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Thursday, 27 February 2025

Transgrid Reference Number:	**2024-262**
DA / CNR Number:	**DA24/0294 | CNR-68778**
Location:	**221-227 Luddenham Road, Orchard Hills NSW 2748**
Proposal:	**Updated stormwater irrigation/distribution system in the easement**
Transgrid Asset:	**Transmission Line 39 | Yass 330kV to Sydney West 330kV | Structure 524 - 526**

Thank you for consulting with Transgrid regarding this proposal at **221-227 Luddenham Road, Orchard Hills** for changes and/or activities around Transgrid's assets.

Please be advised that after reviewing your request, Transgrid **gives its authorisation** to the proposed development, subject to the following requirements.

DETERMINATION: Conditionally permitted

1. TECHNICAL ENGINEERING TEAM REVIEW:

Summary of Findings:

1. We presume the previously proposed subdivision and bulk earthworks, submitted in May 2024 and October 2024, are still valid.
2. Under Revision 2, the proponent has proposed to construct an unsealed 3m wide road between each Transgrid tower. A concrete slab with 1:6 grades is proposed at the creek crossing to ensure adequate vehicular access. Refer to "Civil Documentation_AI-1378959" dated 9/10/24. This access road is not shown on the current irrigation drawings. The existing gate on Patons Lane will provide access to the easement throughout the construction period.
3. The proposed irrigation system was submitted for Transgrid's review.
4. The sprinklers are spaced about 15-metres apart within the centreline exclusion zone. This may impact the proposed unsealed access road between towers and Transgrid's maintenance teams to travel along the easement when required.
5. The irrigation system is outside the tower exclusion zone.
6. The sprinklers will be about 2-metres above ground. The irrigation jet height is not indicated in the drawings.
7. Vegetation is proposed in the easement that this stormwater system will irrigate. The maximum height of the plants within the easement is 1.2-metres.

Conditions:

1. This conditional approval assumes that access along the line will be provided as indicated in "Civil Documentation_AI-1378959", dated 9/10/24.
2. No solid jets of water can be directed within 4-metres of overhead conductors, and no ponding or water around Transgrid's structures will be permitted.
3. Irrigation pumps and equipment must be outside the earthing and centreline exclusion zones.
4. Only non-metallic piping (i.e., irrigation mains and distribution piping) can be used in the easement.

Additional Notes:

1. Adequate precautions shall be taken during construction to protect Transgrid structures from accidental damage.
2. The easement area shall not be used for temporary storage of construction spoil, topsoil, gravel, or any other construction material.
3. Transgrid should not be restricted from routine maintenance and inspection activities. After the works, access to the Transmission Line and structures shall always be available for Transgrid's plant & personnel.

4. Any machinery operating within the Transgrid's easement shall not exceed 4.3-metres in height and be at least 22-metres away from towers unless an accredited person operates it in accordance with WorkCover NSW Work Near Overhead Power Lines Code of Practice 2006 (https://www.safework.nsw.gov.au/__data/_assets/pdf_file/0020/52832/Work-near-overhead-power-lines-code-of-practice.pdf).
5. A dust management plan will ensure that dust and dirt are not deposited on the transmission line conductors, insulators, or towers. Such deposits can cause a flashover or trip of the power lines. Transgrid does not require approval of this plan, but one must be in place.
6. If any ground-level changes are proposed within the easement, Transgrid shall be provided with a georeferenced 3D DXF for ground clearance review (note: .dgn and .dwg are unacceptable).
7. A "Restriction as User" (88B Instrument) must be placed on the titles of any created lots that may become affected by a transmission line easement.
8. If fence heights are not stipulated on the plans, approval is based on the assumption that all fences will be at most 2.5-metres. The proponent must provide full details if fences are planned taller than 2.5-metres. Metallic fencing (including temporary fences) must be earthed. For more information, please refer to "Transgrid Fencing Guidelines."
9. Below-ground services and manhole pits within the easement must withstand the weight of maintenance vehicles (43-tonnes).
10. Non-metallic water/stormwater pipes within the transmission line easement are preferred. If the water pipe is metallic, isolation sections, such as RCP pipe and rubber ring joint, are required at entry and exit to the easement.
11. Any metallic structures or objects planned in the easement must be earthed.
12. The ENA DOC 008-2006 National Guidelines On Electrical Safety For Emergency Service Personnel provides important safety information and risk controls for fighting fires near powerlines. This includes specific conditions and risk controls for using water near powerlines.

