

BREATHE ENERGY SUBSTATION

North Manchester General Hospital

Design & Access Statement

January 2023



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0.0 INTRODUCTION

This Design & Access Statement has been prepared by DAY Architectural in support of an application for Full Planning Permission for the perimeter fencing and associated retaining wall system for the Breathe Energy Centre Substation.

0.1 DESIGN BRIEF

The current substation is in support of the NMGH Masterplan as an intermittent scheme.

The site sits next to the existing Breathe Energy Centre and adjacent to the GMMH New Build facility and associated landscaping.

The current substation has a series of associated M&E equipment circa 3m in height that faces Central Drive. There is also a new proposed road that creates another prominent frontage to this substation.

The brief was to mask and lessen the impact of the M&E kit that would otherwise be a prominent frontage to these main arterial routes. Also to provide a secure compound to maintain proposed kit and ensure that the site is enclosed due the level differences between the substation level and new road/pavement level.





① New Energy Centre

② Substation 8 Site

NMGH Masterplan Overview

The NMGH Redevelopment will include a new Energy Centre which is to be constructed to the North of the hospital site and which will serve the new acute hospital via underground services tunnels.

The substation 8 project is an intermittent scheme to serve, A-G blocks, North Manchester House and FM building until the main redevelopment is underway.

Once the site is redeveloped and the new infrastructure is in place Substation 8 will be come redundant and this location will be transformed into public realm space to the front of the new Wellbeing hub.

This Masterplan is subject to funding and associated timescales are to be confirmed and is NOT inclusive within this application.

