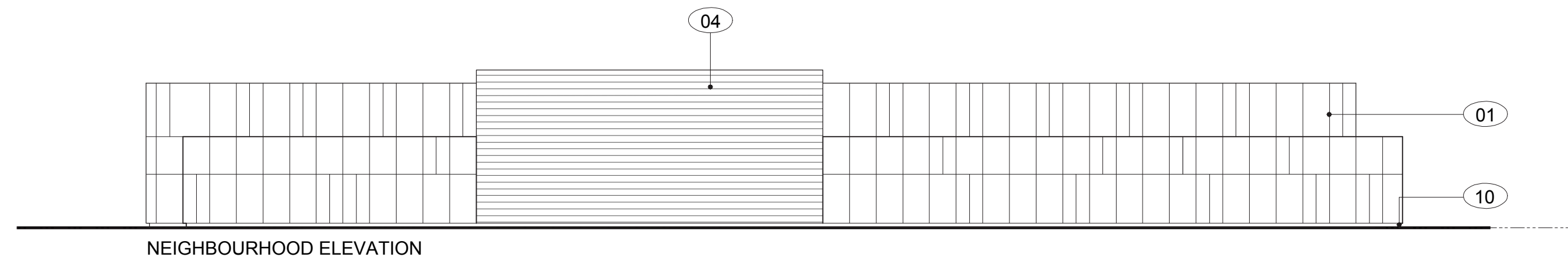
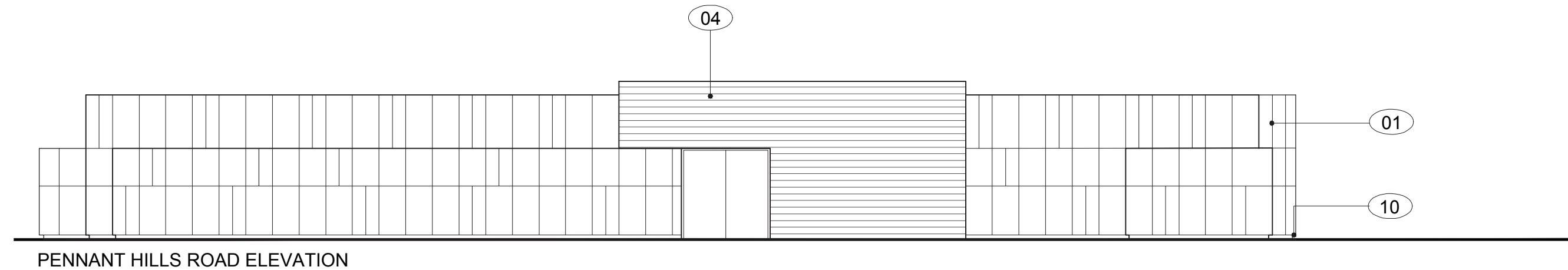