2. ACCESS AND MAINTENANCE TEAM REVIEW:

Additional Notes:

1. Metal gates should be earthed by bonding across the hinges to the fence (in the case of a wire or other metal fence), or by suitable earthing arrangements at the gate post for fences of wooden construction.
2. All fence and gate earthing must be installed in accordance with Transgrid's Fencing Guidelines.
3. Any fencing installed on the easement must not exceed 2.5m in height.
4. Vehicles, plant or equipment having a height exceeding 4.3 metres when fully extended shall not be brought onto or used within the easement area without Transgrid's permission
5. If any services are to be proposed to be situated within the easement or where travel is required by Transgrid maintenance vehicles, it must be ensured that the trench backfill can safely withstand the 43-tonne load capacity of maintenance trucks without causing damage to any pipes/conduits and services.

6. The subsoil stability and surface drainage is not to be adversely affected in the vicinity of a structure
7. Any water flow is to be directed away from the structure or where travel is required by Transgrid maintenance vehicles.
8. If any services are to be proposed to be situated within the easement or where travel is required by Transgrid maintenance vehicles, it must be ensured that the trench backfill can safely withstand the 43-tonne load capacity of maintenance trucks without causing damage to any pipes/conduits and services.

Supporting Documents:

20241219 Landscape Documentation_PAN-427395.pdf
20250114 cover letter_PAN-427395.pdf
20250115 2413-SWI-SHEET 01 REV C_PAN-427395.pdf
20250115 2413-SWI SHEET 02 REV C_PAN-427395.pdf
20250115 2413-SWI SHEET 03 REV C_PAN-427395.pdf

Transgrid shall be notified of any amendments and/or modifications to the proposal which may change proposed distances to Transgrid's assets, structures and conductors.

All works near/within the easement need to be carried out in accordance with Transgrid's Easement Guidelines, Transgrid's Fencing Guidelines, and SafeWork NSW Workcover's Code of Practice 2006 – 'Work Near Overhead Powerlines'.

Transgrid's Easement Guidelines are those referred to and included via the hyperlink below – as updated from time to time. https://www.transgrid.com.au/safety/community-safety/

If you have any questions, please do not hesitate to contact Transgrid's Easements & Development Team at easements&development@transgrid.com.au

Yours faithfully,

Easements & Development Team

Transgrid

Please note, this is Transgrid's permission as easement holder only, and it does not constitute planning approval under the Environmental Planning and Assessment Act 1979.

Andrew Moore
General Manager
Penrith City Council
Via: NSW Planning Portal

Development Application – D24/0294
221-227 & 289-317 Luddenham Road, Orchard Hills
Response to additional information

21 February 2025

Dear Andrew Moore,

Sydney Metro refers to Development Application D/24/0294 (DA) and additional information uploaded onto the NSW Planning Portal in relation to the following documents:

- Traffic Impact Assessment Bulk Earthworks Response memo
- Traffic Impact Bulk Earthworks; and
- Urbis cover letter to Metro RFI.

Sydney Metro has reviewed the additional information and provides the following comments and recommendations for your consideration.

Traffic Impact Assessment

Observations

Sydney Metro notes that the updated Traffic Impact Assessment (TIA) report summarises that the bulk earthworks project is expected to generate up to 100 heavy vehicles (50 IN, 50 OUT) and 160 light vehicles (80 IN, 80 OUT) movements per day during peak construction period.

