

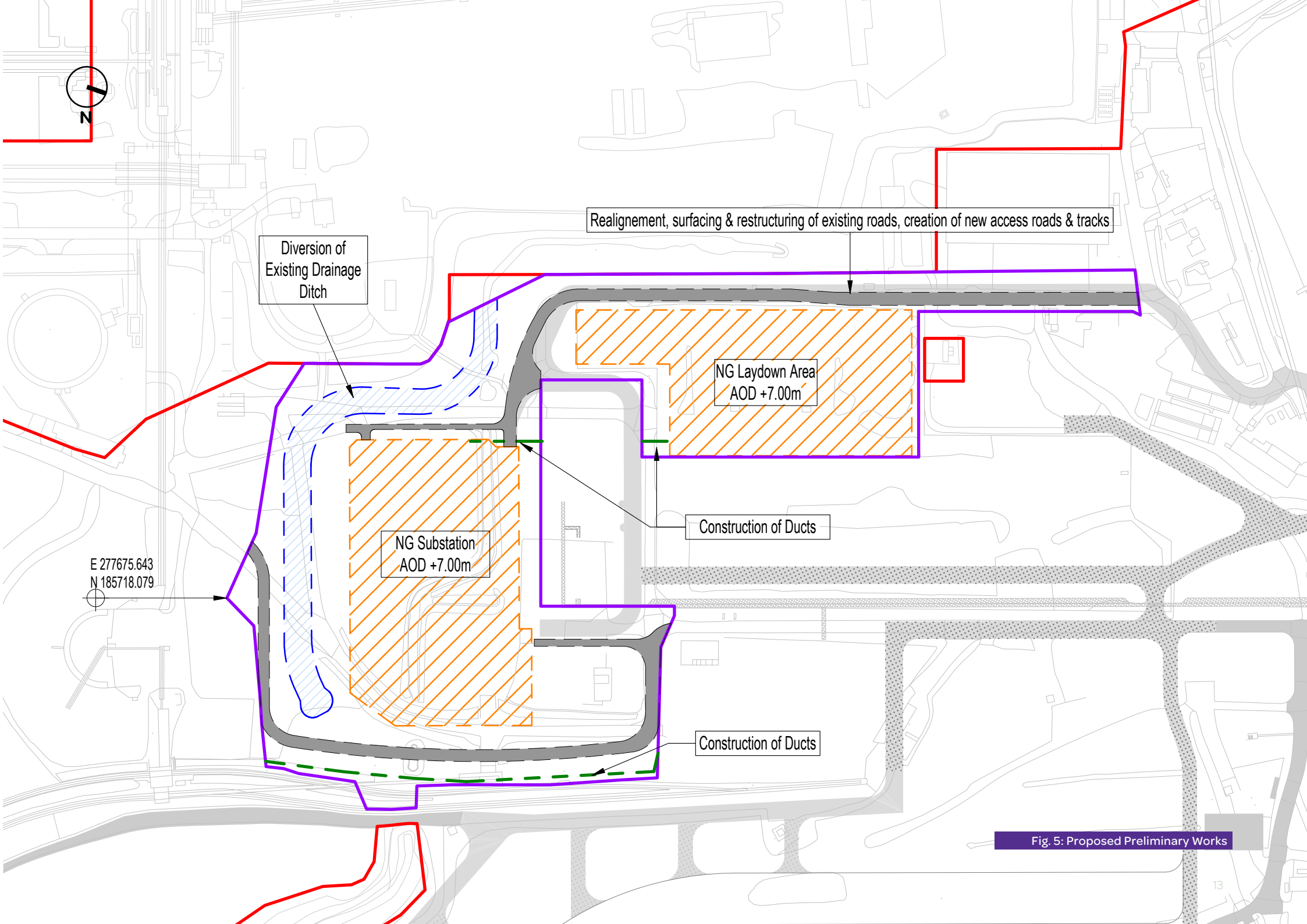


Fig. 5: Proposed Preliminary Works

Layout

The proposed National Grid substation will be located within the existing industrial area of the wider Port Talbot Steelworks site and will make use of the existing and approved transport infrastructure.

The preliminary works includes the realignment, resurfacing and reconstruction of existing roads, which will serve the proposed substation.

The access road shall be subject to low traffic counts as it will facilitate for access to the proposed substation only, which will be unmanned and will only require maintenance visits.

The internal road layout has been designed to optimise access to the various components of the Proposed Development safely and securely. A plan showing the proposed substation is shown opposite (Figure 6).

A total of six parking spaces, including two disabled spaces, are provided close to the entrance to the proposed GIS building.

Scale and Massing

As the proposed substation is located within the existing industrial area of the wider steelworks site, it will largely be perceived as part of the existing Site infrastructure and works, rather than a new development. The scale of the proposals will not extend the working area of the Site and the height and massing of buildings will be subservient to existing plant and buildings.

The approved outline application (P2024/0711) set the maximum parameters for the proposed substation at 200m long, 100m wide, and 15m high.

The maximum height of the proposed development is 13.09m (the height of the proposed GIS hall), which is within the approved maximum height parameters of 15m.

The dimensions of the proposed components are set out in the table below.

Component	Length	Width	Maximum height
GIS building	26.477m	49.623m	13.090m
Water tank	Concrete slab base 6.9m	Concrete slab base 6.9m	6.0m
Transformer enclosures	16.3m	9.1m	5.0m
Transformers	14.7m	10.1m	7.9m
Storage units	6.096m	2.438m	2.591m
Workshop	6.096m	2.438m	2.591m