WILSON ROAD & TRELAWNEY STREET TUNNEL SUPPORT FACILITY - EMERGENCY SMOKE EXTRACTION BUILDING - PLAN - TYPICAL

M1-M2-5000-DR-UD-0537

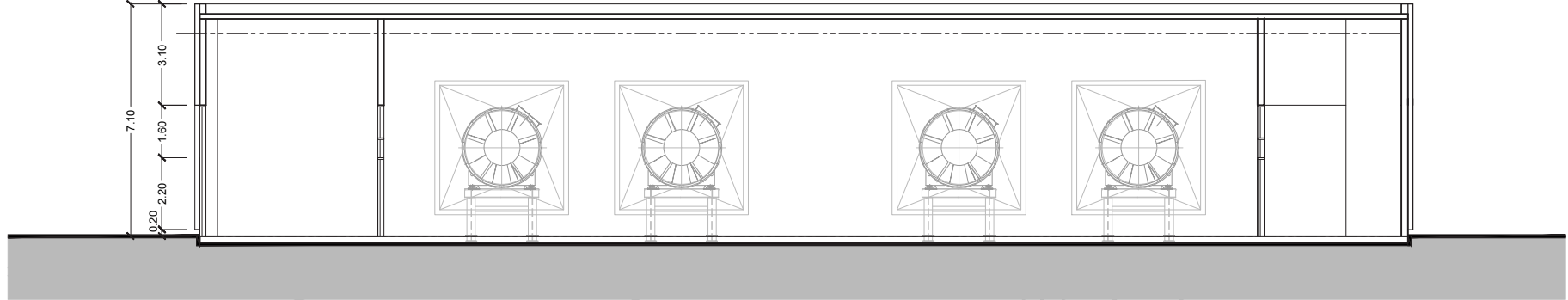


Legend

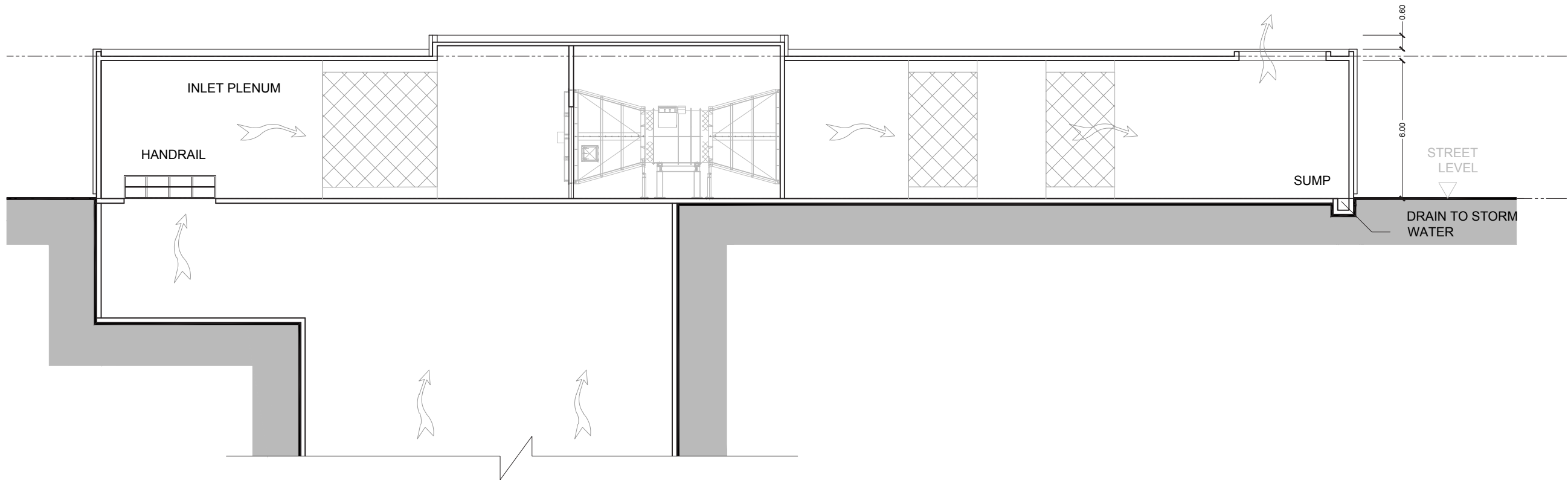
- | | | |
|--|---|--|
| (01) GRC Panels in Various Colours | (05) Painted rendered Concrete Wall | (09) Alum Security Screen - Match Sun Screen |
| (02) Insulated Glass - 600 x 1200 - Operable as shown | (06) Standard Pattern Alum Sun Screen Grating 1200 wide | (10) Exposed Concrete - No Finish |
| (03) Single Panel Glass - 600 x 1200 - Operable as shown | (07) Steel Structure to Engineers Requirement | (11) Door to Engineers Requirements |
| (04) Shed Panels Wall - Horizontal 300 ridges | (08) Removable Alum Louver | (12) Galv Steel Roll Up Door |
| | | (13) Rain Harvesting Equipment |

