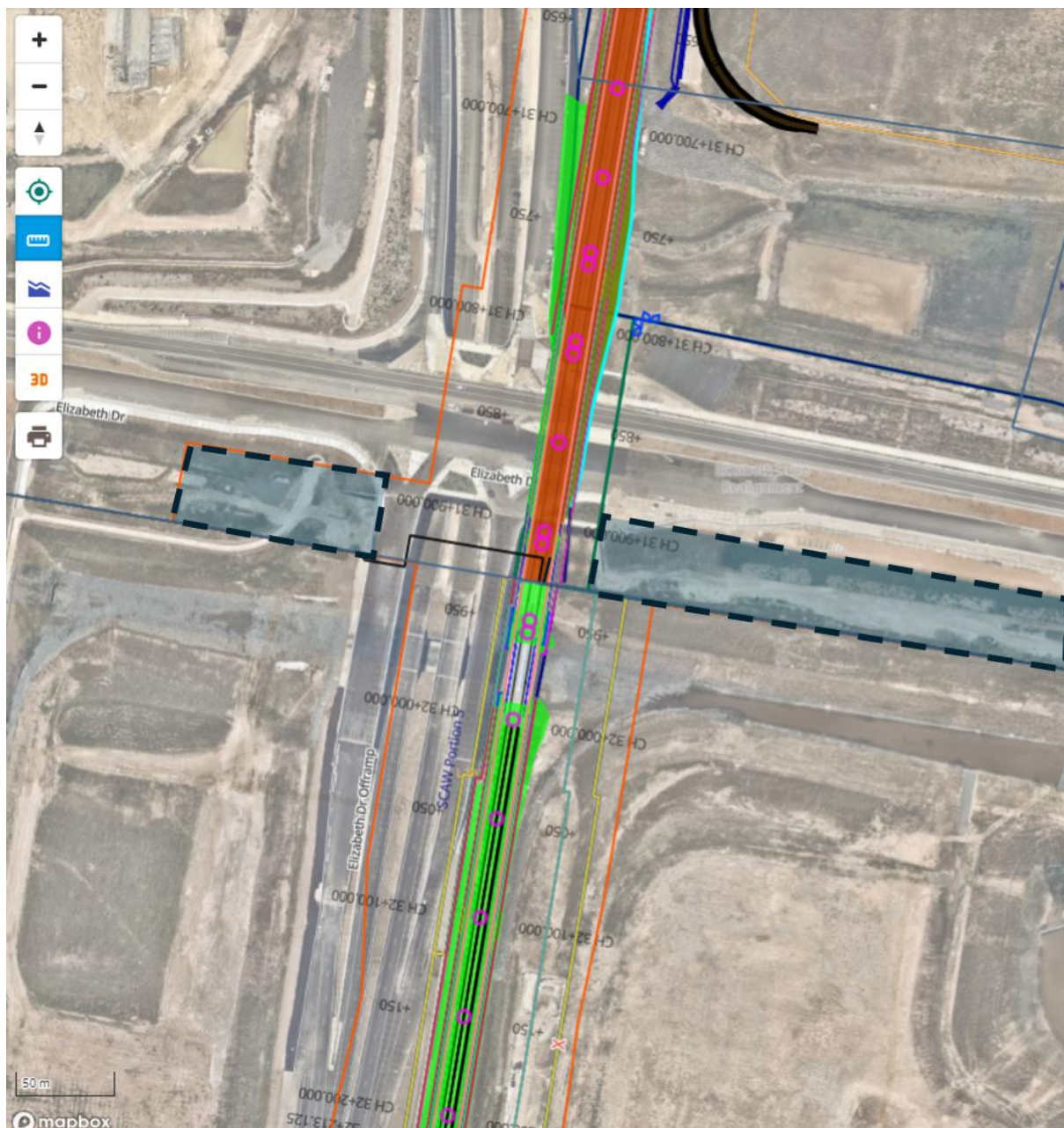


Figure 4 Area 2 Proposed buffer zone in M12 work area. Approximately 40m width.

