

11 July 2025
Attn: Dominic Crinnion
Director – Infrastructure Management
NSW Department of Planning Housing and Infrastructure
Locked Bag 5022
Parramatta NSW 2124

Dear Dominic,

**Sydney Metro West Stage 3
Request for the Planning Secretary's interpretation of Condition E94**

Context and proposition

The Environmental Impact Statement (EIS) for the Sydney Metro West – Concept and Stage 3 recognises that utility works would be required as part of the proposal and would generally be within or adjacent to the EIS boundary. As part of delivering the approved Project, Sydney Metro are required to install a new 33kV power supply as part of the broader utility installation and relocations scope, which will form part of the final alignment of the permanent Sydney Metro West works at Clyde Maintenance and Stabling Facility (MSF) and Rosehill Services Facility (RSF) construction sites. The permanent power supply route will be provided between the traction substation at Rosehill services facility and Camellia substation, generally within road reserves along Unwin Street and Colquhoun Street.

Ministers Condition of Approval (MCoA) E94 of the Sydney Metro West – Concept and Stage 3 Conditions of Approval (SSI 22765520-Mod-2) describes that Detailed Site Investigations (DSI) are to be undertaken before ground disturbance to confirm moderate and high risk contaminated sites identified in the documents listed in CoA A1, unless otherwise agreed by the Planning Secretary. The Clyde MSF and Rosehill SF sites are identified in the EIS as being bordered or within lands categorised as moderate contamination. As such, any ground disturbance works in the vicinity of the Clyde MSF and Rosehill SF sites would be subject to a DSI, unless otherwise agreed with the Planning Secretary.

Sydney Metro has worked with its contractor to review and refine the methodology associated with the proposed electrical HV main described herein, resulting in a reduction in the risk of managing contaminated land and the interaction of potential contaminated material impacting the environment.

Considering the aforementioned and detail provided within this document, Sydney Metro is requesting the Planning Secretary agrees that a DSI is not warranted for the proposed works. The proposed scope and justifications for determining that a DSI is not required under MCoA E94, are detailed below in their respective sections.

Proposed Scope

Sydney Metro's contractor is required to undertake twin trench excavations on Unwin Street and Colquhoun Street immediately adjacent to the Clyde MSF and Rosehill SF sites to install 33kV electrical conduits. The location of the proposed alignment is provided in [Figure 1](#) and [Figure 2](#). The proposed methodology for the twin trenches is consistent throughout the

alignment. The works will be undertaken in two stages, investigation works and trenching works. The below describes the method for the early investigative works and the conduit installations and plant / equipment to be utilised to perform the work activities.

- **Early investigation works:** Minor excavations of surface pavements using excavators. NDD techniques with vacuum trucks to locate services. In-situ waste classification sampling.
- **Trenching works:** Full depth excavations using excavators including hammer attachment and standard buckets. 33kV conduit installation and proofing. No cable pulling works are include in proposed work scope.

Details when interpreting the project scope:

- Investigative works are primarily using NDD excavation techniques following removal of pavement materials by excavators. Clean material is used as backfill. Waste sampling will be conducted using hand-held equipment.
- Full trenching scope will require the use of all plant and equipment with excavators and hammer attachments required to remove concrete pavements.
- Any surplus excavated material during trenching works will be loaded directly into a Bogie and taken to an approved ancillary facility site. Waste will then be taken to a licenced waste facility.
- All waste will be classified in accordance with the NSW EPA Waste Classification Guidelines. Waste will then be taken to a licenced waste facility in line with EPA requirements.
- Any unexpected finds would be managed in accordance with the Unexpected finds protocol.
- Backfill following conduit installation will be clean fill material only.
- No loose excavated material will be stockpiled adjacent to the site.

Methodology

Equipment to be used for early investigation works includes:

- Vacuum truck for Non-Destructive Digging (NDD)
- 5 tonne excavator
- 13 tonne excavator
- Small Tipper Truck
- Wacker Packer
- Concrete Saw
- Tool van
- Light vehicles

Method of investigation works: Design verification and in-situ waste classification.