0 2 4 6 8 10m
SCALE 1:200@A3

M1-M2-5000-DR-UD-0533
TRELAWNEY STREET TUNNEL SUPPORT FACILITY - ELEVATIONS



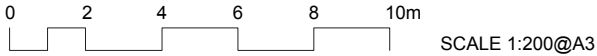
SECTION A-A

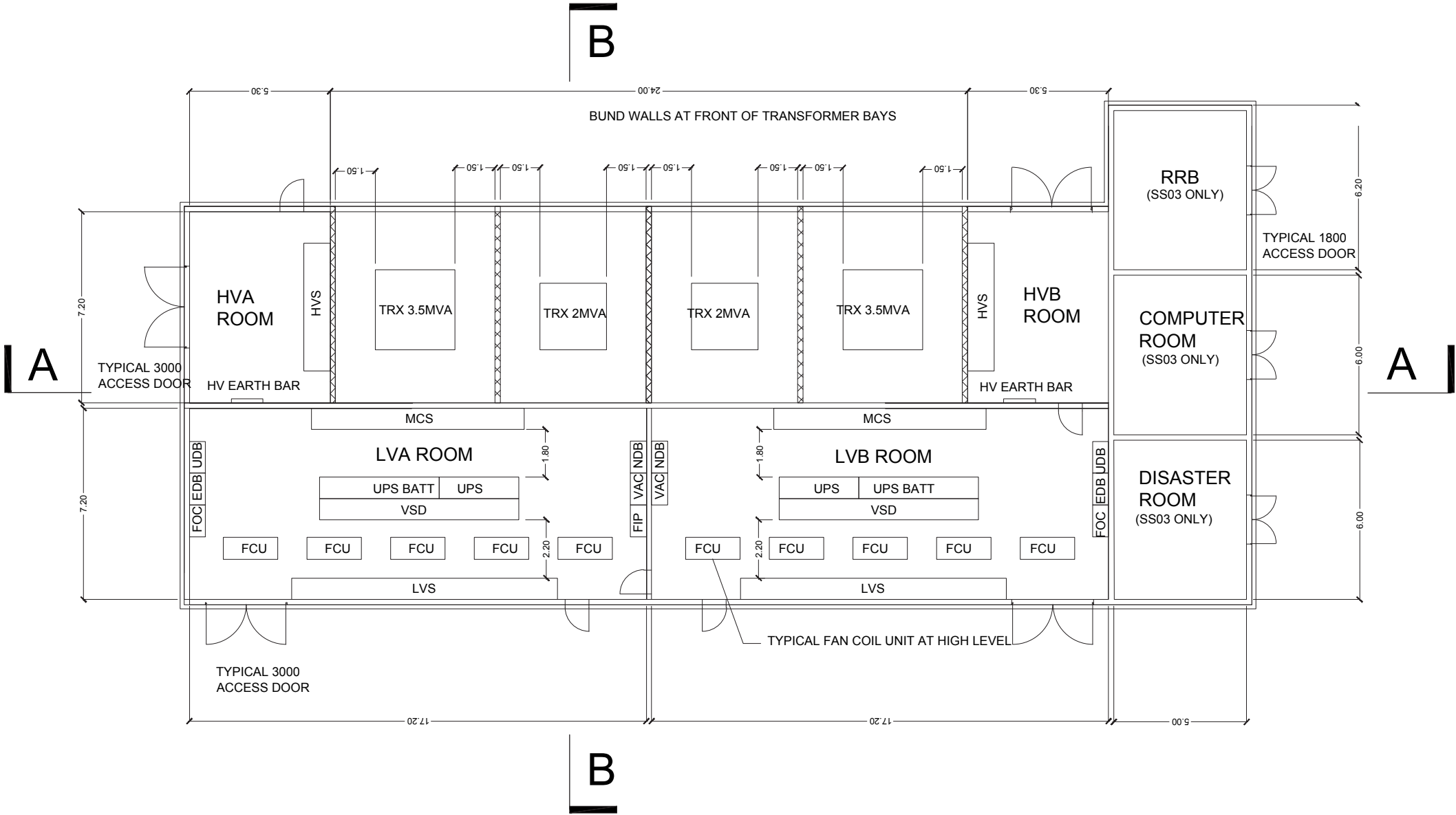


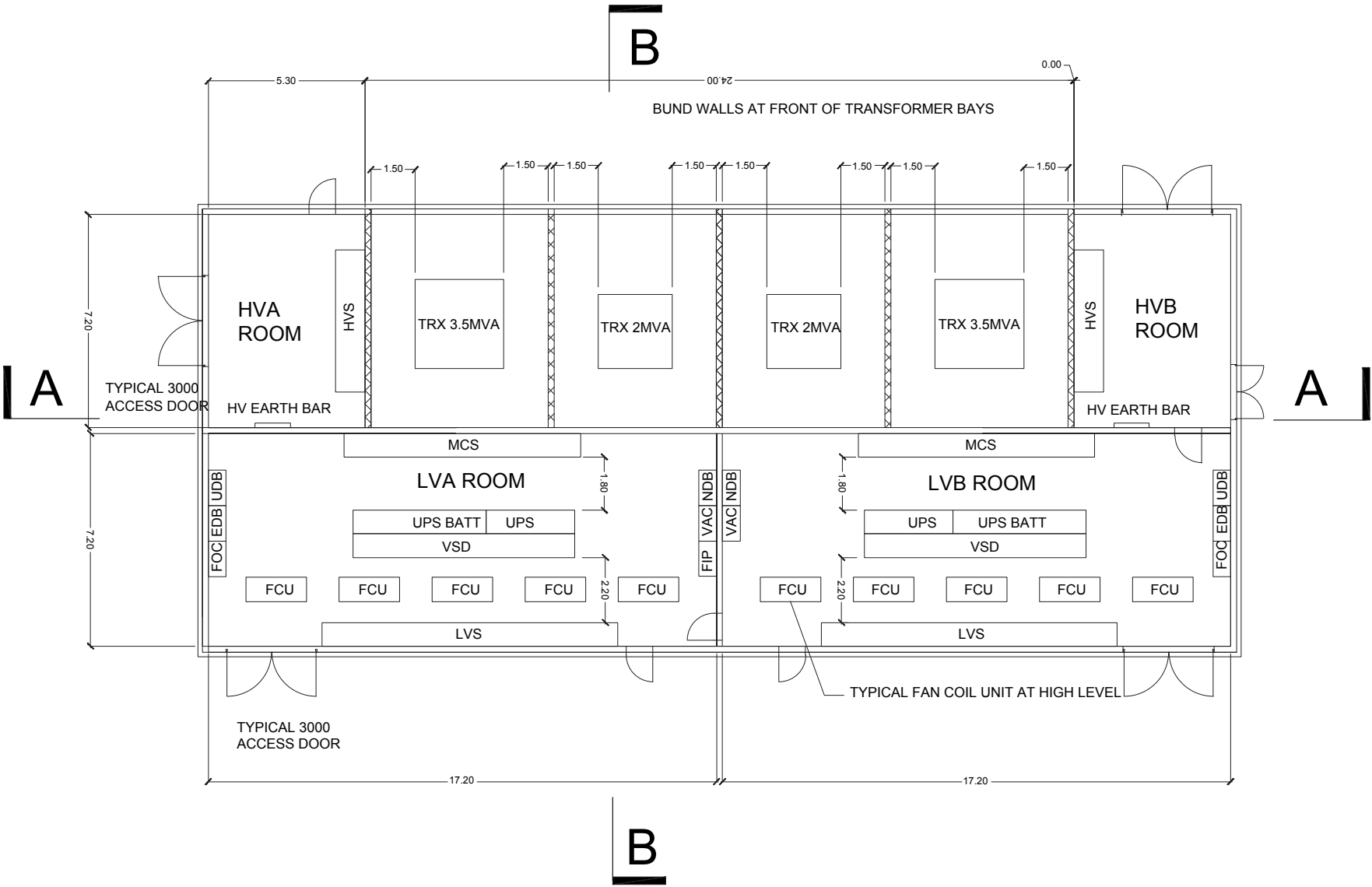