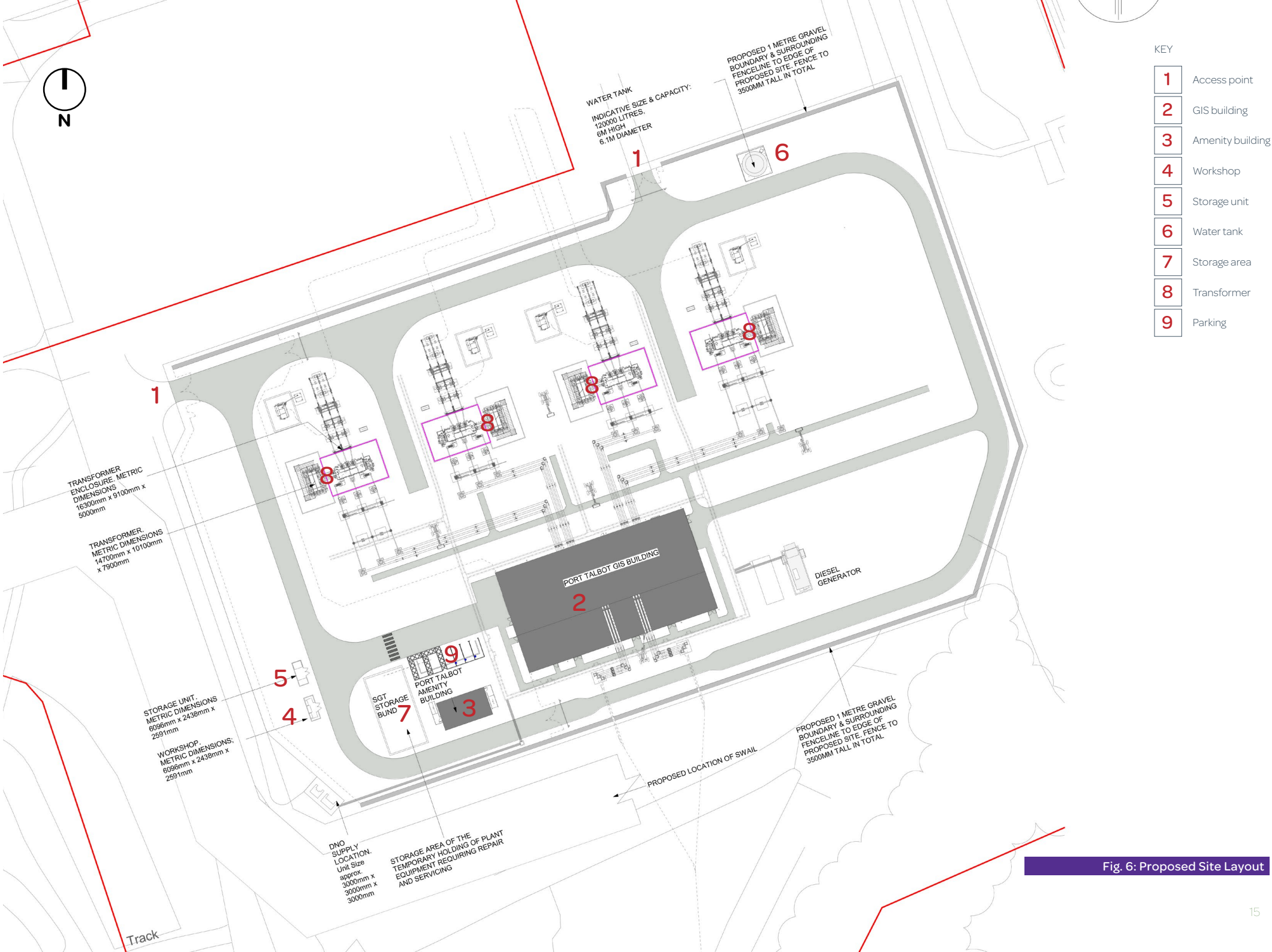


Fig. 6: Proposed Site Layout

GIS Hall

The GIS (Gas Insulated Switchgear) Hall takes the form of a large rectangular building located towards the southern boundary of the National Grid compound site

Scale

The proposed building is 49.623m in length and 26.477m wide. The building's overall maximum height is 13.09m. The larger, north western part of the building, which houses the main GIS, features a 5 degree mono-pitched roof which slopes down from a maximum height of 13.09m to an eaves height of 11.25m.

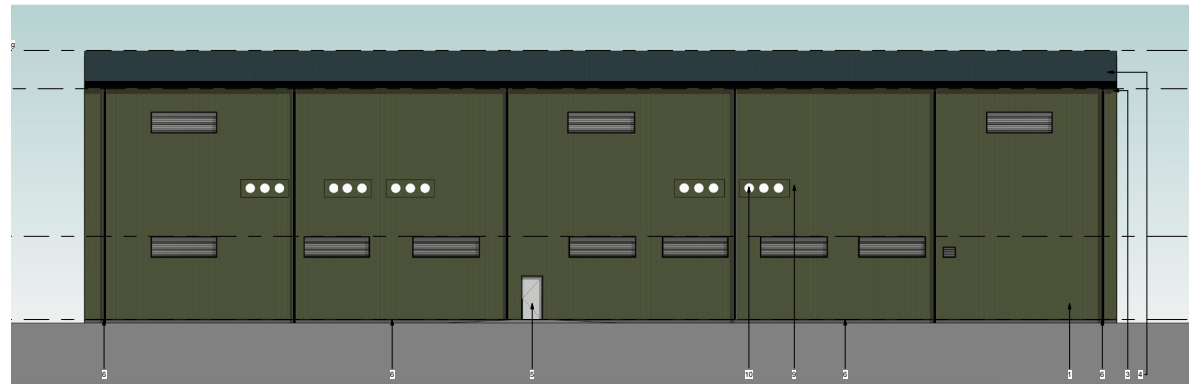
The lower, south eastern part of the GIS Hall, which houses the control rooms, telecom room, LV AC/DC room and battery room, also features a 5 degree mono-pitched roof with an eaves height of 4.449m.