The estimated Alspec Industrial Business Park (AIBP) cumulative construction traffic volumes would consist of 25 heavy vehicle (25 IN) and 95 light vehicles (95 IN) movements during the AM peak hour, and 95 light vehicle (95 OUT) with no heavy vehicle movements during the PM peak hour. Section 4.4 indicated that *"The assessment identified that, during the AM and PM peak hour for both modelled scenarios, traffic exiting Patons Lane may experience substantial delays to turn into Luddenham Road."* Noting that the cumulative construction impact on Patons Lane and Luddenham Road intersection will result in significant delays, a number of construction mitigation and management measures are specified in Section 5 of the report prepared by Arcadia.

It was requested that the applicant provide details of the SIDRA intersection layout inputs in the report to allow for the assessment of the intersection layout input used in both Scenario A and Scenario B.

The construction traffic management strategy outlined in the TIA suggests access to the site via Luddenham Road/ Patons Lane intersection for both light and heavy vehicles. Exit of heavy vehicles appears to be via existing driveway located 1 km south of the Luddenham Road/ Patons Lane intersection.

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Section 3.2 of the report also suggests that when traffic congestion is observed at Luddenham Road/ Patons Lane access, light and heavy vehicles accessing the site will be directed to use the third access point. Whilst Figure 3-3 and Figure 3-4 show this arrangement, there are inconsistencies in Section 3.4 of the report which states *"departing heavy vehicles will exit onto Luddenham Road either via Patons Lane or the additional site access and then travel north to the M4 Western Motorway".*

The revised TIA includes SIDRA site layout diagrams that are misaligned with the existing intersection layout, with the through lane along Luddenham Road configured incorrectly. The west approach to the intersection, Patons Lane, is also configured now as a shared left/right turn.

A review of the traffic flow input volumes outlined in Figure 4-3 noted 30 vehicles performing a right turn from Patons Lane into the Site Access A during AM peak. Sydney Metro notes this as inaccurate as the Site Access A during AM peak is not utilised by Sydney Metro, resulting in an inconsistency in the traffic flow volumes.

The AIBP bulk earthworks construction is expected to generate 160 light vehicles plus 100 heavy vehicle movements on a daily basis. The AM and PM peak hour cumulative construction traffic volume associated with AIBP development comprise:

a. AM peak – 95 light vehicles (inbound), 25 heavy vehicles (inbound), 0 outbound movements;
b. PM peak – 95 light vehicles (outbound), 0 heavy vehicles (outbound), 0 inbound movement.

The TIA provided a revised site access arrangement as detailed in Section 3.2 of the report, with Patons Lane along the northern boundary of the site, a secondary access point along Luddenham Road (200 metres south of the Luddenham Road/ Patons Lane intersection), and a third access point via an existing driveway on Luddenham Road (approximately 1km south of the Luddenham Road and Patons Lane intersection. However, on page 13 of the TIA, the report notes that the access located 200 metres south of the Luddenham Road/ Patons Lane intersection will not be used for bulk earthworks related construction due to construction activities on Pad 1. Effectively, the bulk earthworks will rely on two access points being Patons Lane to the north, and the existing driveway located approximately 1km south of the Luddenham Road/ Patons Lane intersection.

The TIA report included a road network impacts assessment with SIDRA intersection results outlined in Section 4.4.1 of the TIA. Scenario A is for 2025 traffic conditions, including the traffic data from the STFM model on Luddenham Road, Sydney Metro peak EIS construction traffic volume, and Sydney Metro's commissioned autotomic tube count data for Patons Lane, without AIBP construction traffic. Scenario B is for the 2025 cumulative peak hour AIBP construction traffic demand combined with background traffic.

Based on our observations, the assessment results indicate that Patons Lane and Luddenham Road would experience significant delays.

Year	Intersection	Intersection treatment	Peak hour	Volume	Average delay (sec)	DoS	LoS
2025	**Scenario A -** Luddenham Rd/Patons Lane	Sign controlled intersection	AM	2011	724.4	1.654	F
			PM	1905	227.2	1.164	F
	Scenario B - Luddenham Rd/Patons Lane	Sign controlled intersection	AM	2137	1633	2.652	F
			PM	2006	569.1	1.560	F

Table 1: Level of service for Luddenham Road/Patons Lane

The TIA also noted that the assessment adopted standard gap acceptance parameters in accordance with the TfNSW Traffic Modelling guidelines, which may impact the modelled LoS at the intersection. In addition, both scenarios have adopted the estimated 2025 traffic flows by using the STFM model on Luddenham Road.