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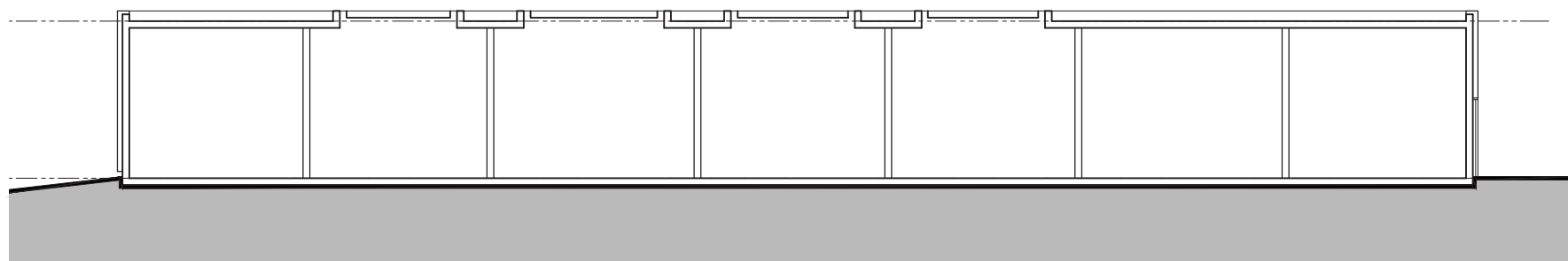
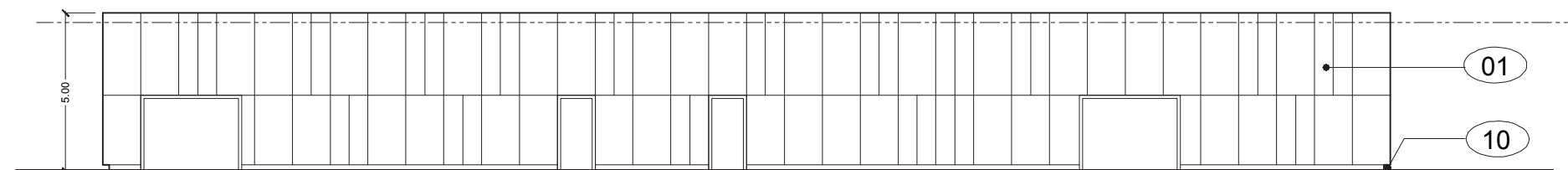
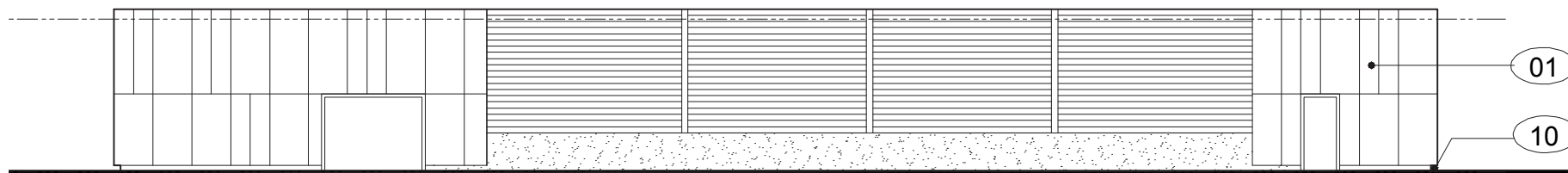
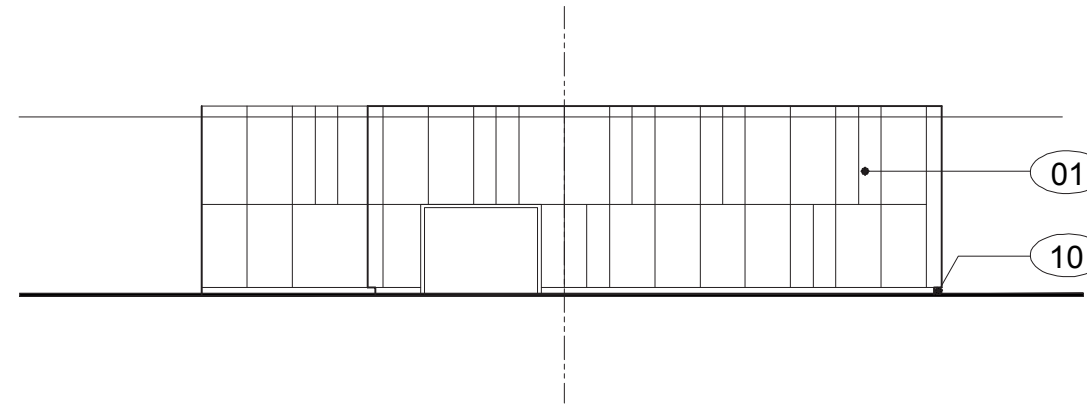
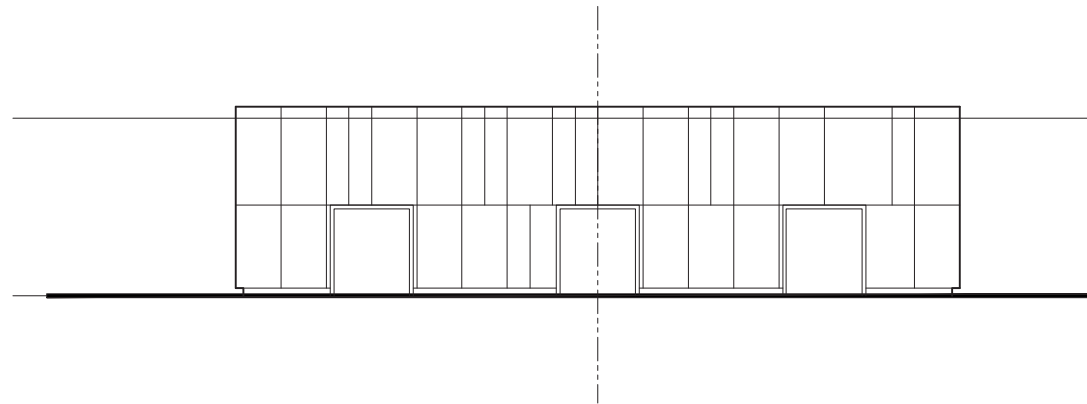
Legend