Materials / Appearance

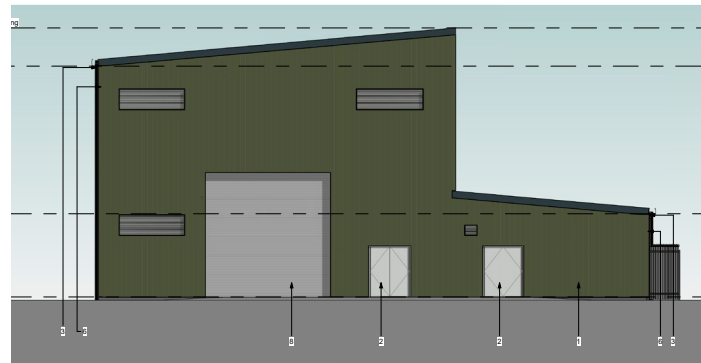
The proposed materials are as follows:

- **Wall cladding:** composite insulated cladding panels in Olive Green (RAL 6003)
- **Roof cladding:** insulated built-up roof with a trapezoidal external profile in Dark Grey (RAL 7016)
- **External doors / roller shutter doors:** powder coated steel in Grey (RAL 7035)
- **Rainwater pipes:** aluminium in Black (RAL 9005)
- **Guttering:** steel in Black (RAL 9005).

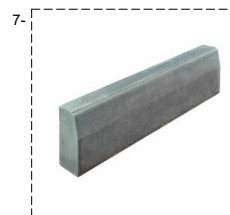
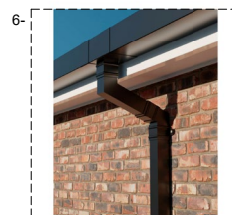
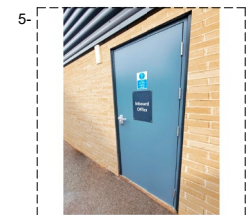
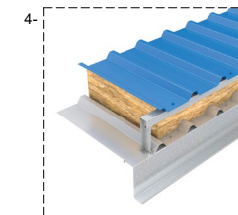
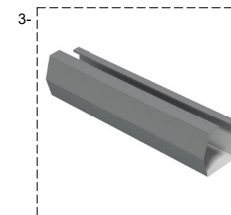
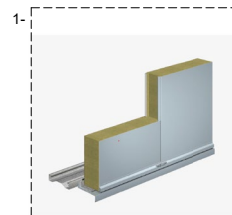
1. Wall cladding system
2. External double doors
3. Gutter system
4. Roof cladding system
5. External single door
6. Rainwater pipe
7. Kerb upstand
8. Roller shutter door



ZZ_NorthElevation - Proposed Materials



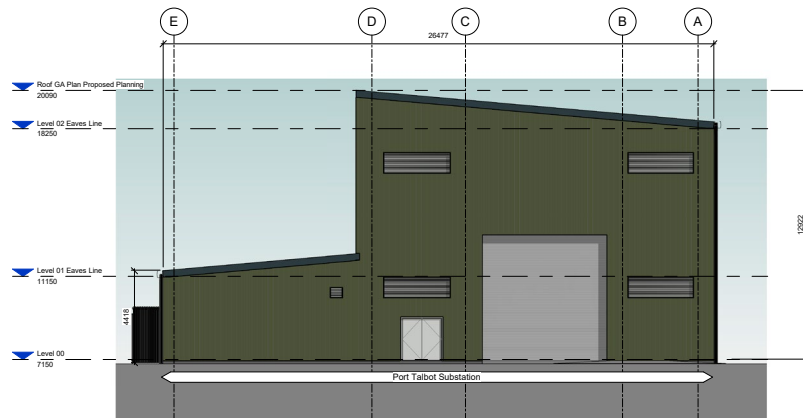
ZZ_WestElevation - Proposed Materials



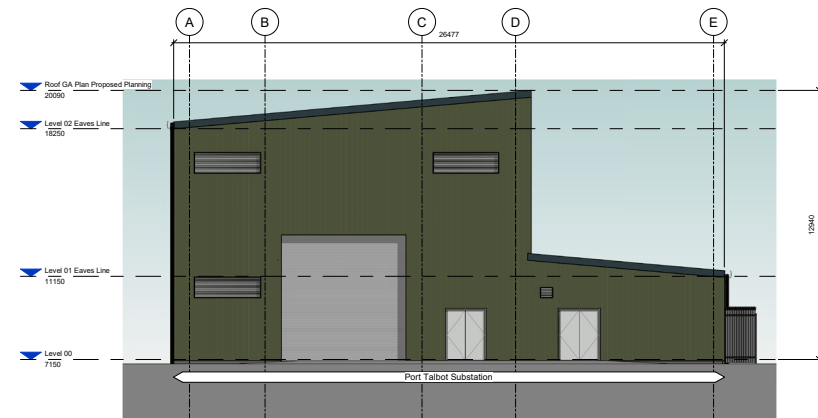
Images for illustrative purposes only.



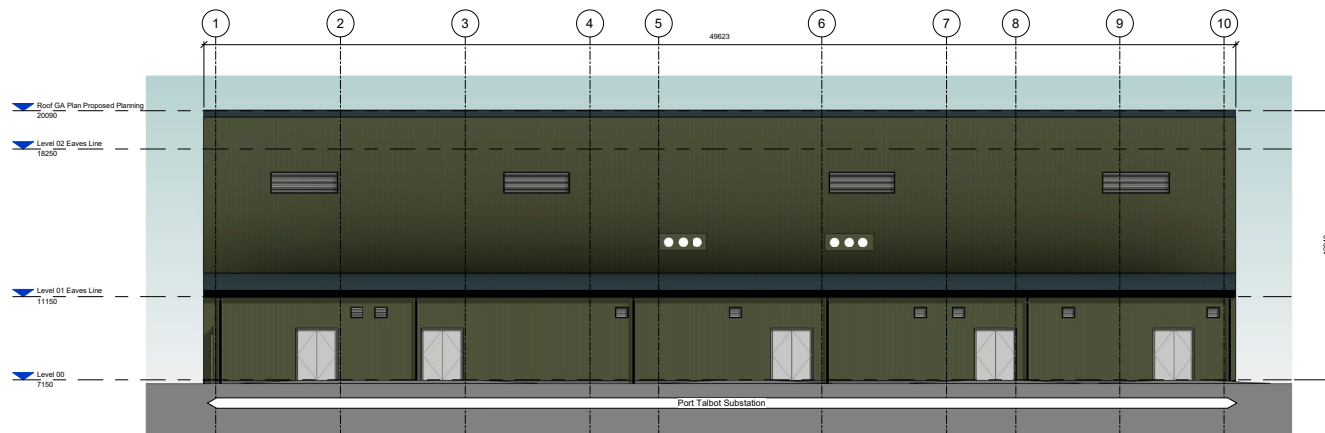
1 ZZ NorthElevation



2 ZZ EastElevation



3 ZZ WestElevation



4 ZZ SouthElevation

Amenities Building

The proposed amenities building is located within the south western corner of the proposed National Grid compound. It houses offices, meeting room, mess room, toilets, showers and changing facilities.

