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Knowledge

# Planning Approval Environmental Review Form

SM-22-00008046

Sydney Metro – Metro Body of Knowledge (MBoK)

<b>Assessment Name:</b>	Luddenham Power Utility Installation
<b>Prepared by:</b>	Parklife Metro
<b>Prepared for:</b>	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 is provided in Section 2.

**Table 1 Description of proposed works**

Description	Overview
Location of works	<p>The work area addressed in this environmental review is located south of the Luddenham Station site outside the SM-WSA Project boundary as shown in Appendix A (Figure 1).</p> <p>The works are located within Lot 100, DP1288092.</p>
Scope of works	<p>The scope of work is to complete an extension of the electricity distribution ducts from the future substation (currently under construction by others), into the Luddenham Station site. Horizontal direction drilling (HDD) will be used to underbore Luddenham Road from Lot 100, DP1288092, south of Luddenham Road, to the Luddenham Station access road. Works will include minor excavation for the HDD entry pit.</p> <p>This environmental review only seeks approval for the portion of work south of Luddenham Road outside the approved construction boundary, however, for clarity the work within the Luddenham Station site relating to the HDD exit are also described.</p> <p><u>Works</u></p> <ul style="list-style-type: none"> <li>Utility investigations may supplement “Dial Before You Dig” (DBYD) information and may include field inspection, survey and potholing as required</li> <li>Site establishment within Lot 100, DP1288092 and minor excavation for HDD entry pit.</li> <li>Trenchless underbore techniques using HDD equipment approximately 100m to install conduit for future electricity connections. Noting that of this length of work approximately only 30m of drilling work will be undertaken outside the approved construction boundary in Lot 100, DP1288092.</li> </ul>
Justification for works	<p>The electricity connection works form part of the future power delivery strategy to Luddenham Station and the wider precinct area.</p> <p>Endeavour Energy has approved the design for spare transmission and distribution ducts for the area around the Sydney Science Park development, which includes conduits to Luddenham Station. This work complies with Endeavor Energy’s technical requirements and standards.</p> <p>The SM-WSA EIS outlines the approach that should be taken to identifying and selecting additional utility works. This environmental review addresses that process in Section 2 below.</p>
Timeframe for works	<p>Construction</p> <ul style="list-style-type: none"> <li>Approximately 3-4 weeks. Commencing in November 2025 (pending approvals)</li> </ul>

### Work hours, workforce and equipment / machinery

Works	Method	Personnel and equipment
Services search and potholing as required	<ul style="list-style-type: none"> <li>-Standard survey equipment</li> <li>-Hand dig or vacuum truck if required</li> <li>-Expose utility and survey</li> <li>-Backfill and make good surface</li> </ul>	1-2 x light vehicle 1 x Vacuum Truck 1 x 5t Excavator 1 x Survey Equipment Crew 4-5
Excavation entry and exit pits	<ul style="list-style-type: none"> <li>-Traffic management as per construction agreement requirements</li> <li>-Excavation to required depth for underbore activities. Approx 3m x 3m x1m</li> </ul>	1 x 5t Excavator 1 x Road Saw 1 x Vacuum Truck (if required) 1 x 8t Tipper Up to 10 workers may be on site
HDD and conduit installation	<ul style="list-style-type: none"> <li>-HDD equipment including mud tank for all drill returns established at entry pit.</li> <li>-Conduits to be pulled back from exit pit.</li> <li>-Connections including access pits as per Endeavor Energy specifications</li> </ul>	1 x HDD including mud tank, generators, drill pipes 1 x Franna crane (pipe delivery) 1 x Delivery trucks Up to 10 workers may be on site
Reinstatement	<ul style="list-style-type: none"> <li>-compaction equipment to reinstate ground</li> <li>- Placement of hot mix asphalt</li> </ul>	1-2 x light vehicle 1 x Delivery trucks 1x Road roller 1 x 5t Excavator 1x Skid Steer 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.