1. Pothole plan to determine work area for each shift. Concrete saw to cut to desired extent.
2. Excavators remove concrete and asphalt and place into tipper truck.
3. Vac Truck begins NDD to locate services for design verification
4. Waste sampling undertaken during excavation and varying depths.
5. Service location data is recorded, and excavation backfilled with clean sand.
6. Temporary restoration (Hotmix) applied to excavation and compacted with wacker packer.

Equipment to be used for trenching works includes:

- Vacuum truck for Non-Destructive Digging (NDD)
- 5 tonne excavator
- 13 tonne excavator
- 20 tonne excavator
- Small Tipper Truck
- Bogie Truck
- Wacker Packer
- Roller
- Concrete Saw
- Tool van
- Light vehicles

Method for trenching scope: Full depth excavation, conduit installation, backfill and restoration.

1. Trenching installations works will consist of open excavations, conduit installation, backfilling and temporary restorations and will progressively move along the trench alignment.
2. Trench depths ranging from 1000mm to approximately 3500mm and widths ranging from 900mm out to 2050mm wide in some areas.
3. All of the trenching works occurs within the footway, road carriageway or road shoulder/parking lanes, verge.
4. Open excavations when deeper than 1500mm or in poor ground conditions trenches will be shored with either Verti shores or shoring boxes.
5. Excavation will occur to separate via material layer type – i.e. truck will be loaded with road surface material (concrete/ asphalt / road base) then tipped. Then loaded with any ENM/VENM material in trench (if found). Clean material, and rock will be loaded into truck separately to ensure maximisation of suitable material for re-use.

6. Once excavation has achieved the required depth, conduits be installed and jointed with PVC glues. These conduits will be secured to prevent movement during the placement of the embedment zone material.
7. Thermally Stable Backfill (TSB) will be installed around the conduits as the pipe embedment material. The TSB for the conduits will be delivered to site via agitator truck and placed into the trench off the chute. The assistance of excavator bucket for placing backfill may be required in some tight work areas. As the TSB is a wet mix, curing will be required prior backfill. In this case steel plates will be placed over the trench until the TSB has reached the required curing strength.
8. Polymetric cover strip will be placed over the asset embedment layer (generally no less than 300mm above the obvert of the pipe) prior the completion of trench backfills.
9. Backfill material will be placed, compacted, and vibrated in approximately 150mm layers above the cover strip with trench compaction equipment. This process will be repeated for multiple layers until the underside of road subgrade is met (approximately 300mm below road surface level). Compacting testing will occur progressively during backfilling and layers (excl. TSB Layer).
10. Compaction sand would be placed for backfill immediately around existing utilities crossed.
11. Imported DGB-20 road base material will make up the 300mm thick subgrade level below the road surface. Road base will be placed in 150mm layers, compacted, and rolled with a 2ton smooth drum roller or wacker plate. Compacting testing will occur progressively during backfilling and layers.
12. Temporary road and footpath restorations will be made with the placement of approximately 50-75mm of AC10 or AC14 hot mix. Hot mix will be placed from excavator bucket, spread, and rolled with 2ton smooth drum roller.
13. Any open excavations at the end of each shift withing trafficable lanes to be re-opened will be road plated, pinned in accordance with TfNSW M209 temporary restorations specification, which includes pins and hot mix transition ramps on all sides.

Method for communication pit installations:

1. The new pit locations will be surveyed, and potholing conducted to 'space proof' the new pit location. The pit location will be excavated to beyond the dimensions of the in-situ concrete pit structure.
2. Shoring is installed to support the excavation (>1.5m) and the area is made safe.
3. The pit will be placed on a level and compacted surface.
4. Conduits entering/exiting the pit will be installed and connected to the bell-mouths in the pits.
5. A Class D trafficable lid will be secured to the precast pit level with the surrounding roadway.
6. The excavation around the pits will be backfilled and compacted in layers. The affected ground surface will be temporarily Restored.

Method for conduit mandrel testing:

1. Once the conduits have been installed, ropes will be installed in each conduit.
2. A foam sponge will be pulled through each conduit and repeated until no debris or moisture on the sponge.
3. A rigid mandrel will be pulled through each of the conduits through the entire run of the conduit.
4. The conduits will then be CCTV Inspected to ensure they are free from any damage or defects.
5. The ends of the conduits will be sealed, and any open points will be backfilled with clean sand.