Scale

The proposed building is rectangular in shape and extends to 12.346m in length and 7.09m in width. The roof has a maximum overall height of 3.53m (ridge), falling in a shallow pitch of 2 degrees. A small canopy projects over the building entrance.

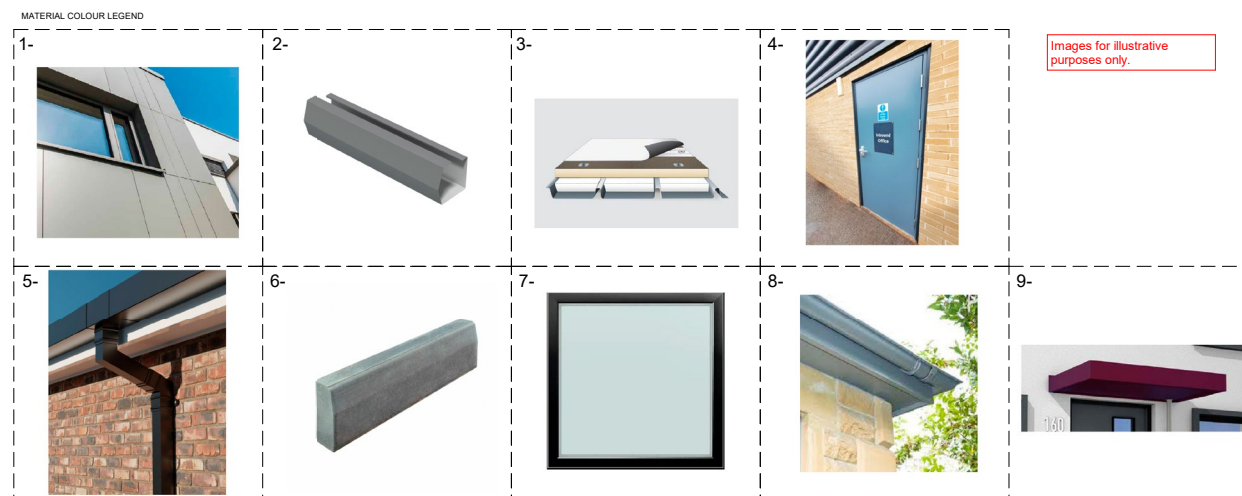
Materials / Appearance

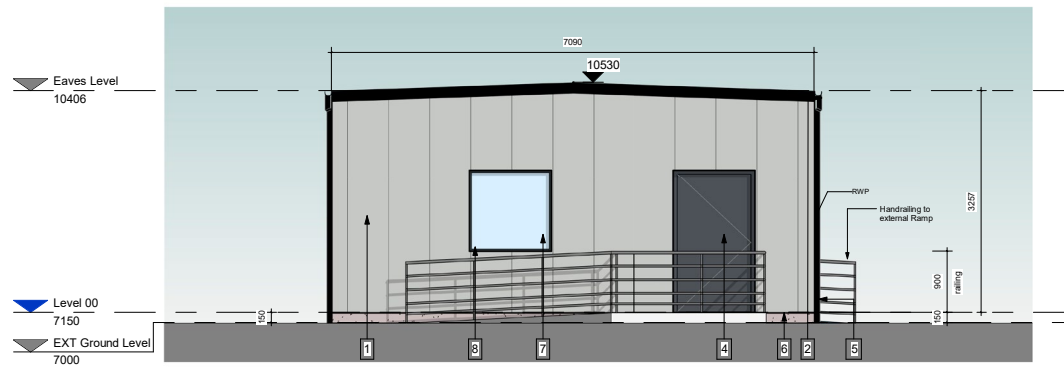
The proposed materials are as follows:

- **Wall cladding:** basalt stone facade panel (RAL 7035)
- **Roof:** EPDM single ply membrane roof (RAL 9004)
- **External door:** general purpose hinged steel door, powder coated in Grey (RAL 7015)
- **Door canopy:** powder coated aluminium in Grey (RAL 7016)
- **Window:** aluminium framed solid panel window with translucent glazing in Grey (RAL 7015)
- **Rainwater pipes:** aluminium in Black (RAL 9005)
- **Guttering:** steel in Black (RAL 9005)
- **Cill, verge, head and cill flashings:** aluminium in black (RAL 9005).

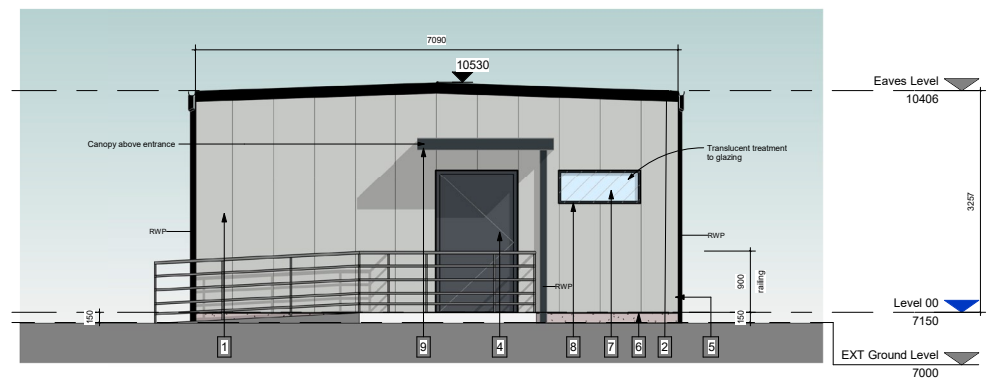
1. External wall cladding
2. Gutter system
3. Single ply membrane roof
4. External door
5. Rainwater pipe
6. Kerb upstand
7. Window
8. Cill, verge, head and cill flashings
9. Door canopy

