Metro Body of Knowledge

Planning Approval Environmental Review Form

SM-22-00008046

Sydney Metro – Metro Body of Knowledge (MBoK)

Assessment Name:	St Marys Station Utility Works
Prepared by:	Parklife Metro
Prepared for:	Sydney Metro – Western Sydney Airport, Stations, Systems, Trains, Operations and Maintenance Works (SSTOM)
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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	The utility works addressed in this environmental review are located outside the approved SM-WSA Project boundary at the St Marys Station site as shown in Appendix A (Figure 1). The works will occur within at the following locations: • Stormwater: new pipe infrastructure on East Lane (approx. 10m) and Chesham Street (approx. 10m) • Watermain: new watermain (approx. 190m) along Chesham Street between Lethbridge Street and Glossip including decommission of 6m of existing main on Glossop St • Electrical: decommission existing high voltage service to St Marys site
Scope of works	Utility construction and decommissioning is required in several locations around the St Marys Station site. This environmental review addresses water, stormwater and electrical utility works. <u>Utility investigations</u> Utility investigations will supplement initial desktop studies and "Dial Before You Dig' (DBYD) information. The works will provide positive confirmation of utility locations to finalise design and ensure safety of workers during construction. Work will include: • Field inspection and survey • Electronic detection and location and ground penetrating radar (GPR) • Pothole and trenching to expose existing services as per utility providers DBYD guidelines Three investigation areas fall outside the construction boundary. <u>Construction</u> • Standard open trench pipelaying construction methods will generally be used for both stormwater and watermain construction. If required non-destructive dig (NDD) techniques may be used close to existing utilities • Construct approximately 190m of 200mm diameter Ductile Iron Cement Lined (DICL) pipes to connect with existing watermain. • Construction connection tee and install all fittings at junction of new 200da watermain and existing 300mm diameter Cast Iron Cement Lined (CICL) watermain along Glossop Street

<table>
<tr><td></td><td>

Construct 375mm diameter reinforced concrete pipe and box culvert at East Lane
Construct 525mm diameter reinforced concrete pipe and box culvert at Chesham Street. Demolish one existing pit to accommodate new drainage
Decommission high voltage power supply to the HV switch station on Glossop Street. Includes removal of one underground to overhead (UGOH) pole on the northeast corner of Glossop and Hobart Street and removal of one UGOH earth.

</td></tr>
<tr><td>Justification for works</td><td>Permanent utilities are required to service St Marys Station and Precinct area.

Sydney Water have approved plans for the scope of work to be delivered under case no, 207822. The works complies with Sydney Water's technical requirements and standards. Construction of the watermain is required to meet Sydney Water technical requirements.

Endeavour Energy has issued a Notice of Approval to certify Drawing No. 530849A. The works have been designed by PLMs level 1 Accredited Service Provider and will meet all Endeavour Energy technical requirements.

All stormwater works subject to Parklife Metro D&C design certification process, which includes independent certification of all designs.

The SM-WSA EIS outlines the approach to identify and assess additional utility works. This review addresses that process in Section 2 below.</td></tr>
<tr><td>Timeframe for works</td><td><u>Investigations include non-intrusive and intrusive investigations</u>
Commencing in November 2025 (pending approvals). Noting that works to undertake the intrusive investigations outside of the construction boundary will take approximately 1-2 days at each location.

<u>Construction</u> Commencing in April 2026.
Stormwater: Works at East Lane and Chesham Street will require approximately 7 days of work at each location

Watermain: between Lethbridge Street and Glossop Street will require approximately 30 days of work

Electrical decommissioning will require approximately 1-2 weeks of work</td></tr>
<tr><td>Work hours, workforce and equipment / machinery</td><td><u>Utility Investigations</u>
<table>
<tr><th>Works</th><th>Method</th><th>Personnel and equipment</th></tr>
<tr><td>Survey</td><td>-Standard survey equipment
-Hand operated detection and GPR equipment
-Survey would include inverts of utility pits where required and pit lids to be lifted as required</td><td>2 x surveyors
1-2 light vehicles
1 x total survey station / jigger
2 x utility search operators / GPR operators
More than 1 survey team may be working</td></tr>
<tr><td>Potholing and Slit trench as required</td><td>- Traffic control and barriers as per TMP</td><td>1 x Vacuum Truck
1 x 5t Excavator (hammer attachment if required)</td></tr>
</table>
</td></tr>
</table>