Assessment

Based on the above observations, Sydney Metro recommends a new traffic survey be undertaken at Patons Lane and Luddenham Road intersection during the weekday AM and PM peak periods to inform the Construction Traffic Management Plan (CTMP) to be prepared by the applicant. The CTMP also need to include updated modelling which has been calibrated to reflect the surveyed queue length.

The results also indicated that AIBP construction traffic will result in the doubling of average delay on the west approach and significant deterioration in the degree of saturation. Whilst the proposed site access strategy of utilising the existing southern access point for heavy vehicles is supported, Sydney Metro encourages the applicant to consider using the AIBP site's southern access point for access and egress of all light and heavy vehicles during peak periods.

Construction Mitigation and Management Measurement

Sydney Metro met with the Applicant on 22 January 2025. At this meeting the applicant stated that the AIBP vehicles generated during the construction stage will not enter and exit via Patons Lane and Luddenham Road intersection during the AM and PM peak hours. All vehicles generated by the AIBP will enter and exit via the Luddenham Road southern access during the AM and PM peak hours.

Accordingly, as shown in Figure 1 below the traffic controllers proposed to be located at the Patons Lane site access and Luddenham Road southern access (refer to the figure below) may not have visibility of vehicle queuing on Patons Lane/ Luddenham Road intersection resulting in effective traffic management of vehicles entering and exiting the site. Recommendations to manage this issue should be addressed in the CTMP in consultation with Sydney Metro (refer to recommendations section of this letter).