- | | | |
|--|---|--|
| 01 GRC Panels in Various Colours | 05 Painted rendered Concrete Wall | 09 Alum Security Screen - Match Sun Screen |
| 02 Insulated Glass - 600 x 1200 - Operable as shown | 06 Standard Pattern Alum Sun Screen Grating 1200 wide | 10 Exposed Concrete - No Finish |
| 03 Single Panel Glass - 600 x 1200 - Operable as shown | 07 Steel Structure to Engineers Requirement | 11 Door to Engineers Requirements |
| 04 Shed Panels Wall - Horizontal 300 ridges | 08 Removable Alum Louver | 12 Galv Steel Roll Up Door |
| | | 13 Rain Harvesting Equipment |

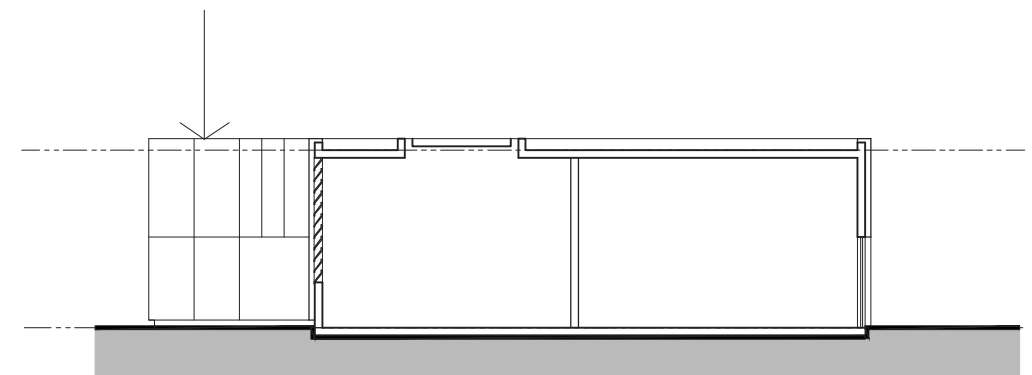








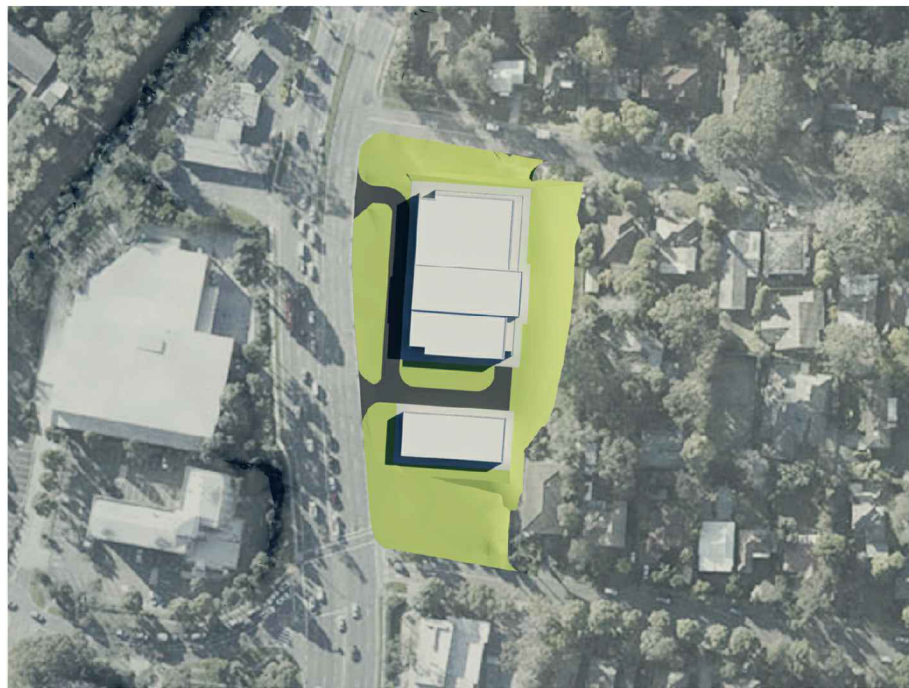
THIS PART IS ONLY FOR
WILSON ROAD SUBSTATION



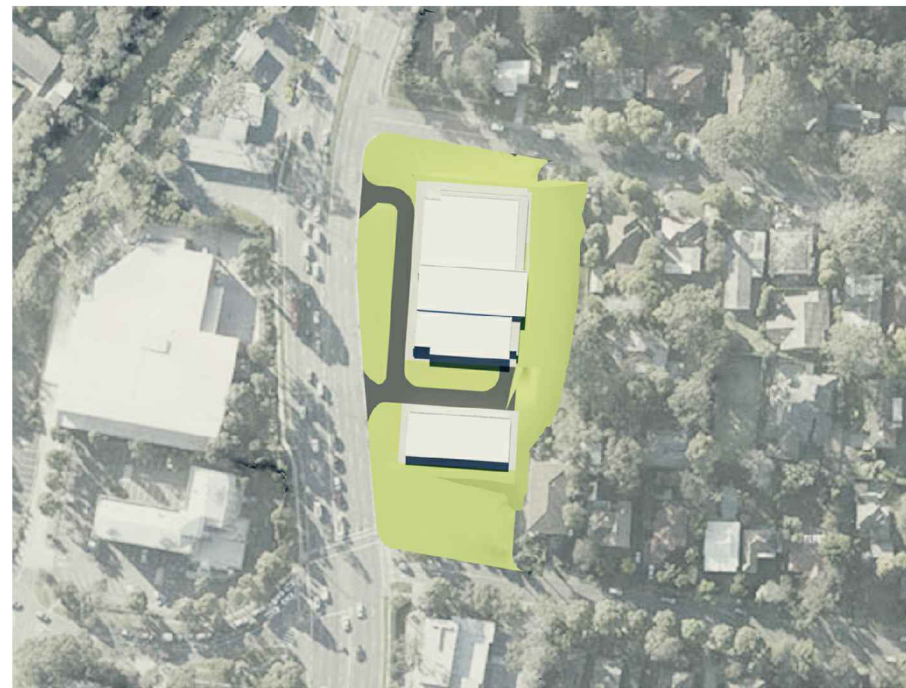
Legend

- | | | |
|--|---|---|
| 01 GRC Panels in Various Colours | 04 Shed Panels Wall - Horizontal 300 ridges | 07 Steel Structure to Engineers Requirement |
| 02 Insulated Glass - 600 x 1200 - Operable as shown | 05 Painted rendered Concrete Wall | 08 Removable Alum Louver |
| 03 Single Panel Glass - 600 x 1200 - Operable as shown | 06 Standard Pattern Alum Sun Screen Grating 1200 wide | 09 Alum Security Screen - Match Sun Screen |

WILSON ROAD & TRELAWNEY STREET TUNNEL SUPPORT FACILITY & NORTHERN VENTILATION FACILITY - SUBSTATION - ELEVATIONS AND SECTIONS - TYPICAL