	-Concrete saw for road opening -Vacuum truck or excavator as required -Expose utility and survey -Backfill and make good surface	1 x Road Saw 1 x 8t Tipper 2x Traffic control vehicles 1 x Rammer 1 x Vibrating plate Survey Equipment **Additional equipment if night work required** 2-3 x Day Makers Up to 10 workers may be on site

Utility Construction - Watermain and Stormwater

Works	Method	Personnel and equipment
Excavation	-Traffic control and barriers as per TMP for each work period -Concrete saw for road opening -Excavation to required depth and placement of bedding material	1 x 5t Excavator (hammer attachment if required) 1 x Road Saw 1 x 8t Tipper 2-3 x Day Makers 2 x Traffic control vehicles **Additional equipment if night work required** 2-3 x Day Makers Up to 10-20 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 3 x Day Makers 2 x Traffic control vehicles **Additional equipment if night work required** 2-3 x Day Makers Up to 10-20 workers may be on site
Testing and commissioning	In conjunction with Sydney Water	2 x Sydney Water truck 2 x Traffic control vehicles Up to 10 workers may be on site
Watermain only. 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

Utility Construction - Electrical decommission

Works	Method	Personnel and equipment

Decommission	Disconnection and reconnection of power lines	-Connections including HV lines as per Endeavor Energy specifications -Ensure all cable to private property is fixed and secure

Whenever possible work would be carried out during standard work hours as set out in Condition E38 of the Conditions of Approval (CoA).

(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 anticipated due to road occupancy conditions. Where this is required Parklife Metro will scope works to prioritise use of evening works hours as far as possible within the ROL conditions

• OOH Evening 6.00pm to 10.00pm Monday to Saturday and 6.00pm to 10.00pm Sunday

• OOH Night from 10.00pm to 7.00am Monday to Friday and from 10.00pm to 8.00am Saturday, Sunday and public holidays

Any OOHW would be carried out under the SSTOM package Environmental Protection Licence (EPL), in accordance with Condition E41(c)(i) which permits different construction hours where an EPL is in force.

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
Chapter 8 of the EIS (Project description – construction) 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: • 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	The utility works are all adjacent to the construction footprint at St Marys as shown in Figure 2 and 3 in Appendix A. 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.
Chapter 12 of the EIS (Non-Aboriginal heritage) *Section 12.5.1 St Marys study area (Heritage items and conservation areas)* *Heritage items* **St Marys Railway Station** SHR 01249, RailCorp s170 (SHI 4801036), Penrith LEP 2010 I282 (SHI 2260282) State significance. This item includes the St Marys railway station and curtilage as well as the Goods Shed building and jib crane which are located in the forecourt plaza south of the existing heavy rail train station. The overall impact of the project as assessed in the EIS on the significance of the item was assessed as moderate *Potential Heritage items* **Marys PostWar Commercial Building** **St Marys Munitions Workers Housing** Overall impact on the significance of both these items was assessed as negligible.	There is no direct or indirect impact to any recorded heritage item from the proposed utility works. Due to the extent of disturbance in the work areas from existing roads, infrastructure and utilities unknown non-Aboriginal heritage items or archaeology are highly unlikely to be in the vicinity of the work areas. The Unexpected Heritage Finds Procedure would be implemented during work. The works would have no impact on heritage items (including areas of archaeological sensitivity), beyond the impacts assessed in the Approved Project.