## 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) and Appendix B Revised Project Description of the Submissions Report</i></p> <p>Section 8.11.5 of the EIS and Section 2.11.5 of the Submissions Report 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"><li>the works connect to the construction footprint or to a point adjacent to the construction footprint</li><li>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</li><li>the works can be carried out and managed consistent with the performance outcomes identified in Chapter 27 (Synthesis) or as revised</li></ul>			<p>The electricity connection is adjacent to the construction footprint at Luddenham Road as shown in Figure 1 -3 in Appendix A.</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>Direct and indirect impacts to Luddenham Road alignment (Locally heritage listed I843) have been considered as part of the Approved Project noting there would be no permanent changes to the road alignment and no significant heritage fabric would be removed.</p>						
<p><i>Chapter 13 of the EIS (Aboriginal heritage) and Appendix J Aboriginal Archaeological Report of the Submissions Report</i></p> <p>One Aboriginal heritage item has been identified over 300m from the proposed electricity connections works. The item is not discussed within the EIS or associated documents however was identified in the wider EIS database reviewed as part of this assessment.</p> <table><tr><th>AHIMS site</th><th>Description</th><th>Site Status and mitigation measures</th></tr><tr><td>45-5-5073</td><td>Site is described as an artefact scatter, located approx. 330m south of the work area.</td><td>No additional mitigation</td></tr></table>			AHIMS site	Description	Site Status and mitigation measures	45-5-5073	Site is described as an artefact scatter, located approx. 330m south of the work area.	No additional mitigation	<p>An Aboriginal Heritage Impact Permit 5309 has been issued to Celestino Developments Pty Ltd for the Science Park Zone Substation – Enabling Works (17 July 2024) area. The proposed electricity connection is located within this AHIP boundary shown in Appendix B.</p> <p>A search of the Aboriginal Heritage Information Management Sydney (search date 3 July 25) confirmed no new sites in the vicinity of the work areas. (see Appendix B).</p> <p>The work area has been highly disturbed by the enabling works and substation construction. The AHIP does not require any management of Aboriginal archaeology that may be disturbed in the AHIP area. No further management measures are required.</p>
AHIMS site	Description	Site Status and mitigation measures							
45-5-5073	Site is described as an artefact scatter, located approx. 330m south of the work area.	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 work area.						
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:			All construction works will be undertaken during standard construction hours, in accordance with this condition.						

<p>(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.</p>	
<p><b>CSSI CoA E109</b> Construction Parking and Access Management Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles) must be managed to:</p> <p>(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.</p>	<p>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.</p> <p>No idling, queuing or marshalling of vehicles will be required. Spoil haulage is not applicable to these works.</p>
<p><b>CSSI CoA E110</b> – Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.</p>	<p>Work to deliver the energy utility work will be carried out in conjunction with Endeavour Energy. Works will be managed through an appropriate Interface Agreement or Construction Deed.</p>
<p><b>Revised performance outcome (Cumulative impacts)</b> 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)</p>	<p>The proposed works would be located within Lot 100, DP1288092 which is owned by Celestino Pty Ltd. Cumulative impacts would be managed through coordination with the Celestino interface coordination meetings and in accordance with an appropriate construction licence or deed.</p>
<p><b>Revised performance outcome (Aboriginal heritage)</b> 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</p>	<p>An Aboriginal Heritage Impact Permit has been issued to Celestino Developments Pty Ltd for the Science Park Zone Substation – Enabling Works area (17 July 2024). The proposed electricity connection is located within this AHIP boundary shown in Appendix B. A search of the Aboriginal Heritage Information Management Sydney (search date 3 July 2025) confirmed no new sites in the vicinity of the work areas. (see Appendix B). The work area has been highly disturbed by the enabling works and substation construction. The AHIP does not require any management of Aboriginal archaeology that may be disturbed in the AHIP area. No further management measures are required.</p>
<p><b>REMM AH9</b> Works within the bounds of existing Aboriginal Heritage Impact Permit areas should be undertaken in accordance with the conditions of those permits and with permission from the relevant Aboriginal Heritage Impact Permit holder. Works undertaken within the revised boundaries on Defence Establishment Orchard Hills (Commonwealth land) should be undertaken in accordance with the Defence Establishment Orchard Hills Heritage Management Plan</p>	<p>An Aboriginal Heritage Impact Permit has been issued to Celestino Developments Pty Ltd for the Science Park Zone Substation – Enabling Works area (17 July 2024). The proposed electricity connection is located within this AHIP boundary shown in Appendix B. The work area has been highly disturbed by the enabling works and substation construction. The AHIP does not require any management of Aboriginal archaeology that may be disturbed in the AHIP area. No further management measures are required.</p>