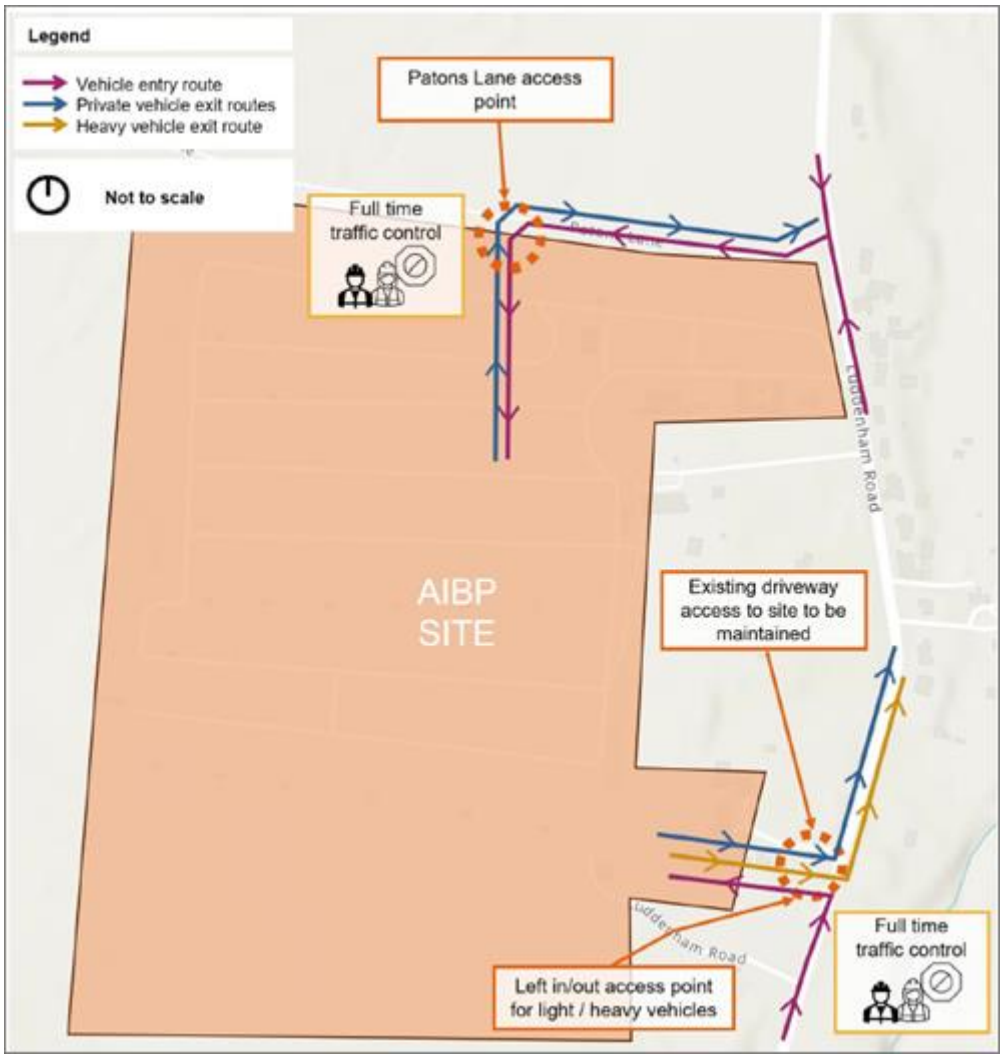

Figure 1: Traffic controllers siting and locations for construction management

Recommendation

Following our review of the additional information submitted by the Applicant, Sydney Metro recommends that subject to approval, the following condition be imposed by Penrith City Council as part of the Conditions of Consent:

- Prior to the issue of any construction certificate the applicant shall prepare a CTMP in consultation and to the satisfaction of Transport for NSW and Sydney Metro. The CTMP will need to incorporate the following considerations:
    - The updated traffic surveys and intersection assessment at Patons Lane and Luddenham Road.
    - Vehicular traffic generated during the construction stage shall not be permitted to enter and exit via Patons Lane and Luddenham Road intersection during the Sydney Metro's peak construction hours, which are between 7:30am and 8:30am, and 4:30pm and 5:30pm weekdays. The Applicant to consider using the AIBP site's southern access point for access and egress of all light and heavy vehicles during peak periods.

- For periods outside of the construction peak hours, reverting to the one-way loop arrangement, that is, enter via Patons Lane and exit via southern access off Luddenham Road. Alternatively, a traffic controller be engaged by the application to be positioned at Patons Lane and Luddenham Road intersection to monitor and manage vehicles queuing, which will enable the construction vehicles to enter and exit via Patons Lane during the off-peak construction periods.
- Traffic controllers are to ensure that Sydney Metro construction traffic be given priority access to Patons Lane to minimise disruptions for Sydney Metro's construction activities and deliveries, and if required, traffic controllers must divert any Alspec Industrial Business Park (AIBP) construction vehicles to access the site via the existing driveway on Luddenham Road.
- Patons Lane access must be maintained at all times to not impede on Sydney Metro's construction activities.
- Traffic surveys on Patons Lane are to be undertaken on a regular basis to monitor AIBP contribution to the traffic on the surrounding road network throughout the construction period. A copy of the traffic survey data shall be provided to Sydney Metro.

In addition to the above traffic-related conditions, the following conditions are recommended in relation to fencing:

- Prior to the commencement of any works, appropriate fencing must be in place along the boundary that adjoins the rail corridor to prevent unauthorised access to the rail corridor during construction works. Details of the type of fencing and the method of erection are to be to the satisfaction of Sydney Metro prior to the fencing work being undertaken.

- The development shall have appropriate fencing fit for the future usage of the development site to prevent unauthorised access to the rail corridor by future occupants of the development. Prior to the issue of an Occupation Certificate, the Applicant shall liaise with Sydney Metro regarding the adequacy of any existing fencing along the rail corridor boundary or the need for the design and erection of new fencing. Details of the type of new fencing to be installed and the method of erection are to be to the satisfaction of Sydney Metro prior to the fencing work being undertaken.

Subject to the above recommended conditions of consent being incorporated into the determination, Sydney Metro raises no further objection to Development Application D24/0294.

Should you have any further questions, please contact Vanessa Cagliostro, Manager Urban Planning, at Vanessa.cagliostro@transport.nsw.gov.au.