Chapter 13 of the EIS (Aboriginal heritage) and Revised Aboriginal Cultural Heritage Assessment Report At the St Marys construction site the following potential impacts were described • There are no registered AHIMS sites within the curtilage of the St Marys construction site. There are no AHIMS sites within 200 metres of the construction site • Based on the high levels of past disturbance in this construction site (including road corridors, rail corridor, the existing St Marys Station, buildings and services), no areas of archaeological sensitivity have been identified within its bounds • There are no known Aboriginal cultural values specifically associated with this construction site. • No potential direct impacts to Aboriginal archaeological sites have been identified in this construction site. No specific cultural values have yet been identified in this construction zone.	A search of the Aboriginal Heritage Information Management Sydney (search date 18/09/25) confirmed no new sites in the vicinity of the work areas. The work areas for the utilities are 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.
CSSI CoA E2 – Minimising clearing of native vegetation	No clearing of vegetation would be required and no areas of remnant vegetation remain within work areas.
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.	Where possible all construction works will be undertaken during standard construction hours, in accordance with this condition.
CSSI CoA E41 Variation to Work Hours Notwithstanding Conditions E38 and E39 work may be undertaken outside the hours specified in the following circumstances:.. c) By Approval, including: (i) where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or..	Some out of hours works (OOHW) are anticipated due to expected road occupancy conditions. Any OOHW would be carried out under the SSTOM package Environmental Protection Licence (EPL), in accordance with Condition E41(c)(i) which permits different construction hours where an EPL is in force. Where this is required Parklife Metro will scope works to prioritise use of evening works hours as far as possible within the parameters of any ROL conditions • OOH Evening 6.00pm to10.00pm Monday to Saturday and 6.00pm to 10.00pm Sunday • OOH Night from 10.00pm to 7.00am Monday to Friday and from 10.00pm to 8.00am Saturday, Sunday and public holidays
CSSI CoA E64 – The CSSI must be constructed and operated with the objective of minimising light spill to surrounding properties. All lighting associated with the CSSI must be consistent with the requirements of: • ASINZS 4282:2019 Control of the obtrusive effects of outdoor lighting, relevant Australian Standards in the series ASINZS 1158 - Lighting for Roads and Public Spaces;	Any night lighting required during OOHW will be managed in accordance with the appropriate guidelines to minimise light spill and impacts to sensitive receivers as outlined in the approved Visual Amenity Management Sub-plan SMWSASSM-PLD-1NL-PC-PLN-000027.

• NASF Guideline E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports; and • NASF Guideline C: Managing the risk of wildlife strikes in the vicinity of airports. Mitigation measures must be provided to manage residual night lighting impacts to protect properties adjoining or adjacent to the CSSI, in consultation with affected landowners.	
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 (e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMP.	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.
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 and electrical utility work will be carried out in conjunction with Sydney Water and Endeavour Energy through the accredited Services Provider. Coordination with the Penrith City Council occurs through the process as agreed by the Interface Agreement.
CSSI CoA E115 – Safe pedestrian and cyclist access must be maintained around the St Marys construction site during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternate route which complies with the relevant standards, must be provided and signposted before the restriction or removal of the impacted access.	Pedestrian and cyclist access would be addressed through the preparation of the Traffic Management Plan or Traffic Guidance Scheme for the work.
Revised performance outcome (Transport) Safe access to properties and businesses is maintained during construction, unless alternatives are agreed with property owners and businesses	Access to properties along Chesham Street would be maintained and would be addressed through the preparation of the Traffic Management Plan or Traffic Guidance Scheme for the work. No impacts to business is anticipated from the utility work beyond the impacts assessed in the Approved 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 adjacent to the St Marys station work site. Cumulative impacts would be managed through coordination Penrith City Council and TTLG as required.
Revised performance outcome (non-Aboriginal heritage)	There is no direct or indirect impact to any recorded heritage item from the proposed utility works. Due to the extent of disturbance in the work areas from existing roads, infrastructure and utilities