	RAL 7015 (Slate Grey)
	RAL 7016 (Dark Grey)
	RAL 7035 (Grey)
	RAL 9004 (Black)
	RAL 9005 (Black)

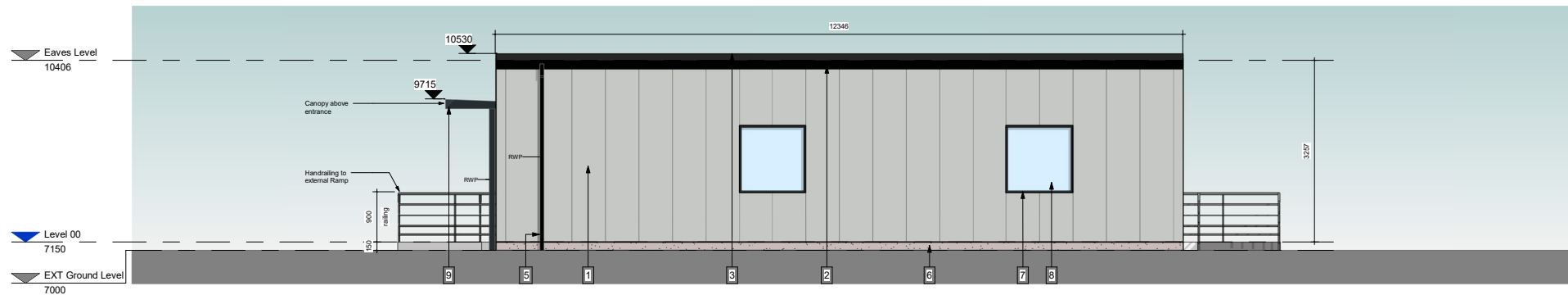




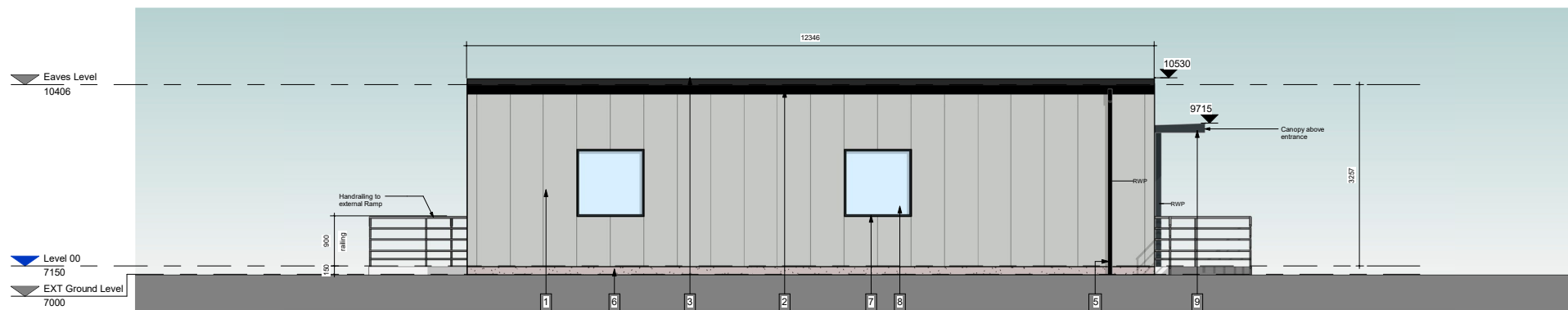
1 South Elevation



2 North Elevation



3 West Elevation



4 East Elevation

Fig. 8: Proposed Amenity Building Elevations

Workshop and Storage Unit

The workshop and storage units comprise of two identical modular ISO standard steel shipping container, located in the western part of the proposed National Grid compound.

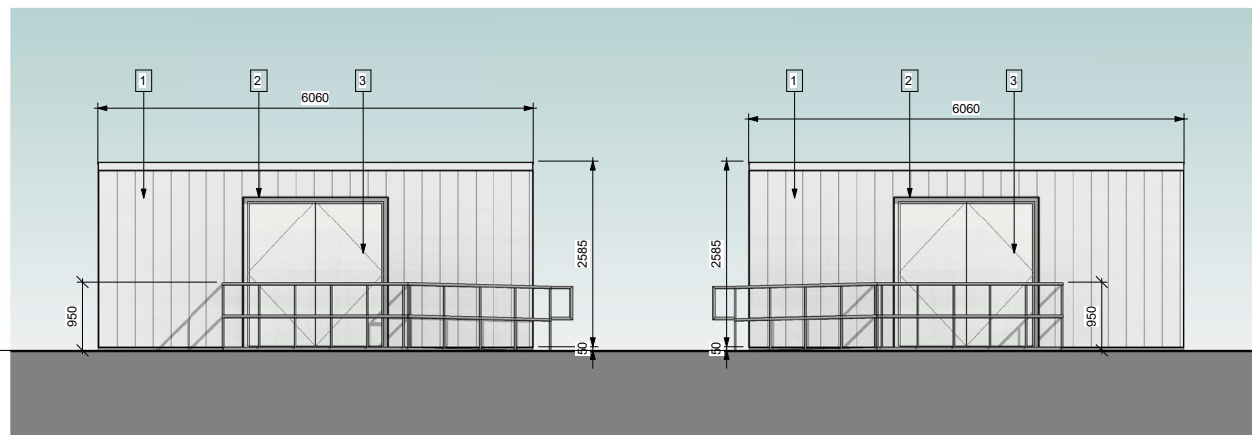
Scale

Each unit is 6.06m in length; 2.4m in width and 2.635m in height with a flat roof. Each unit has an external stair with a handrail on both sides fixed to staircase and landing.