Sincerely,

Lara Dominish
Director Place Making & Property

Transport for NSW

14 February 2025

TfNSW Reference: SYD24-00916/05
DPHI Reference: DA24/0294 (CNR-68778)

Mr. Andrew Moore
General Manager
Penrith City Council
PO Box 60
PENRITH NSW 2751

Attention: Jake Bentley

ADDITIONAL INFORMATION FOR BULK EARTHWORKS AND SUBDIVISION
221-227 & 289-317 LUDDENHAM ROAD, ORCHARD HILLS

Dear Mr Moore,

Reference is made to Council's referral dated 4 February 2025 regarding the abovementioned Development Application (**DA**), which was referred to Transport for NSW (**TfNSW**) for comment in accordance with the clause 2.122 of the *State Environment Planning Policy (Transport and Infrastructure) 2021*. TfNSW advises that:

- A separate submission will be provided by Sydney Metro.
- TfNSW advises that the amended DA addresses TfNSW previous comments.

As such, TfNSW has reviewed the amended DA and recommends that the following requirement is included in any Development Consent issued by the relevant Consent Authority:

Construction Pedestrian and Traffic Management

Prior to the issue of any construction certificate, the applicant shall prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with TfNSW. The CPTMP needs to specify matters including, but not limited to, the following:

- To mitigate the impact of construction traffic and reduce interaction with other projects, all access to the site shall be provided from Patons Lane via the intersection of Luddenham Road.
- Patons Lane is to always remain open to traffic.
- Proposed haulage routes and construction vehicle access arrangements.
- Predicted number of construction vehicle movements, detail of vehicle types and demonstrate that proposed construction vehicle movements can be accommodated within the context of road changes in the surrounding area.
- Identify any potential impacts to general traffic, cyclists, pedestrians, and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works.;
- Identify the cumulative construction activities of the development and other projects within or around the development site.
- Proposed measures to minimise the cumulative impacts on the surrounding road network should be clearly identified and included in the CPTMP.
- Construction program and construction methodology, including any construction staging.
- Consultation strategy for liaison with surrounding stakeholders, including Sydney Metro and other developments under construction.
- Details of crane arrangements including location of any crane(s) and crane movement plan.
- Proposed construction hours.
- A detailed plan of any proposed hoarding and/or scaffolding.
- Provide the direct contact details to businesses and residents impacted by the construction work and TfNSW via development.ctmp.cjp@transport.nsw.gov.au to resolve issues during construction in real time. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction; and

  Submit a copy of the final plan to TfNSW for endorsement via development.ctmp.cjp@transport.nsw.gov.au.

For more information regarding the above matter, please contact Nav Prasad, Land Use Planner via email at development.sydney@transport.nsw.gov.au.

Yours sincerely,

Brendan Pegg
Senior Manager Land Use Assessment Central and Western
Transport Planning, Planning Integration and Passenger Division

Department of Planning, Housing and Infrastructure

A-83184/IRF24/1548

Council ref: DA24/0294

Mr Andrew Moore
Penrith Council
PO BOX 60
PENRITH NSW 2751

11 July 2024

Subject: Planning Secretary Concurrence clause 7.32 of the Penrith Local Environmental Plan 2010 – 211-277 Luddenham Road, Orchard Hills (Lots 1 & 2 DP1293805) CNR-68778

Dear Sir/Madam

I refer to Council's request to the Department of Planning, Housing and Infrastructure seeking concurrence from the Planning Secretary in accordance with clause 7.32 of the Penrith Local Environmental Plan (PLEP) 2010, for a subdivision of two lots (Lots 1 & 2 DP1293805) into nine lots and associated works site preparation works including bulk earthworks.

I am pleased to advise that as the Planning Secretary's delegate, I am satisfied the proposed subdivision and associated works will not impact on the Transport Investigation Area and concurrence is granted in accordance with clause 7.32 of the Penrith LEP.

Should you have any enquiries about this matter, I have arranged for Mr Ryan Klingberg to assist you. Mr Klingberg can be contacted on 02 9860 1561.

Yours sincerely

Ian Bignell
Manager, Place and Infrastructure, Local Planning (Central, West & South)
Planning, Land Use Strategy, Housing and Infrastructure