-Impacts on the State heritage significant St Marys Railway Station Group are avoided or minimised so that the overall heritage value of the item is maintained -Impacts on non-Aboriginal heritage items and archaeology are minimised or where possible avoided	unknown non-Aboriginal heritage items or archaeology 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 18/09/25) confirmed no new sites in the vicinity of the work areas. There is 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 outside the construction footprint assessed by the Approved Project. The EIS considered such utility works as discussed above. Impacts would be consistent with those assessed in the EIS, are anticipated to be localised, and can be managed appropriately by the existing conditions of approval, revised environmental mitigation measures (REMMs) and performance outcomes.
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 investigation works for the locations outside of the approved Project Boundary will take 1-2 days of work only. Utility construction works may take 2 months to complete as described in the timeframe for work above. Potential community impacts will be managed through the consultation and OOHW process. Potential traffic management will be managed through the traffic management process, CTMP and include all works in accordance with the required ROLs.
Does the work require OOHW approval	Yes	OOHW are anticipated for the works and will be determined by ROL conditions when issued. Where OOHW are required 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 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	Yes	The area surrounding the utility work areas are highly urbanised with residential receivers on Phillip Street, Station Street, Chesham Street and Glossop Street and business receivers in the vicinity of East Lane. Noisy works will be required to open road pavement using concrete saws. Small rock hammers may also be required. To ensure appropriate management of noise impacts a DNVIS would be prepared as required for these works. Mitigation measures included in the DNVIS would be implemented. This may include additional mitigation measures (AMM) such as: phone calls, monitoring, individual briefings, alternative accommodation, specific notification, letterbox drops, duration reduction and Project specific respite offer (RO). Other mitigation measures may include-scheduling of noisiest work as early as possible in the work period to minimise disturbance to residential areas and use of temporary noise barriers around plant and equipment.
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	Yes	The works would be located adjacent to residential properties along Chesham Street and Glossop Street. Sensitive receivers would be notified of the upcoming works. Further community notification and mitigation measures would also be completed for OOHW.
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	No	The proposal is not located within any area of environmental concern and 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	Yes	Works will be within the public road reserve. Temporary traffic impacts are expected to be caused by lane closures required to create safe work spaces within the active road lanes and road reserve area. These lane closures will be determined by the final ROL conditions. 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	Yes	Temporary visual impacts are expected for those nearest residential receivers in the vicinity of the works as construction infrastructure will be visible at the work locations for approximately 8 weeks. On completion of the work all permanent works will be underground. Maintenance hole lids will be visible at grade generally within the existing roadway. No permanent visual impact is expected.
Will the works involve significant earthworks	No	The works will involve minor earthworks and involve open trenches. Open trenching would occur progressively so the area of impact would be limited at any one time. The works 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):

[redacted]

Date: 14/10/25

Name: [redacted]

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:	[redacted]
Endorsed by:	[redacted] A/Senior Manager Planning Approvals
Date:	15/10/2025

Appendix A – Figures

Figure 1 Approved Construction Boundary (orange) and areas subject to this Environmental Review