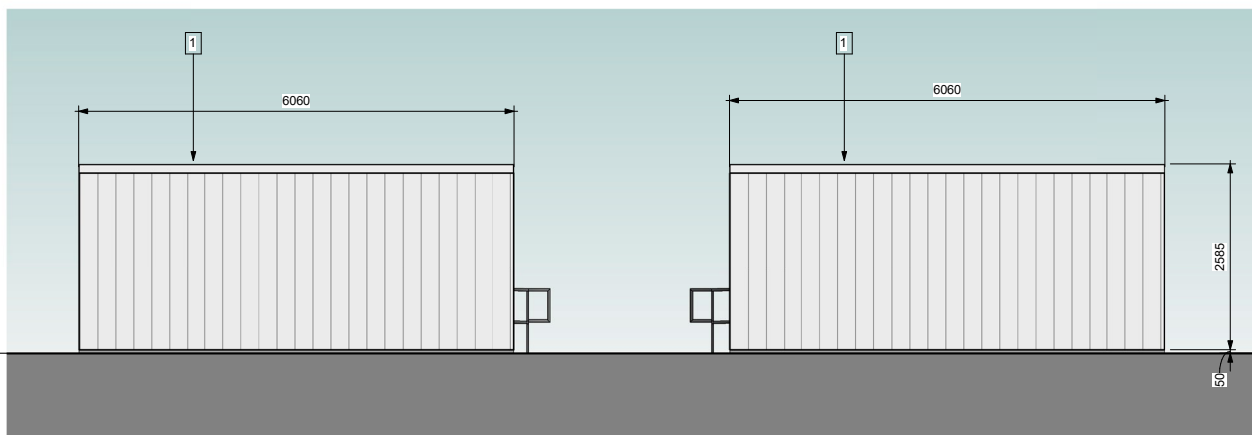
Materials / Appearance

The proposed materials are as follows:

- **Modular workshop and storage unit:** modified ISO standard steel shipping container in Grey (RAL 7035)
- **External door:** general purpose hinged steel door, powder coated in Grey (RAL 7035)
- **External stair and balustrade:** stainless steel.

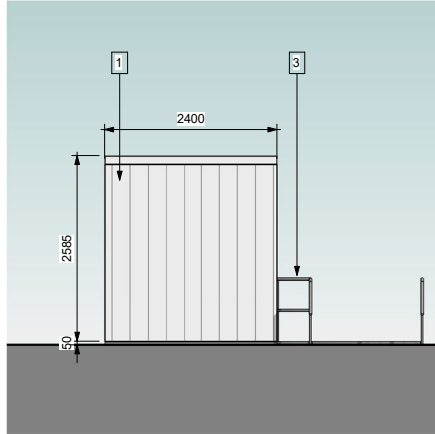


2 | Port Talbot Storage & Workshop East Elevation

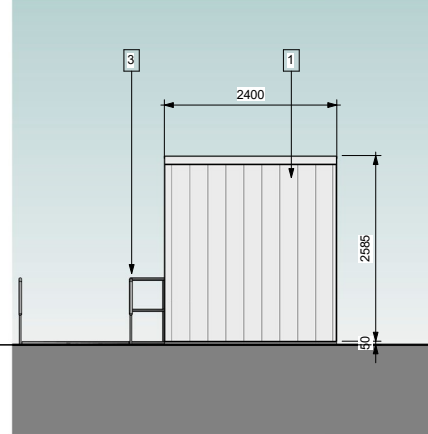


3 | Port Talbot Storage & Workshop West Elevation

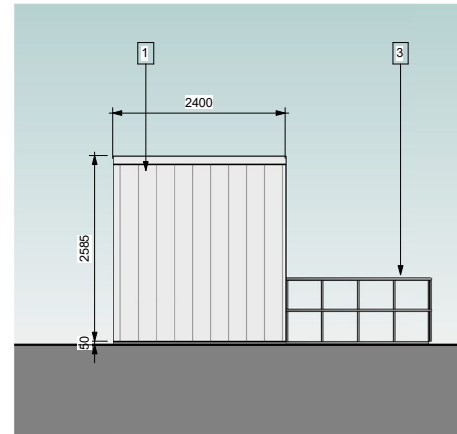
RAL 7035 (Grey)



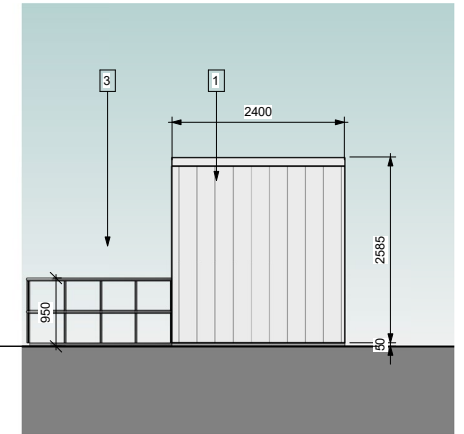
Port Talbot Workshop South Elevation



Port Talbot Storage North Elevation



Port Talbot Storage South Elevation



Port Talbot Workshop North Elevation



Example of proposed modular unit

Fig. 9: Proposed Workshop / Storage Building Elevations

Water Tank

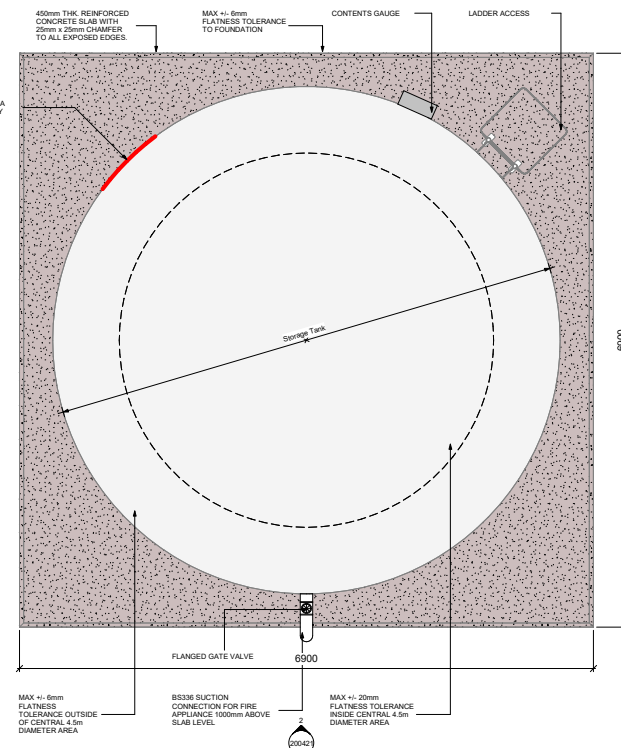
The proposed water tank is located in the north eastern part of the proposed National Grid substation compound.