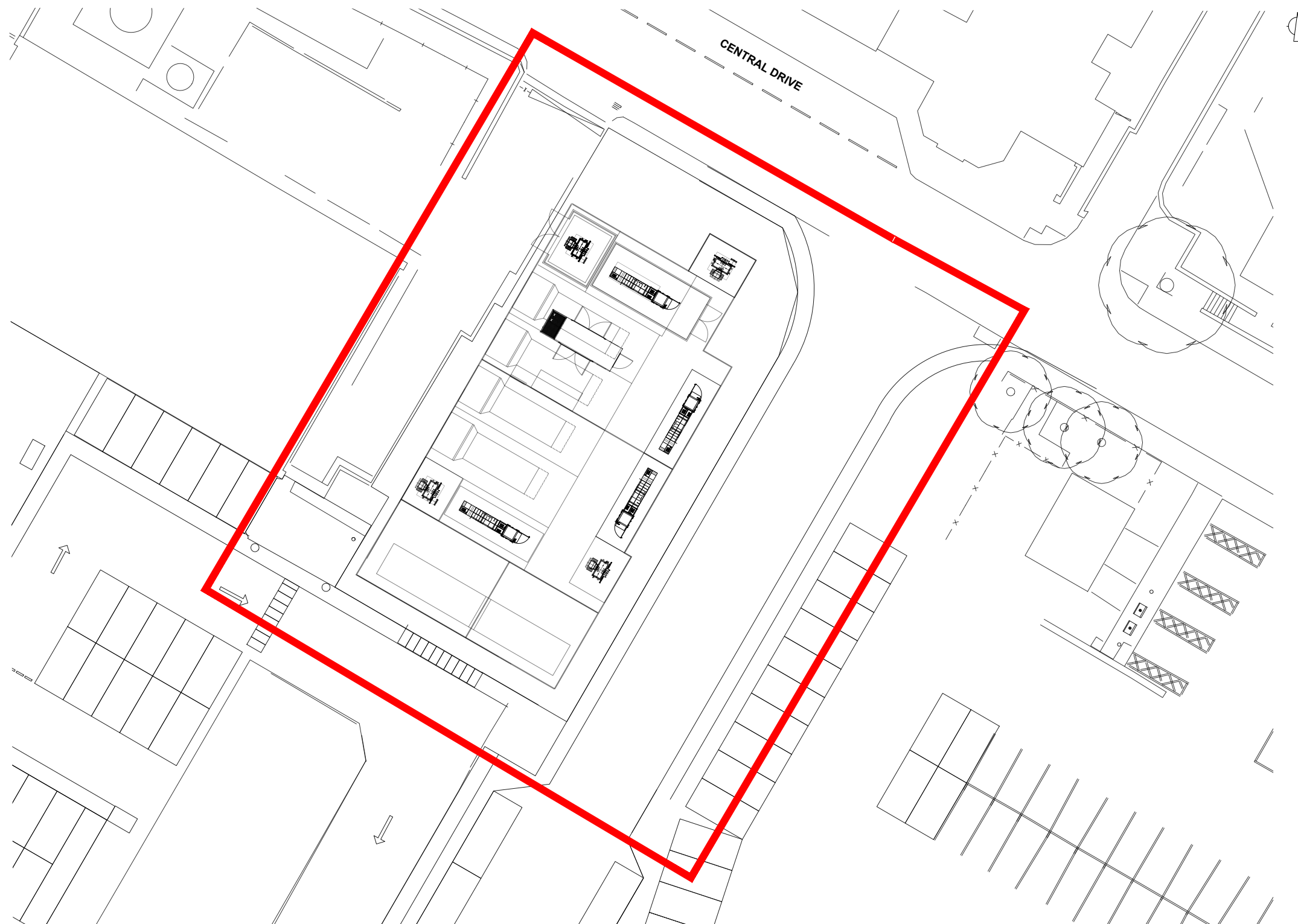


Site Location Aerial View

- Trust Ownership Boundary Line
- Proposed Site Boundary

01 | SITE ANALYSIS

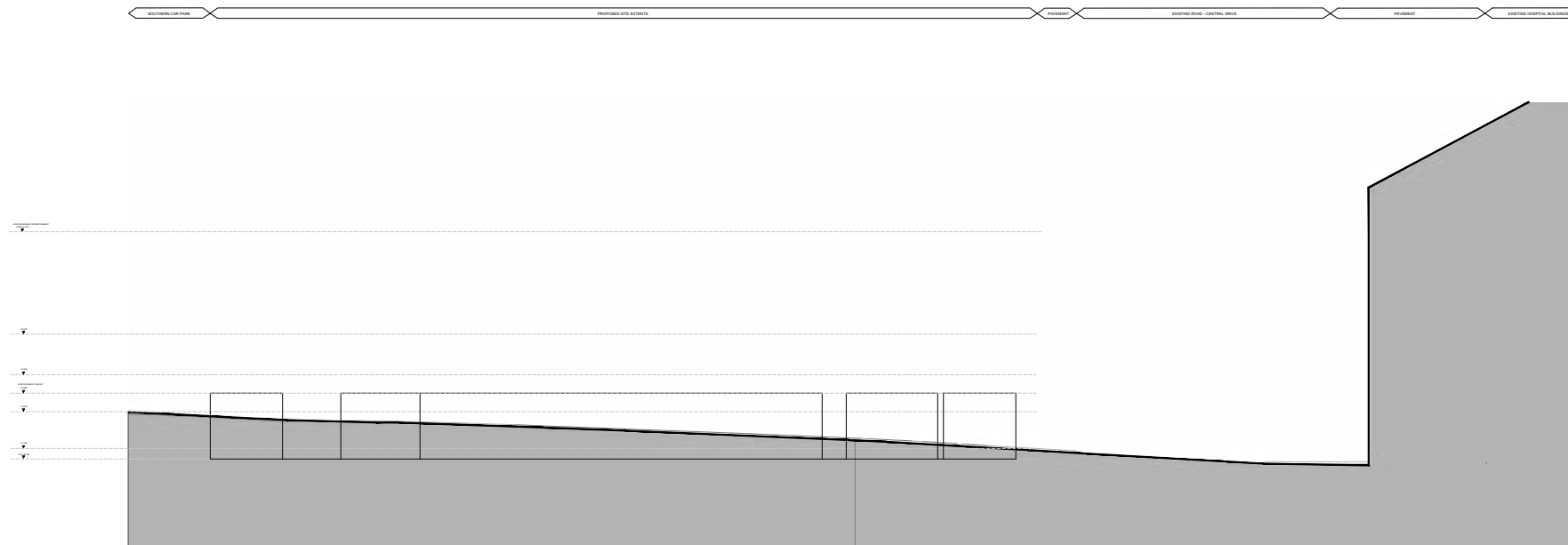