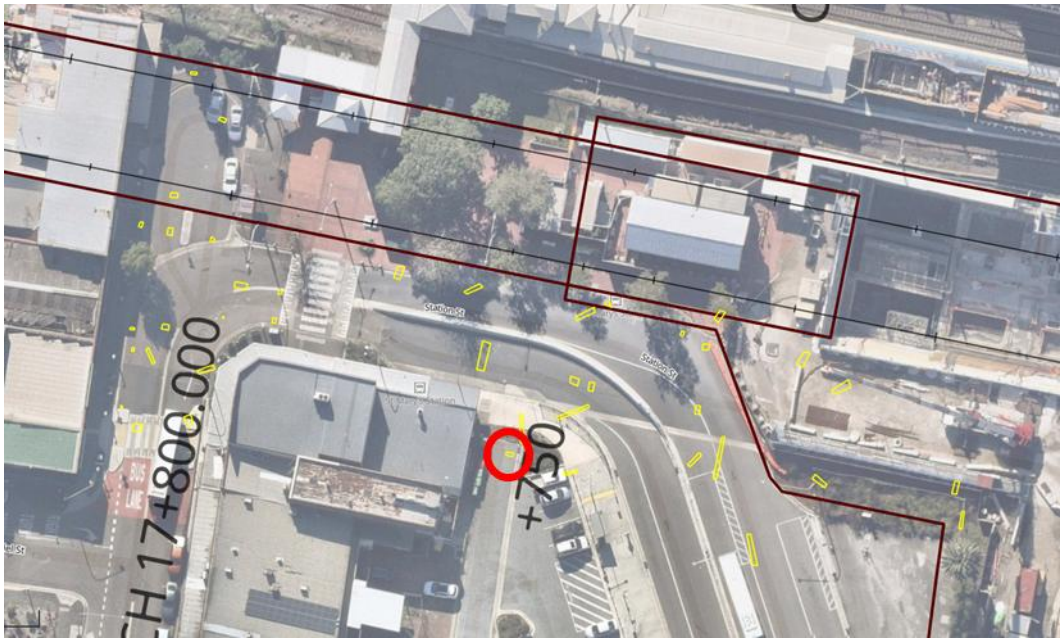

Figure 2a Investigations at East Lane

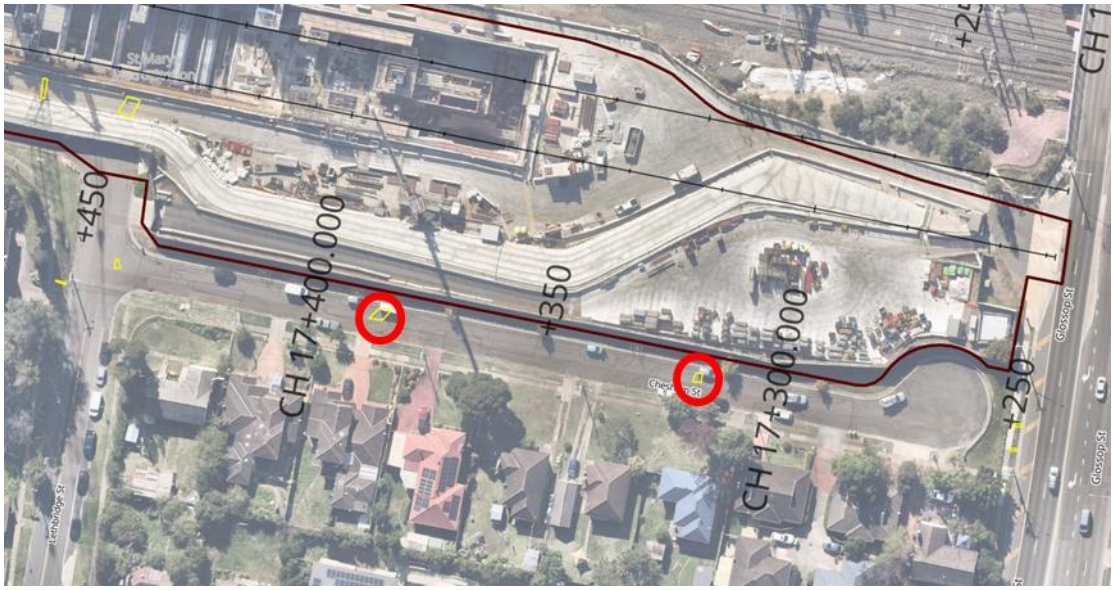

Figure 2b Investigations on Chesham Street

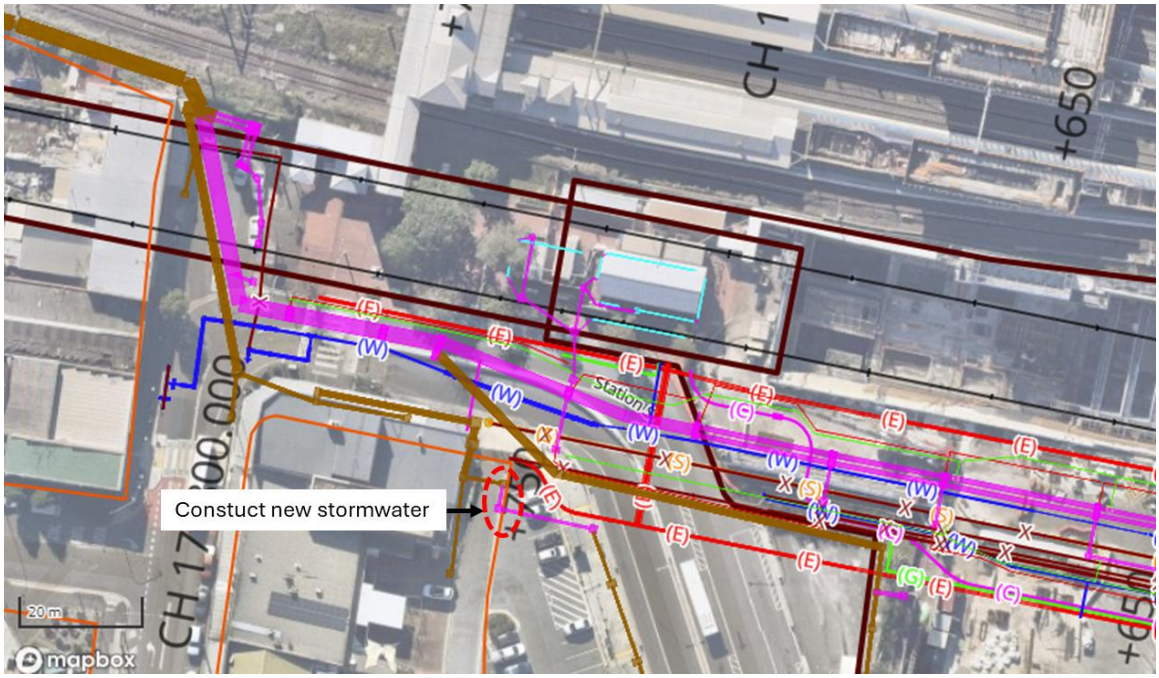

Figure 3 'Area A' Stormwater works on East Lane.