Scale

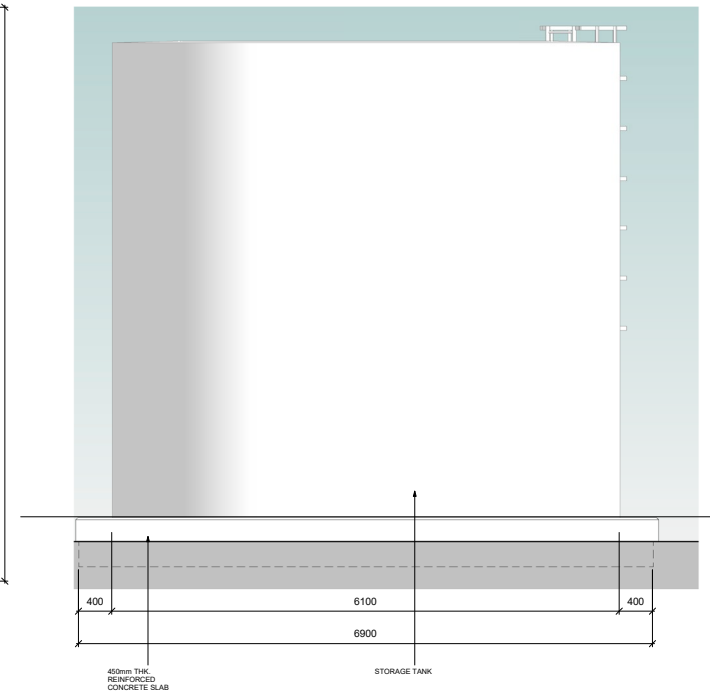
The water tank sits on a 6.9m x 6.9m square concrete slab base which is 0.45m high. The water tank itself is 6.1m in diameter and 6.0m in height.

Materials / Appearance

The water tank is finished in galvanised steel panels.



1 | Level 00 GA Plan Proposed Water Tank



2 | Port Talbot Water Tank South Elevation

Boundary Treatment

A 2.4m high galvanised steel palisade security fence is proposed around the perimeter of the proposed substation. The external perimeter fence incorporates a 3.4m high electric pulse fence.

The fence is designed to deter unauthorised access and prevent climbing and will comply with safety and security standards for substations.

Two access gates are proposed along the northern and western boundaries.

The proposed fence details are set out on drawing ref. MARPT-BHK-02-XX-DG-5-162302.

A 1 metre gravel strip is also proposed along the northern, eastern and southern boundaries.





Example image showing steel access gate with electrified wire overhead



Example image showing steel perimeter fence with electrified wire overhead.

Drainage

As part of the proposals, an unnamed Ordinary Watercourse to the southern extent of the site is to be diverted as a result of the requirement to place the National Grid compound to the north of the southern fields. The existing watercourse crosses the proposed National Grid compound in an easterly direction. The existing channel is culverted along part of its length to facilitate highway crossings.

The proposed diversion route retains the watercourse as an open channel for as much as possible along its length.

The proposed development area comprises two main elements for surface water drainage - the proposed National Grid compound and an associated access road. Ultimately, these two areas shall comprise of separate surface water drainage systems.

Access Road

It is currently proposed that surface water landing on the road will flow overland towards a swale directly adjacent to the road. Surface water will then be conveyed towards, and discharged into, the Ordinary Watercourse at the southern extent of the red line boundary area at an unattenuated rate. The swale will provide water quality, amenity, and biodiversity benefits. The swale feature will be self-seeding, with species that are suitable for the industrial nature of the site and have low maintenance requirements.

National Grid Compound

The proposed National Grid compound will ultimately discharge to the unnamed ordinary watercourse at the southern extent of the red line boundary area.

The proposed surface water network shall comprise a near flat system to achieve a drainage network within the depths available. Drainage of the system shall rely on a pressure-head differential on a surcharged network to ensure discharge to the watercourse, and self-cleansing of the system.

To facilitate this design, surface water catchments will be conveyed via either a filter trench or bund water control unit (pump) from within bundled higher contamination areas. All systems provide a level of filtration to minimise silts/fines wherever possible.