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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. 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 approximately 3-4 weeks to complete. There are no potential community impacts. 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 for the Science Park Zone Substation enabling works. There will be no impact to biodiversity from the works and 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 but these are expected to be minimal due to the limited area of disturbance. 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	The work is within the boundary of AHIP 5309, issued to Celestino Developments Pty Ltd for the Science Park Zone Substation – Enabling Works (17 July 2024) area. The work area has been highly disturbed by the enabling works and substation construction. The AHIP does not require any management of Aboriginal archaeology that may be disturbed in the AHIP area. No further management measures are required.
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	Any traffic controls will be installed in accordance with the approved TMP and approved ROL where applicable. 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:** 24/7/25

**Name:** 

**Position:** Parklife Metro D&C Environment Manager

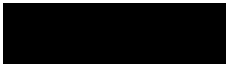

## 6. Endorsement

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

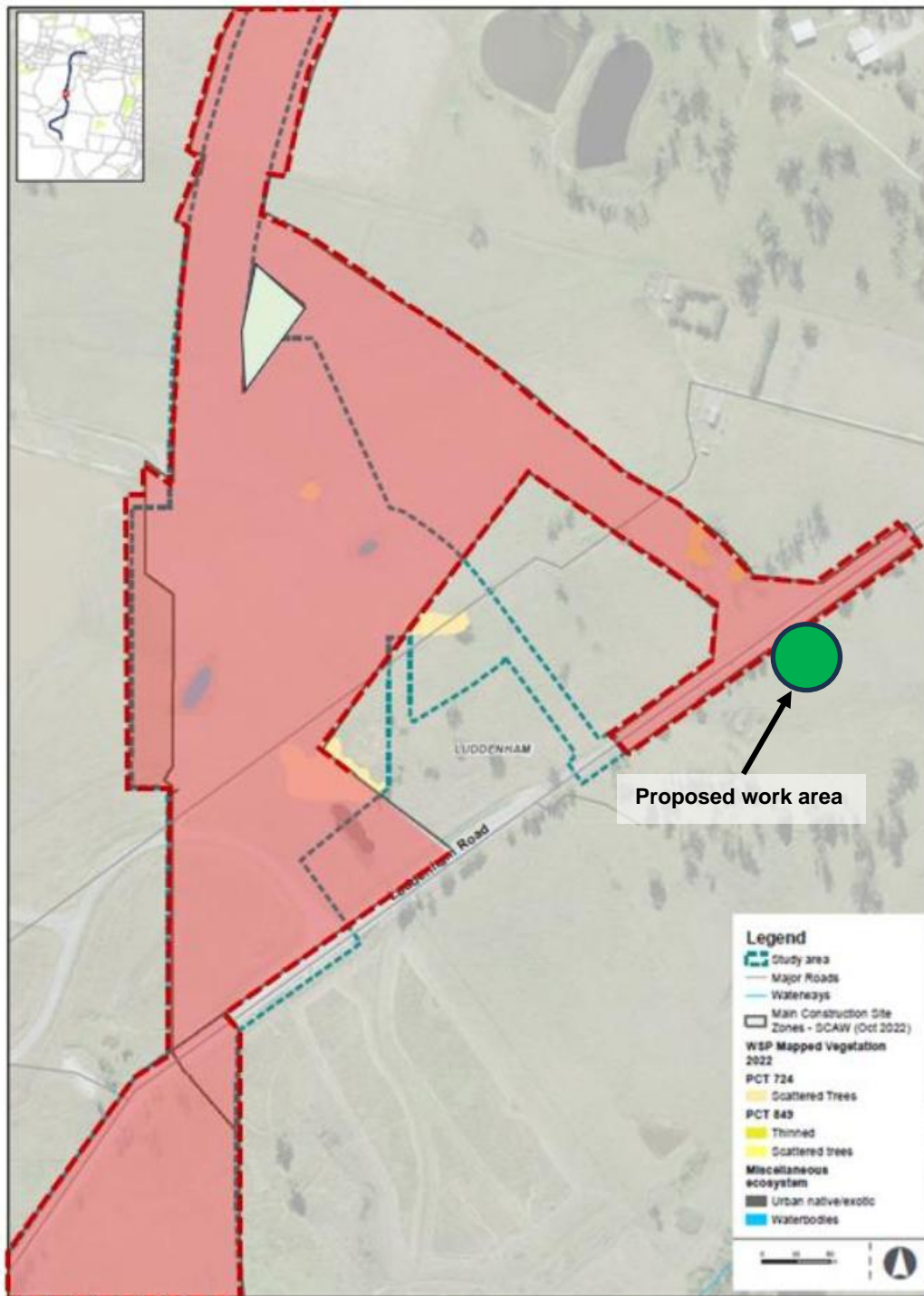
✓	The proposed design/construction change is consistent with the Approved Project SM-WSA EIS and Submissions Report, has negligible impacts on the community and environment and no further assessment or modification of the planning approval is required.
	The proposed design/construction change is likely 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.
3. Compliance with the conditions of the AHIP issued to Celestino Developments, where relevant. Notify Celestino of works occurring within their AHIP area.