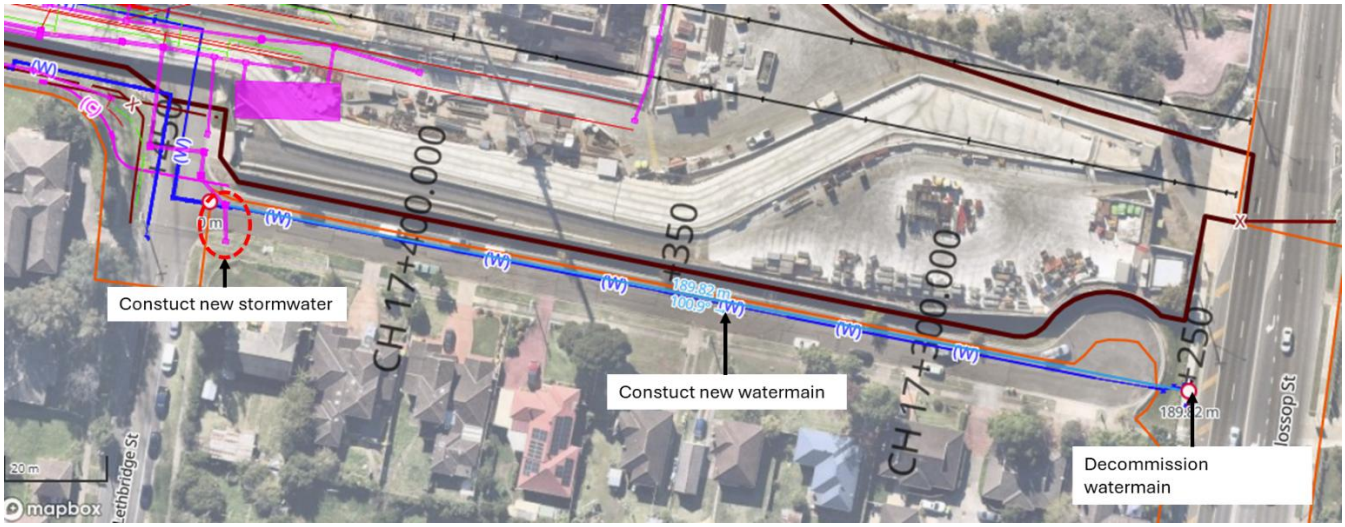

Figure 4 'Area B' Stormwater and Watermain works on Chesham Street

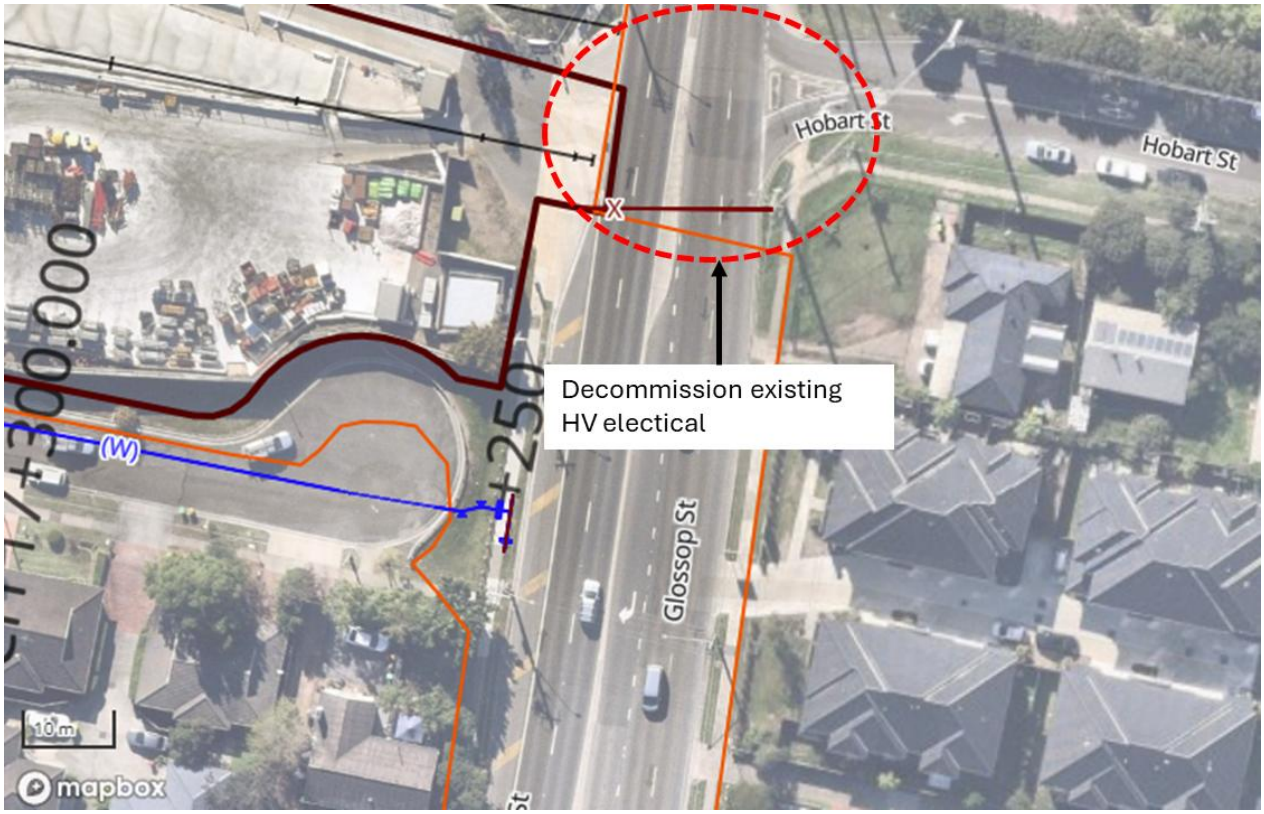