Method for temporary restorations:

1. Return once all conduit installation works and cable pulling, testing works are completed. Mill and re-sheet impacted lane with permanent road pavement material.
2. Restore any footpath materials to pre-existing materials -i.e. concrete or pavers where appropriate

Proposed work times:

- The works are proposed to commence from late August 2025.
- The working hours are proposed to be undertaken during a mix of day-time, evening and night-time periods
 - 07:00am-18:00pm (Monday – Friday) Day shifts
 - 19:00pm – 05:00 am (Monday – Friday) Evening and Night shifts.
- the total number of working shifts will be subject to engineering constraints, weather, ROLs and ROPs.

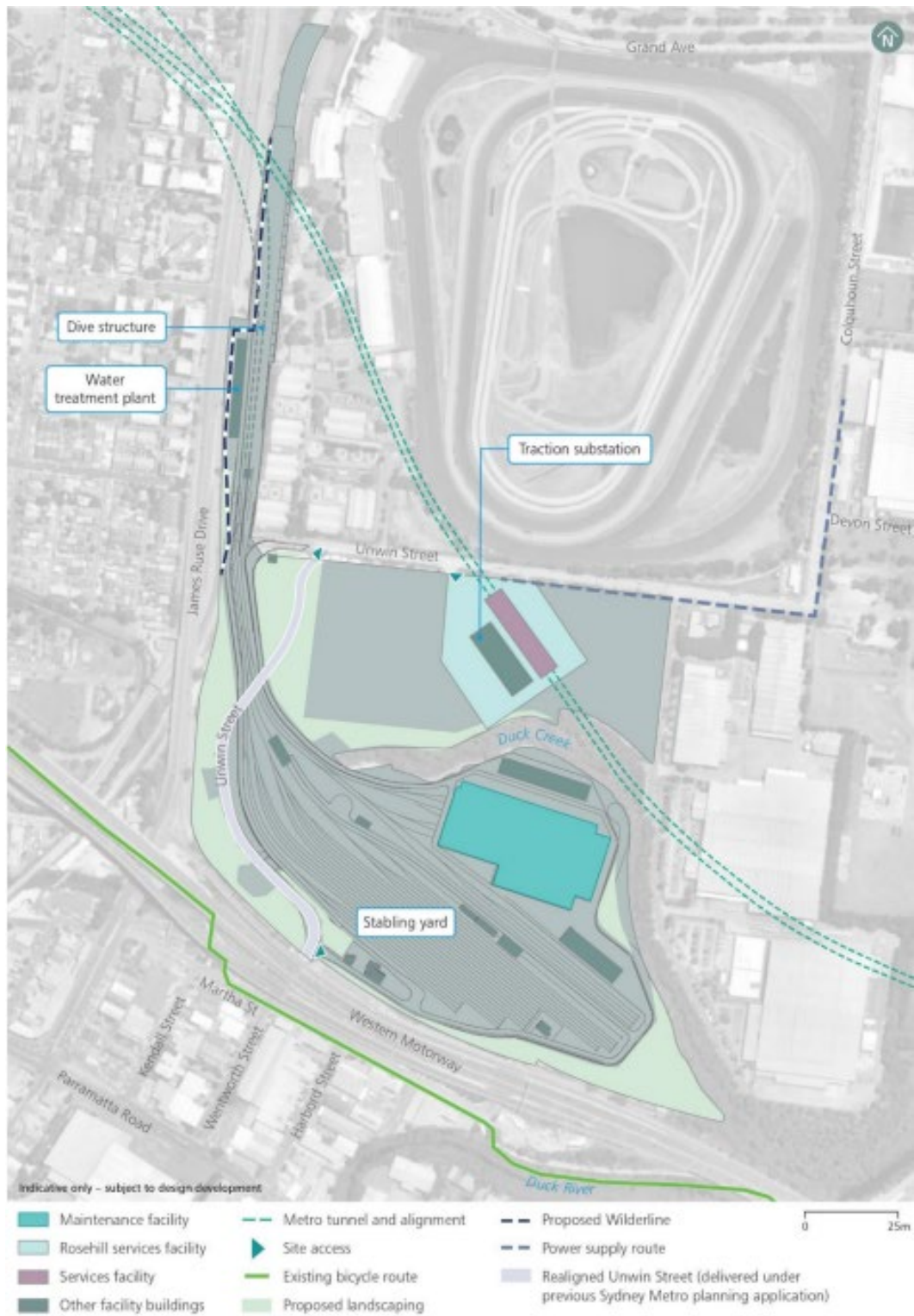


Figure 17-1 Indicative layout – Clyde stabling and maintenance facility and Rosehill services facility

Figure 1 EIS extract indicating the power supply route.