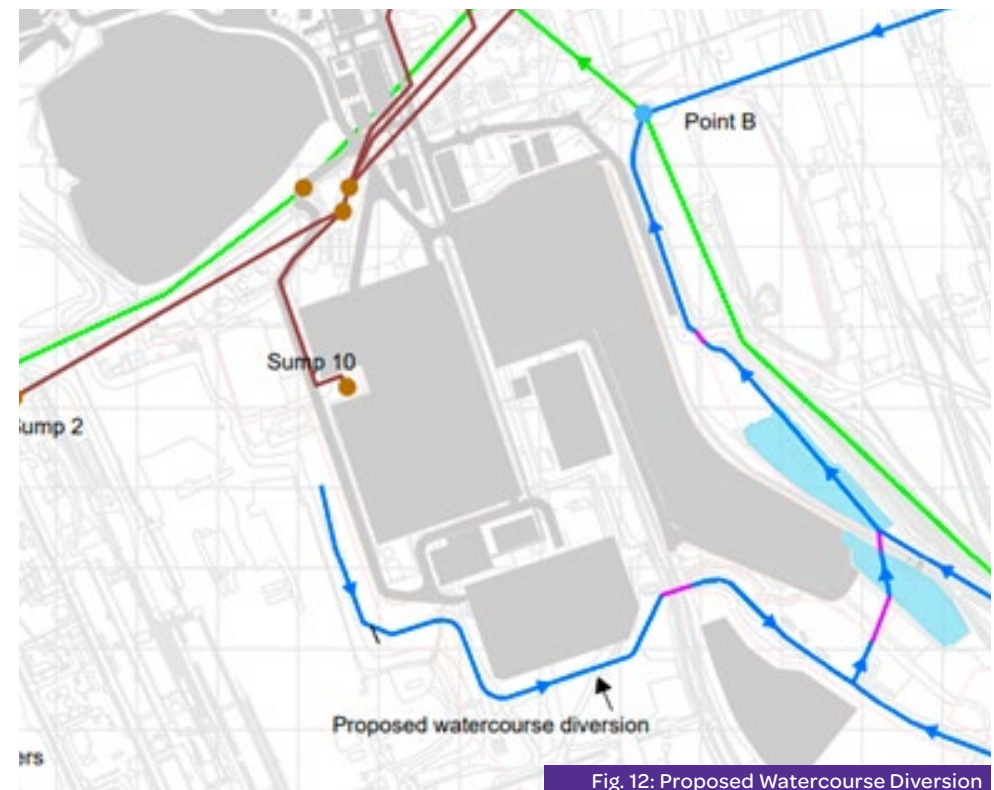


Fig. 12: Proposed Watercourse Diversion

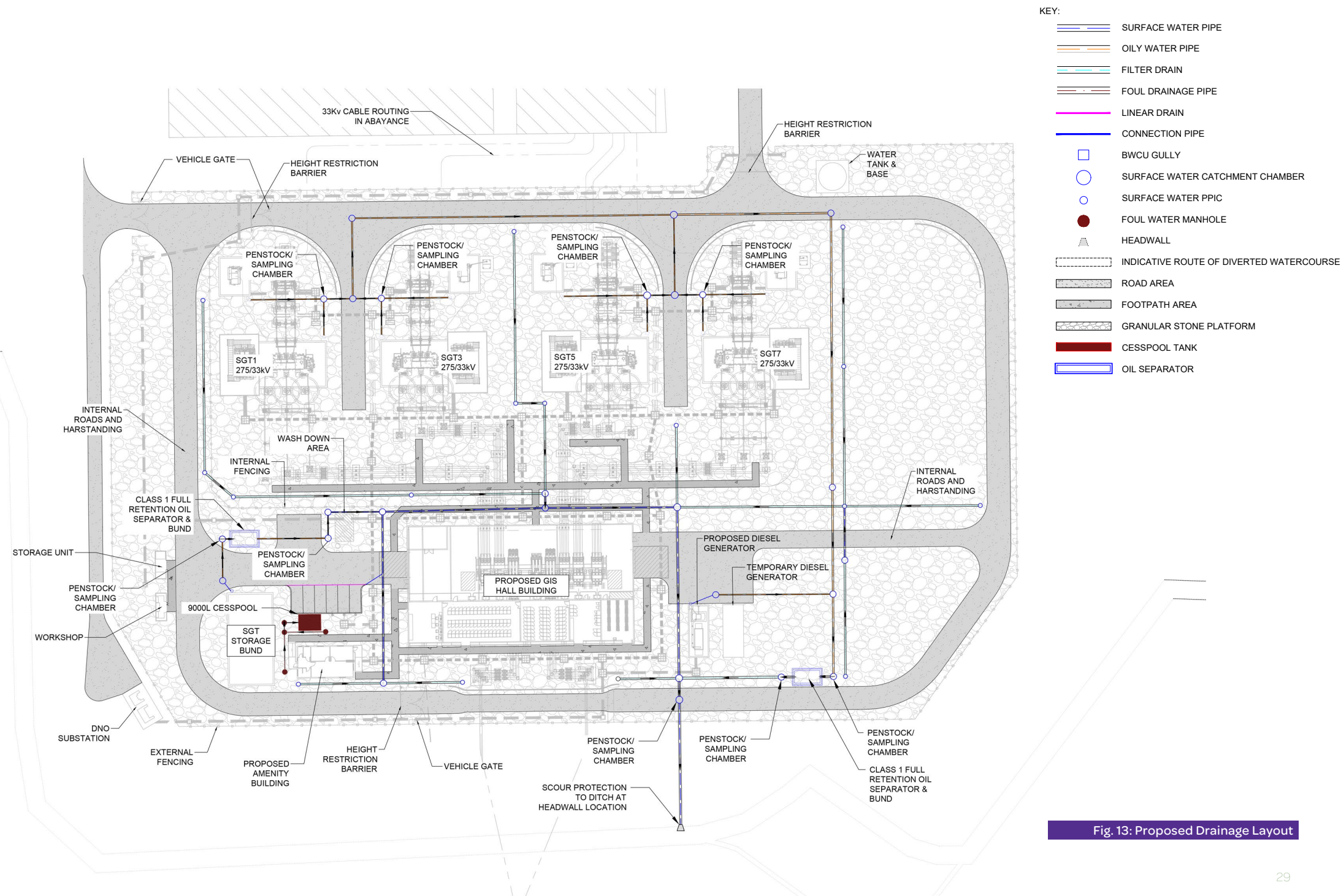


Fig. 13: Proposed Drainage Layout

Lighting

A lighting plan has been prepared for the Proposed Scheme (drawing ref. MARPT-BHK-02-XX-DG-E-320010).

Transformers

Steel enclosures are proposed to the transformers to reduce the noise associated with the proposed substation transformers.



Example image showing steel transformer enclosure for acoustic attenuation purposes



04 Summary & Conclusion

This Design Compliance Statement has been prepared to demonstrate that the RM application for the National Grid electrical infrastructure accords with the outline hybrid planning permission (ref. P2024/0711), approved in March 2025.

This DCS demonstrates that the proposed development is in accordance with the parameters of the consented hybrid development and therefore will be responsive to its surrounding context and can be delivered in accordance with relevant design policies.



Turley