Figure 5 'Area C' Electrical decommissioning works – Glossop and Hobart Streets

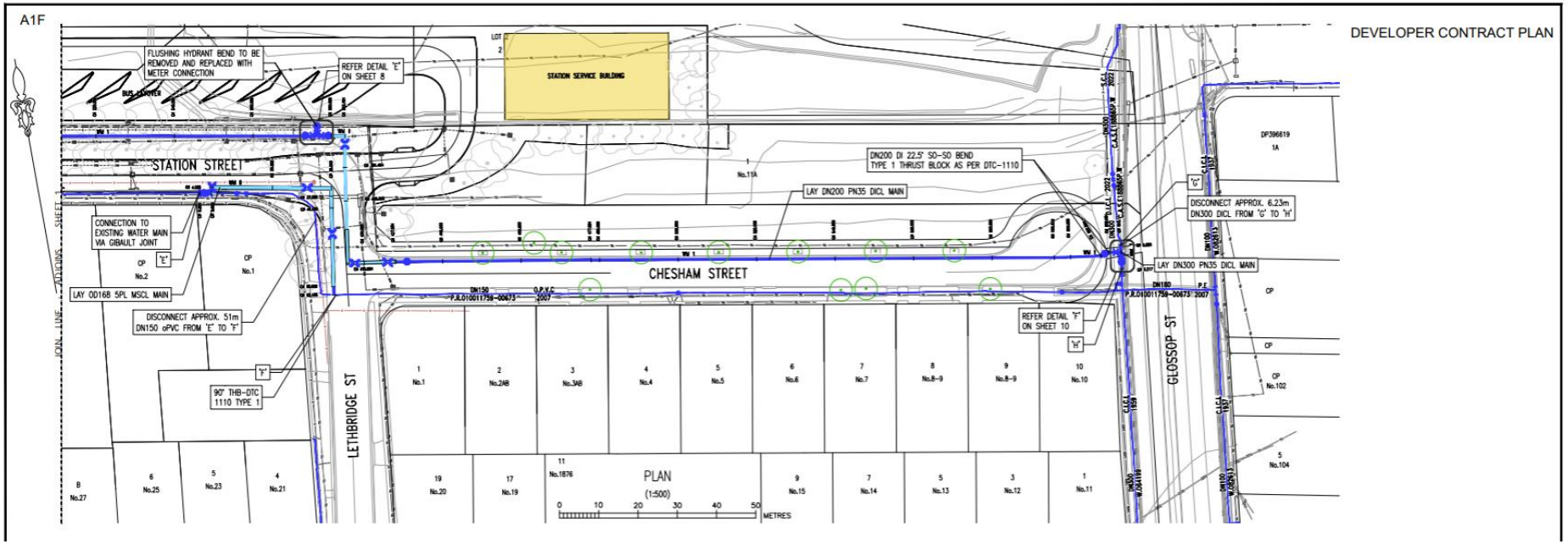

Figure 6 Extract from Sydney Water Details of Services (Case No. 207822PW)