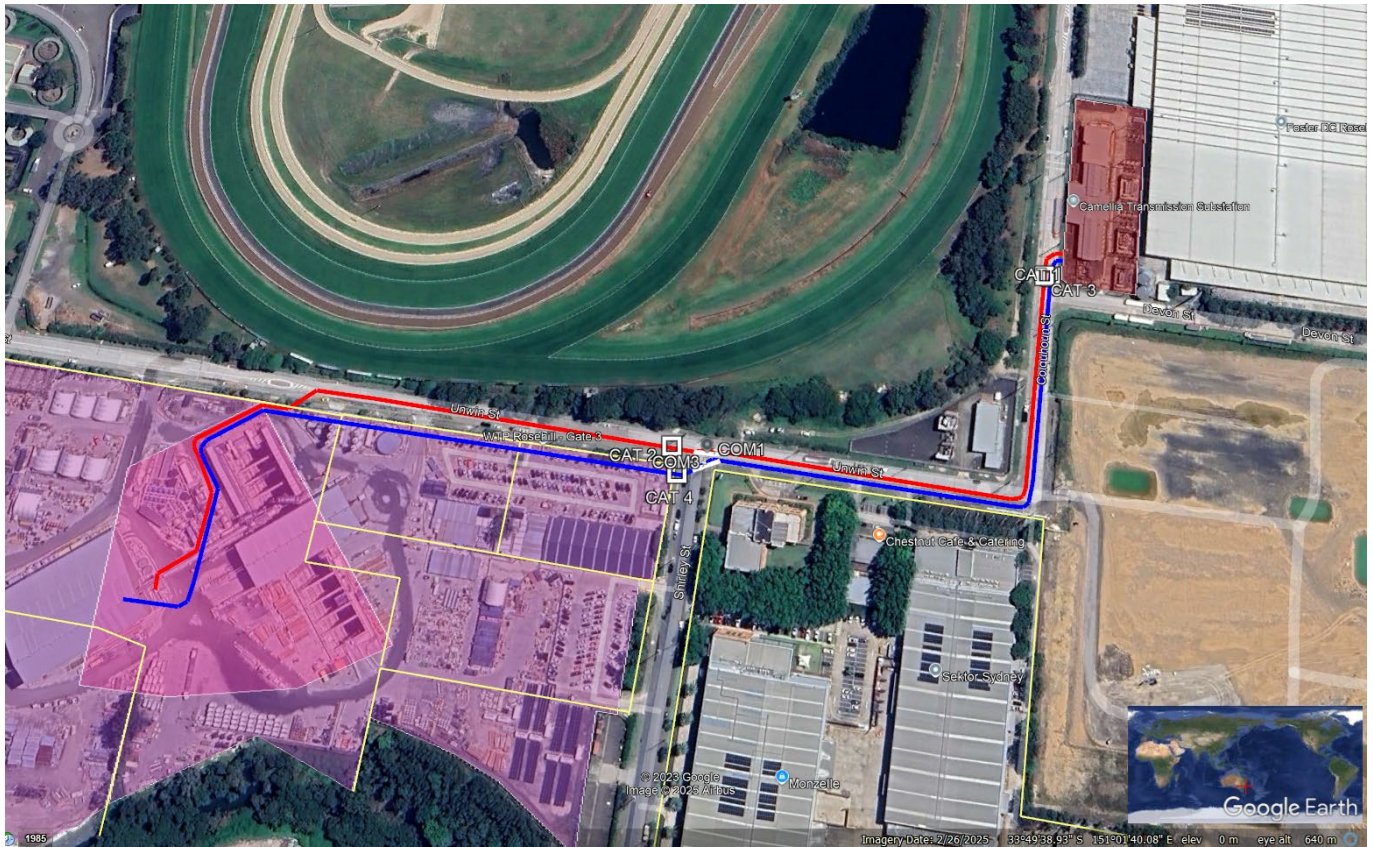


Figure 2 33kV power supply conduit installation route

Justification for not undertaking a DSI

Sydney Metro interprets Ministers Condition of Approval E94 as being applicable to construction activities that would result in ground disturbance to soil with a moderate to high contamination risk, such that it may pose risk to workers and the surrounding environment.