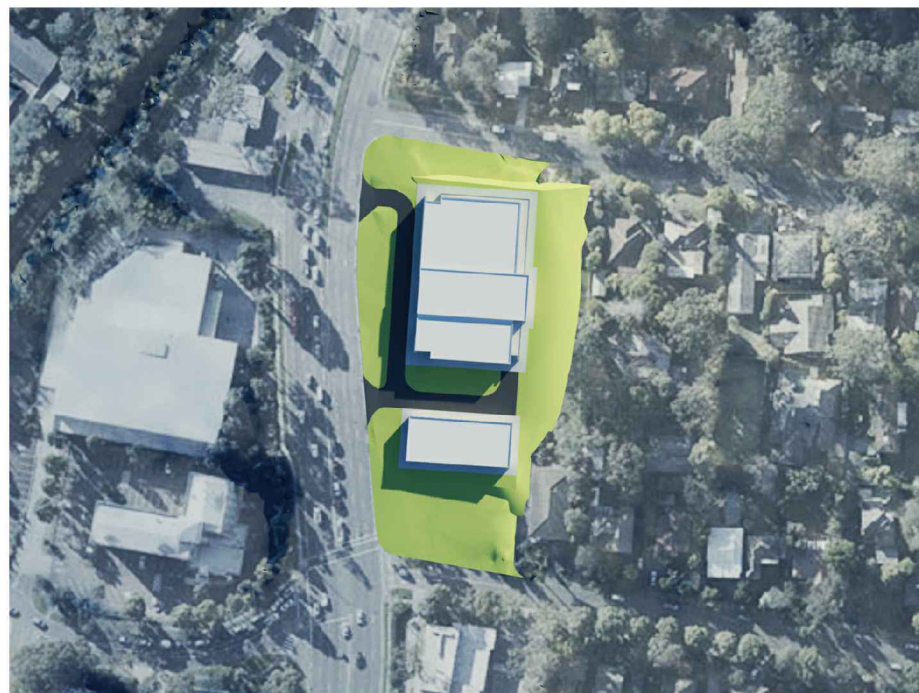
March 22 0900



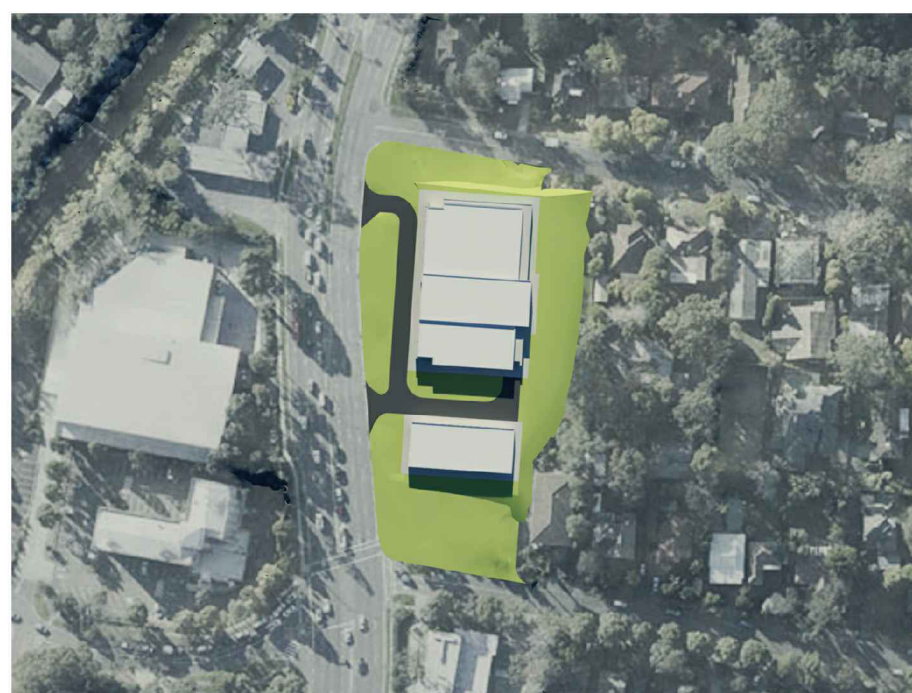
March 22 1200



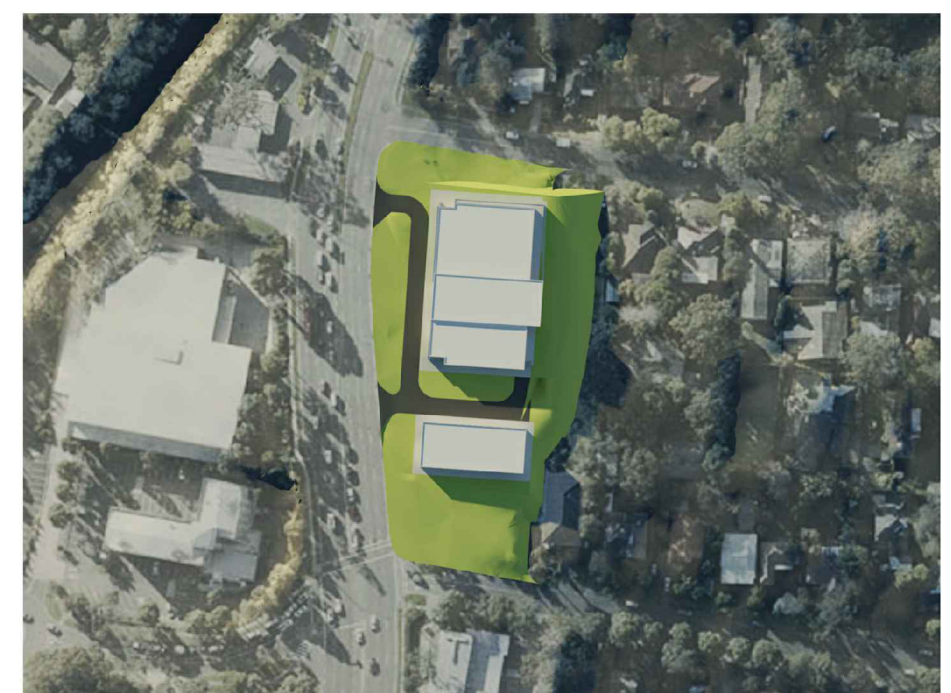
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June 21 0900