Existing Site Plan



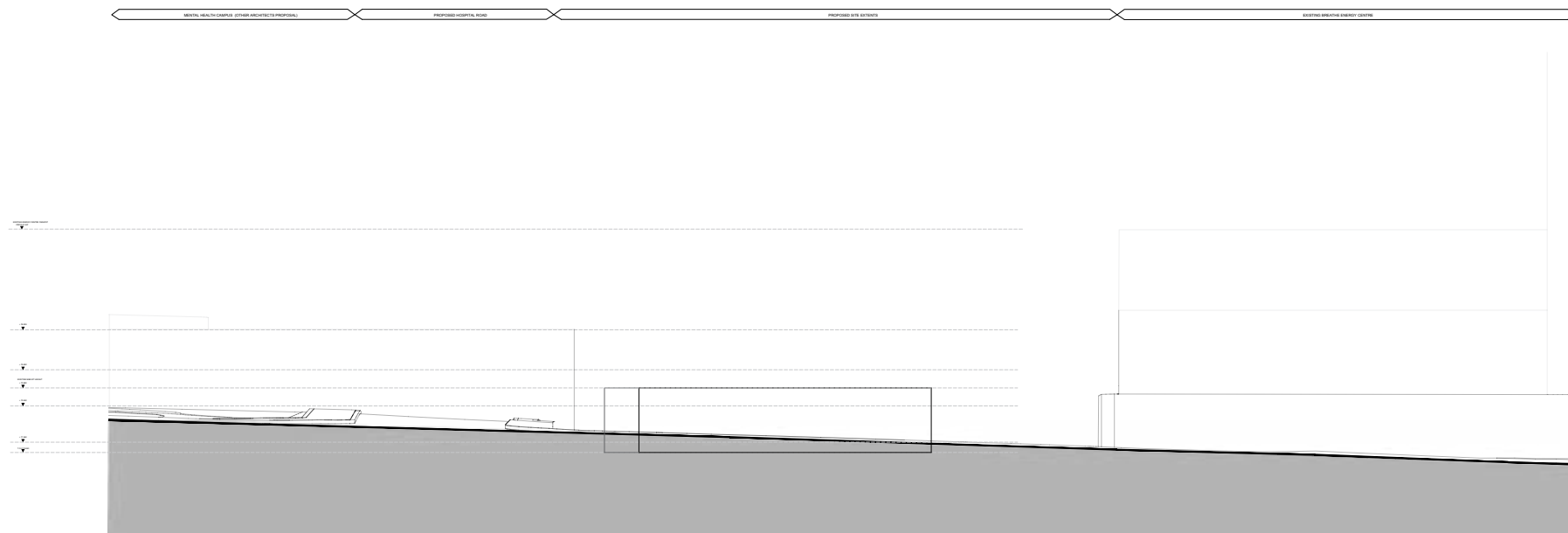
01 | SITE CONTEXT & ANALYSIS

Existing Site Photos

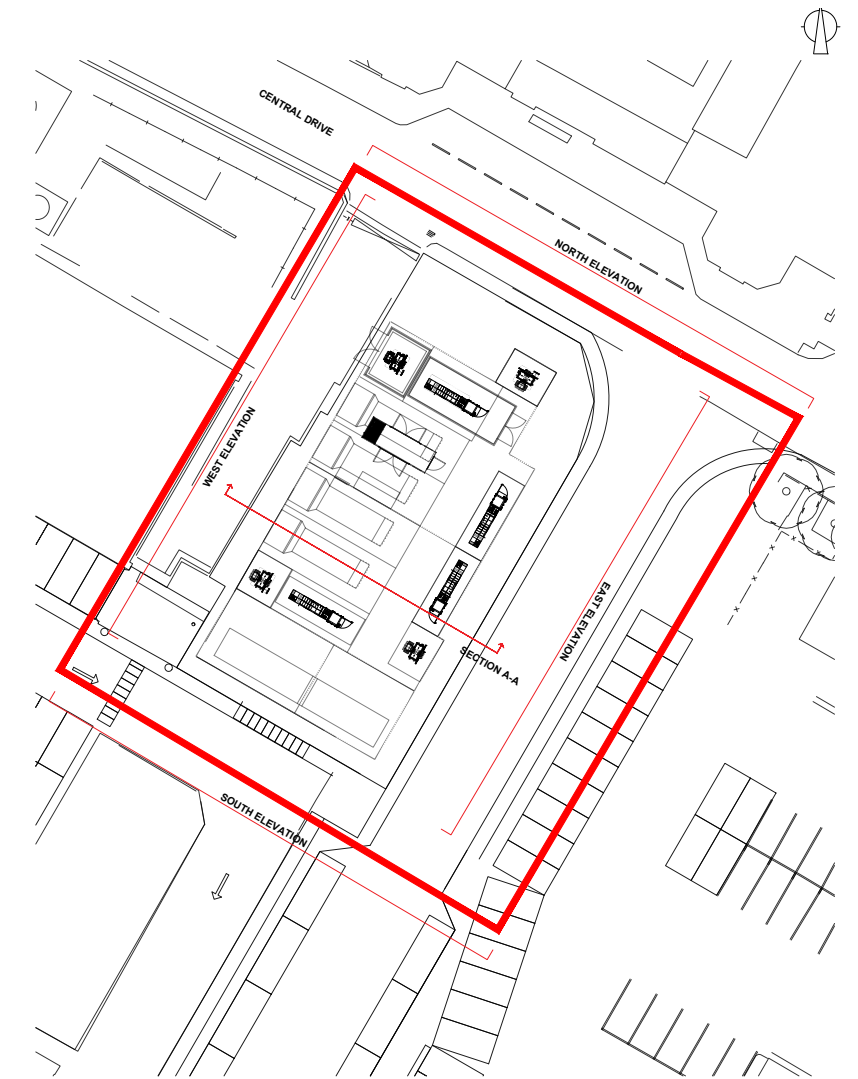