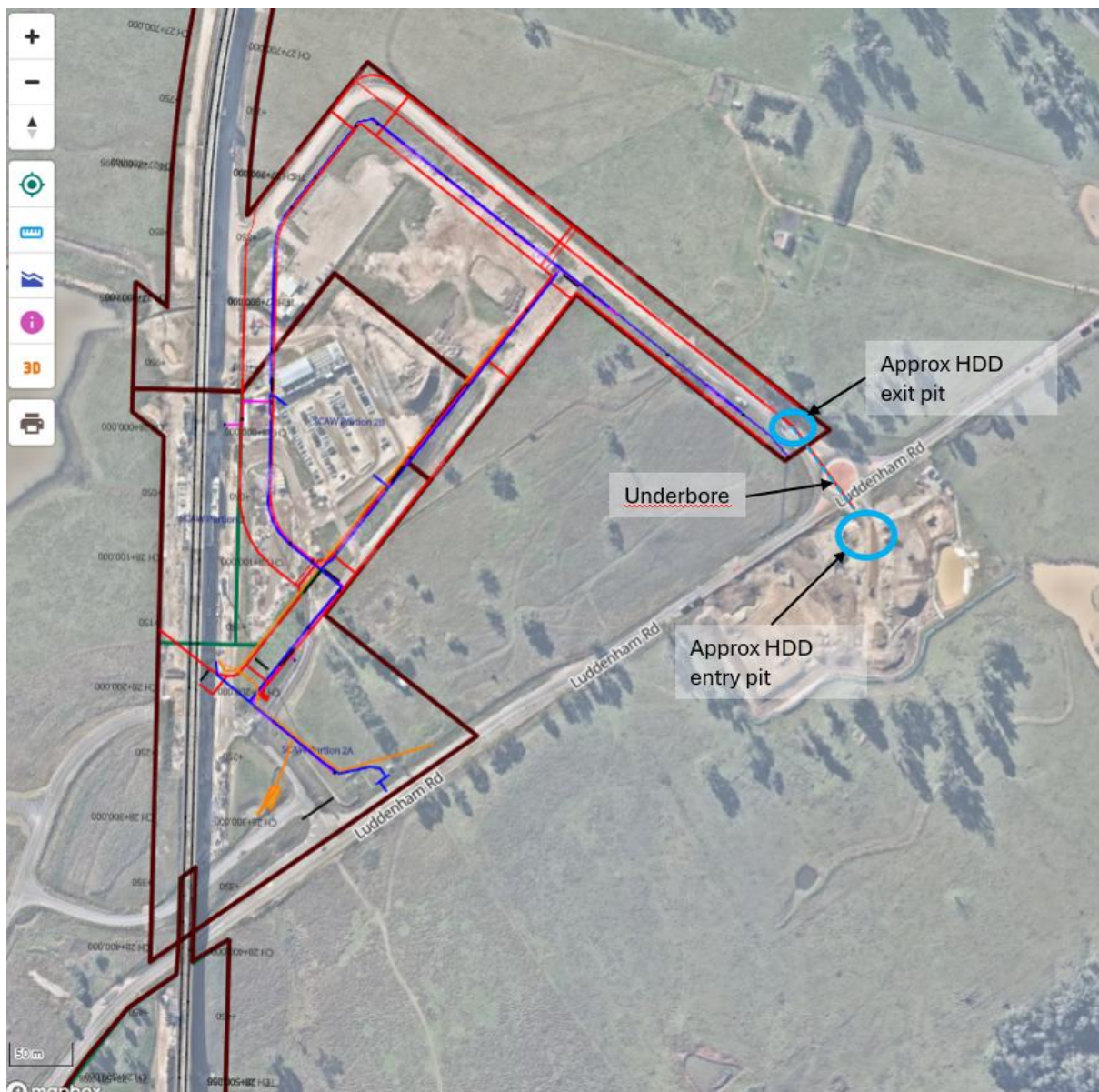
<b>Signed:</b>	
<b>Endorsed by:</b>	 A/Senior Manager Planning Approvals
<b>Date:</b>	29/07/2025