June 21 1200



June 21 1500

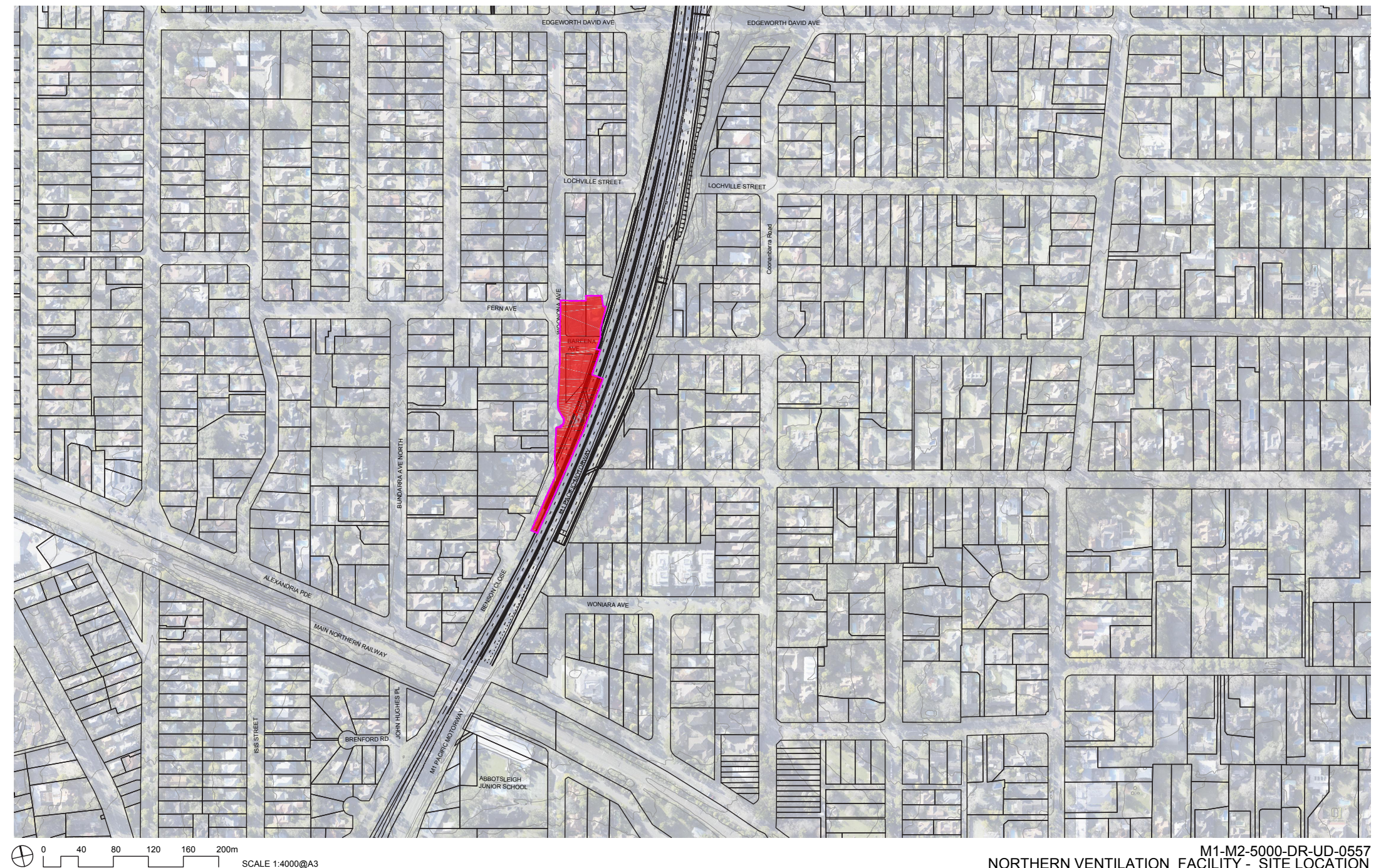
6.0 Operational Ancillary Facilities

6.13 Northern Ventilation Facility

The ventilation building and substation located at the corner of Bareena Avenue and Woonona Avenue North is intended to serve the northern portion of the tunnel. It houses a ventilation building, a substation and fire deluge storage tanks with booster pumps and valves.

It has the following elements:

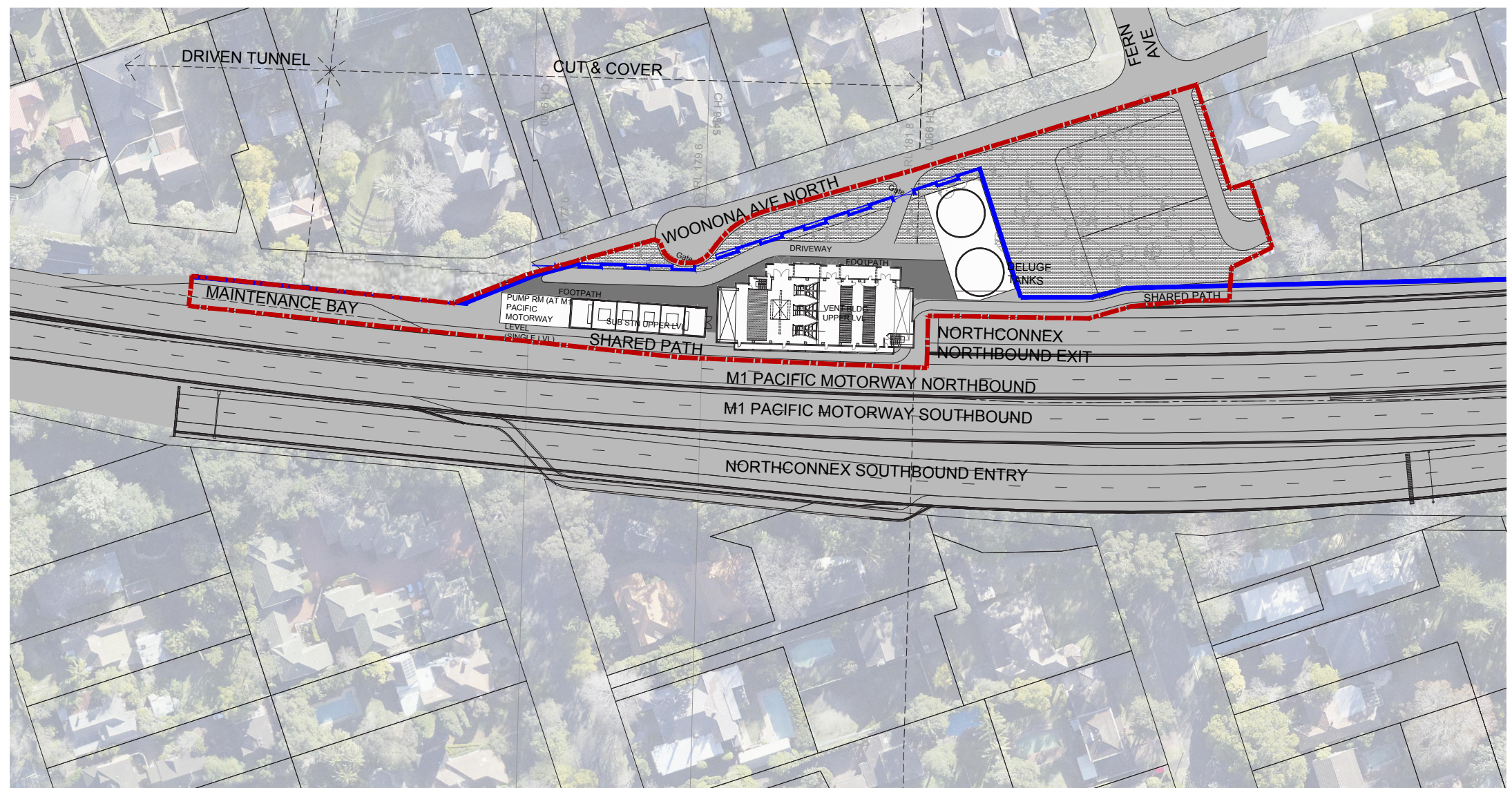
- The site is within the edge of a Heritage Conservation Area, bounded by roads on three sides. It does not share any contiguous edges with other residential properties within the conservation area;
- The site uses the cut and cover of the NorthConnex Northbound exit to accommodate the facilities;
- The site provides for construction of the ventilation, substation and fire pump room facilities directly above the northbound dive structure for the main NorthConnex Carriageway thus saving on land acquisition and capitalising on the structure needed for the dive structure itself;
- The built form typology adopts a two level stacked arrangement of the substation and ventilation facilities taking advantage of the level change between the M1 Pacific Motorway carriageways and the adjacent residential neighbourhood to the west and north which is approximately 7–9 metres, presenting a relatively low scale appearance from the neighbourhood side;
- Access to the ventilation, substation buildings and the deluge tanks would be predominantly from Woonona Avenue;
- The fire pump room would be a single storey building accessed directly from the M1 Pacific Motorway via a maintenance bay provided off the motorway. It would potentially be invisible from the neighbourhood side;



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NORTHERN VENTILATION FACILITY - SITE LOCATION

6.0 Operational Ancillary Facilities

- The substation covers a footprint of approximately 280m²;
- The ventilation building covers a footprint of approximately 960m²;
- The architecture of the buildings are articulated to reduce their impact from the neighbourhood side and define a pleasant urban edge along the M1 Pacific Motorway;
- Where possible, existing landscape and trees will be protected and maintained;
- Articulation includes a series of smaller volumes and elements intended to present a more domestic or small scaled unit building appearance. The western face is modulated into elements between 7.2 and 9.6 metres wide;
- The articulation strategy and material palette are repeated in the noise wall. This feature has sandstone planters, 'timber-look' battens and recessive colouring;
- A material palette of GRC panels, sandstone, 'timber-look' battens and glazed openings support the building articulation and provide some references to local character;
- The ventilation building is approximately at RL172.0 at the M1 Pacific Motorway Level and approximately RL180.0 at Woonona Avenue level. The top of the ventilation building is approximately RL188.0 and RL195.8 to the outlet;
- The substation building is approximately at RL173.78 at the M1 Pacific Motorway Level and approximately RL179.6 at Woonona Avenue level. The top of the substation building is approximately RL184.1 to FFL;
- The fire pump room building is approximately at RL173.78 at the M1 Pacific Motorway Level. The top of the fire pump room building is approximately RL178.28 to FFL;
- Fire deluge storage tanks would be located on the acquired land (rather than over the tunnel), cut into the slope to reduce apparent height. Booster valves would be located at the M1 Pacific Motorway level enabling direct access by Fire Rescue NSW;
- The landform varies along Woonona Avenue, but would not require any benching or retaining walls;



0 10 20 30 40 50m
SCALE 1:1000@A3

NOTE: FOR DISCUSSION ONLY
NOTE: LANDSCAPE SHOWN IS INDICATIVE

NORTHERN VENTILATION FACILITY - SITE PLAN - WOONONA AVE (UPPER LEVEL)
M1-M2-5000-DR-UD-0564