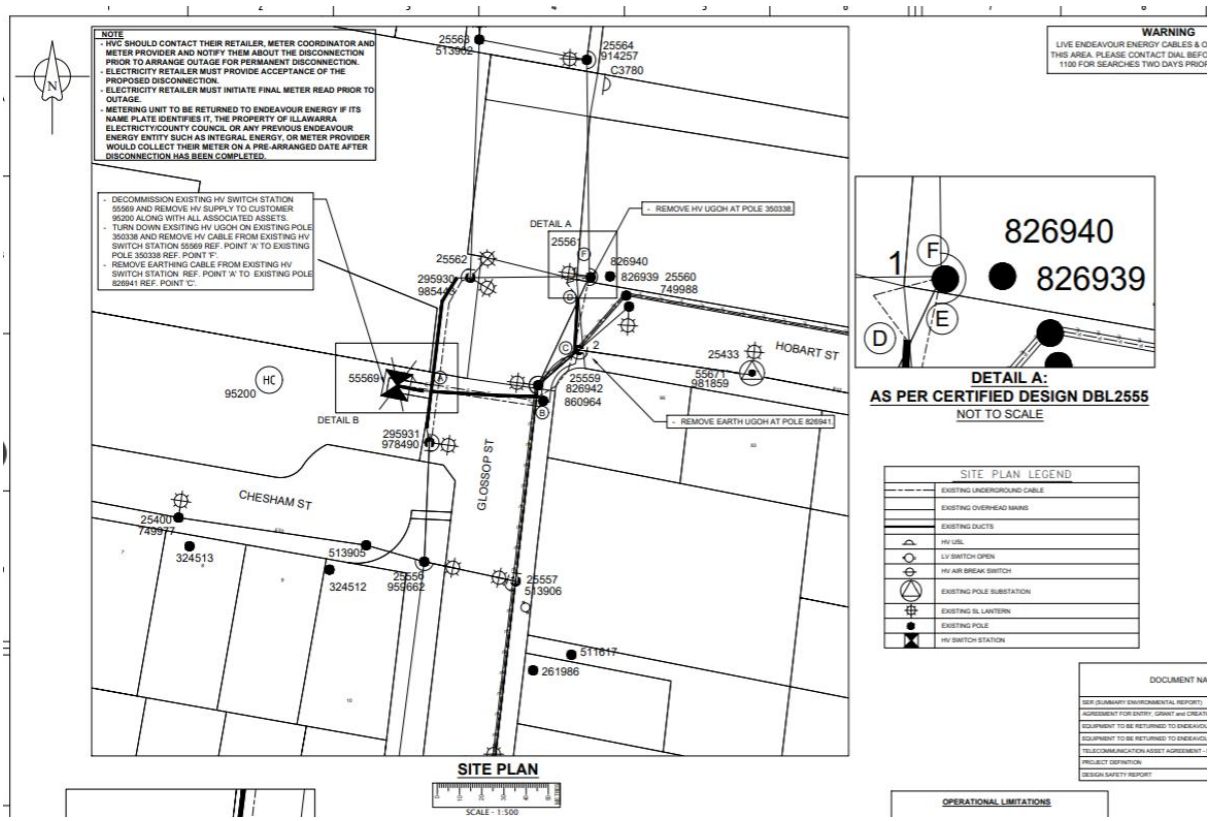

Figure 7 Extract from Endeavour Energy Reference Drawings (530849)

Appendix B – AHIMS Search Results