DEVELOPER CONTR

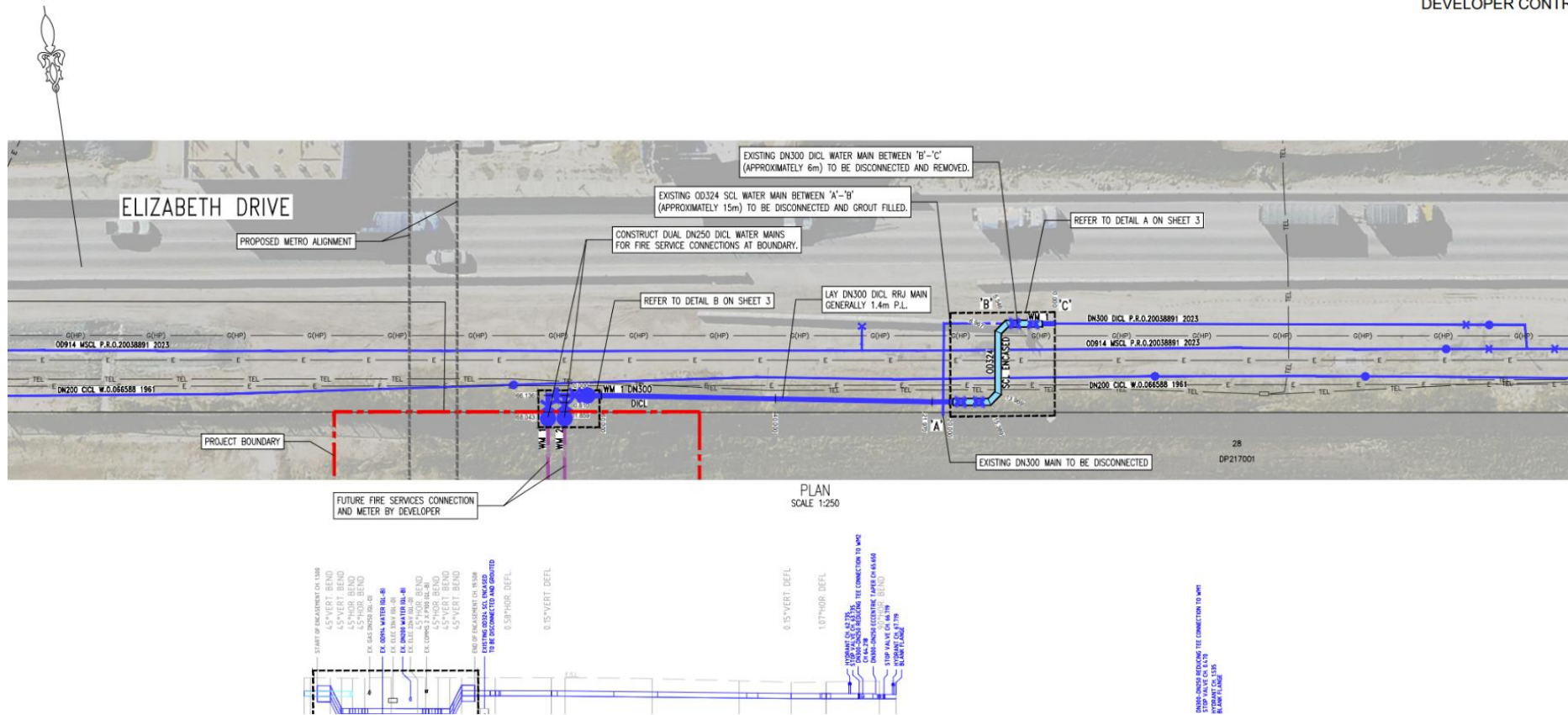


Figure 5 Extract from Sydney Water Airport Business Park Precinct Water Main Connection (Case No 192283PW)

OFFICIAL

Appendix A – AHIMS Search Results