## Appendix A – Figures



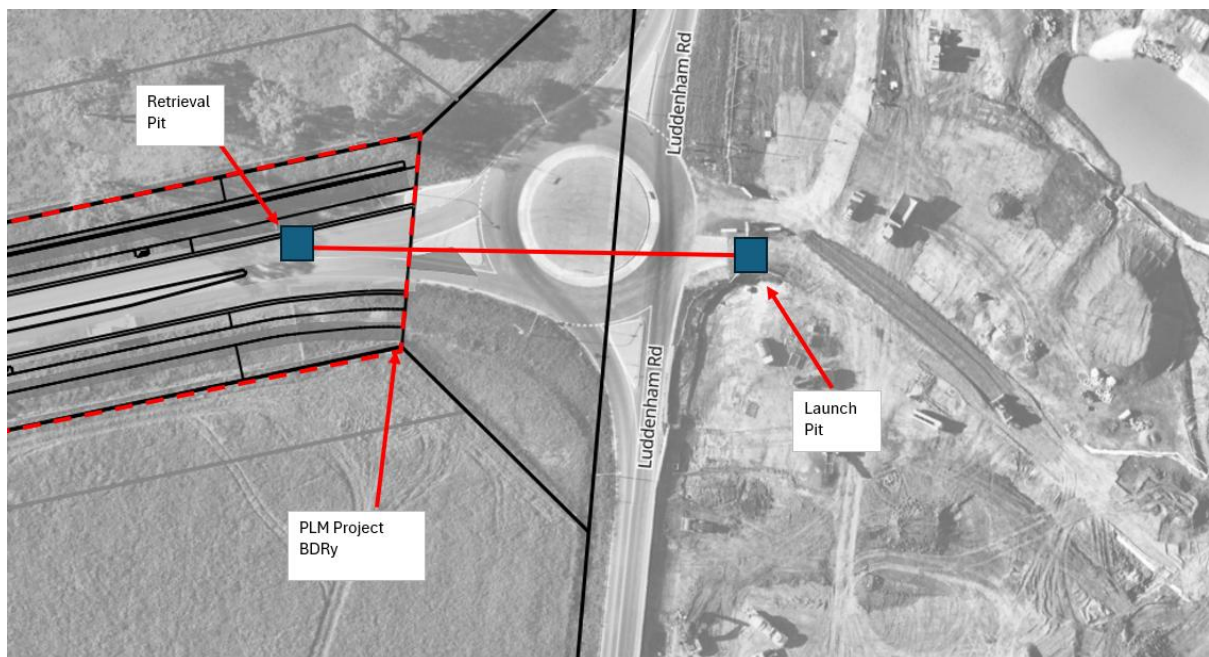
Proposed revised Luddenham Road construction site, shown in red, in comparison to the Approved Project study area.

**Figure 1** Location of utility work located outside the approved construction boundary. (Figure from SM006 – Revised footprint for the Luddenham Road construction site Rev 0.5 approved January 2025)



**Figure 2** Location of proposed utility works. Red and black linework construction footprint handed over for SSTOM works.





**Figure 3** Detail of proposed utility works.

## Appendix B – AHIMS Search Results