Due to the nature of the works, the limited footprint and the requirement to remove all excavated material as part of the process for delivering the work, Sydney Metro considers that the proposed works should not require a DSI on the following basis:

1. Sydney Metro will ensure the surface disturbance and removed material is managed in accordance with all approved / endorsed Management Plans, procedures and EPA Waste Classification Guidelines.
2. Waste classification sampling undertaken during investigation works will determine levels of contamination to determine material waste classification to ensure appropriate stockpiling and correct disposal.
3. Excavated material is directly loaded out from the trench within the sealed road into Bogie trucks. No stockpiling on site or surface disturbance beyond the trench footprint is required.
4. Excavations would not be exposed to the public. Areas of work will be clearly signposted and adequately delineated. The works location is within an industrial / commercial area and is separated from residential areas.
5. The EIS describes the operational power supply route from the Camellia substation to the Rosehill services facility would be constructed by trenching within the road reserve. The excavation work for the power supply route could encounter contamination associated with:
 - *Industrial wastes that **may have been** used in the construction of roadways. **If present**, this contamination would be exposed by the work and represents a moderate risk.*
 - *Historical industrial use in the area. **This contamination is unlikely to be exposed by the work and represents a low risk.***
6. The trenching works will generally be undertaken within the road reserve or areas which are already saturated with utilities, it is safe to assume that these areas have very likely been previously excavated and backfilled with reworked material in the past, hence the risk of encountering any contamination is considered low.

As such, it is not definitive that contamination is present.
7. The undertaking of a DSI, and any validation requirements that stem from this DSI may cause greater soil disturbance than what is proposed for the entire work scope, given the area is an AEI for contamination. This may increase the risk of exposure which would have otherwise remained not disturbed.
8. A DSI will inevitably describe the level of contamination and its' associated risk to the environment and public. As required by the scope of works, Sydney Metro will be undertaking in-situ contamination sampling during investigation works prior to construction to determine the level of contamination and guide waste classification and management. The outcome of the proposed sampling to provide a comprehensive detailed understanding of contamination present, is consistent with the outcomes of a DSI.

9. A DSI would likely indicate the requirement to undertake remediation of the contaminated material. Ultimately given the scope of works, this strategy would be to classify and remove the contaminated material to an approved site or facility, followed, where necessary, by replacement with appropriate material as the preferred option. The proposed power supply work scope requires the need to remove all existing material from the trench, and install clean imported fill materials (stabilised sand, thermal stabilised backfill (TSB), clean sand, DGB-20 and asphalt). This is again consistent with the outcome of undertaking the DSI, by removing and remediating the area.

Approach and conclusion

Sydney Metro is of the opinion that a DSI would not be necessary for the proposed scope. This is due to the size of works footprint, the proposed contamination investigation methods being consistent with those required for DSI and the trenching works scope resulting in the removal of all material and replacing with clean material, consistent with the expected outcome of undertaking a DSI.

If contaminated material is identified, a suitably qualified contaminated land consultant will be engaged to inspect the work site and ensure the material is adequately managed. Considering the aforementioned, relevant contamination risks can be mitigated with appropriate management measures.

Sydney Metro is looking forward to receiving feedback from the Planning Secretary providing their interpretation on the applicability of CoA E94 for the Clyde / Rosehill power supply route, as this proposal relates to a small trenching component of the broader Sydney Metro West Stage 3 works in an area with potential moderate contamination risks.

Should you have any questions please do not hesitate to contact Andrew Hendy, Senior Manager Environment, Sydney Metro, Transport for NSW on 0475 983 494.

Your Sincerely

Oliver Bradshaw

A/Director, Project Environment, Sustainability and Planning, Metro West