EXISTING EAST ELEVATION_1:100



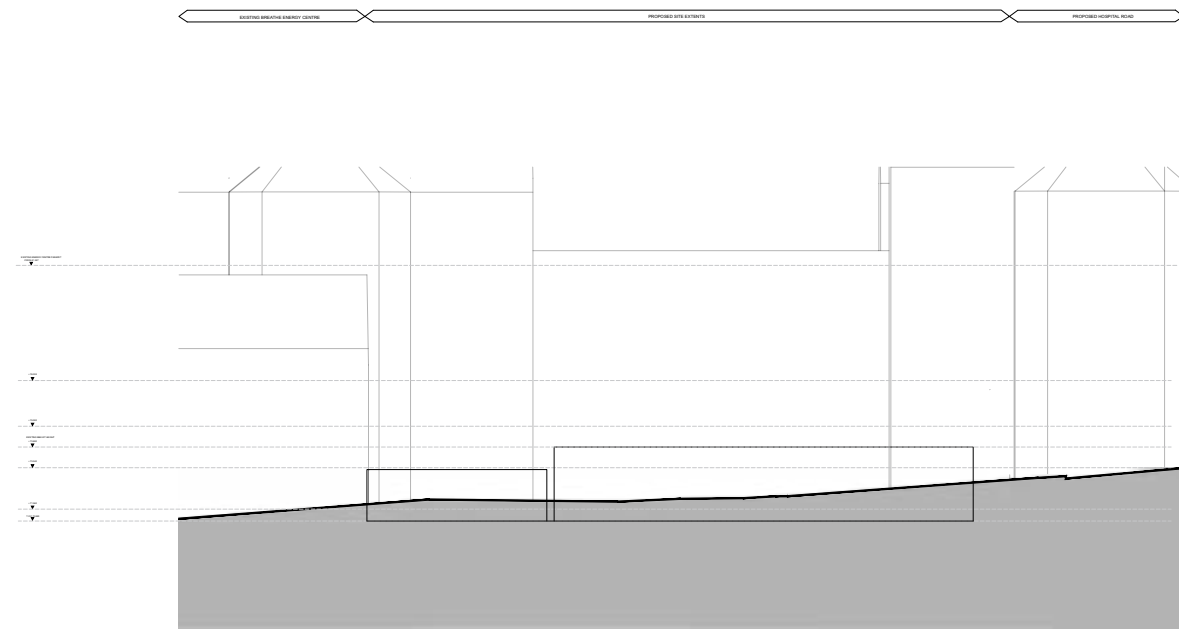
EXISTING NORTH ELEVATION_1:100



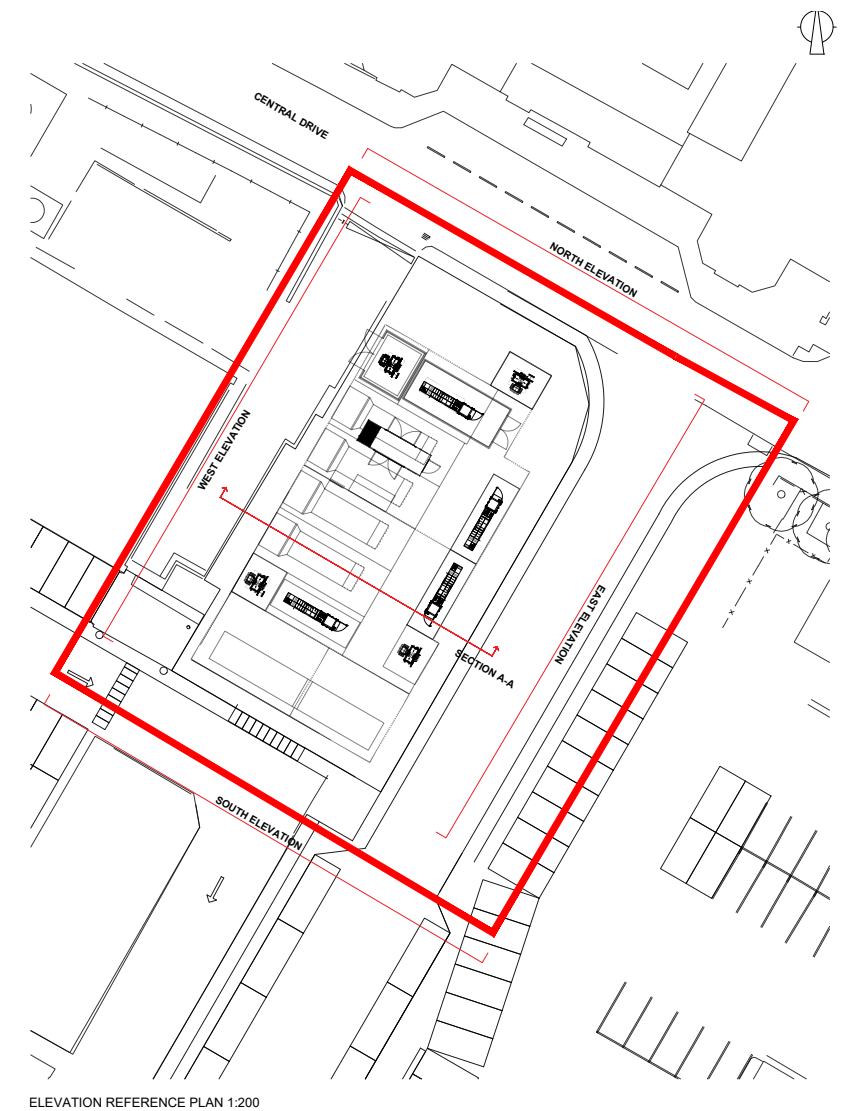
ELEVATION REFERENCE PLAN 1:200

01 | SITE CONTEXT & ANALYSIS

Existing Elevations



EXISTING SOUTH ELEVATION_1:100

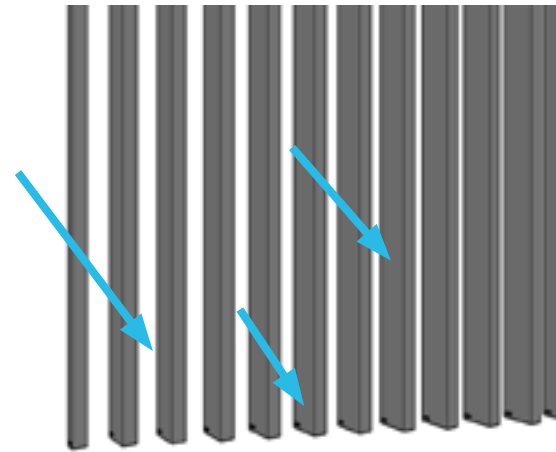


ELEVATION REFERENCE PLAN 1:200

KEY DESIGN INTENTIONS

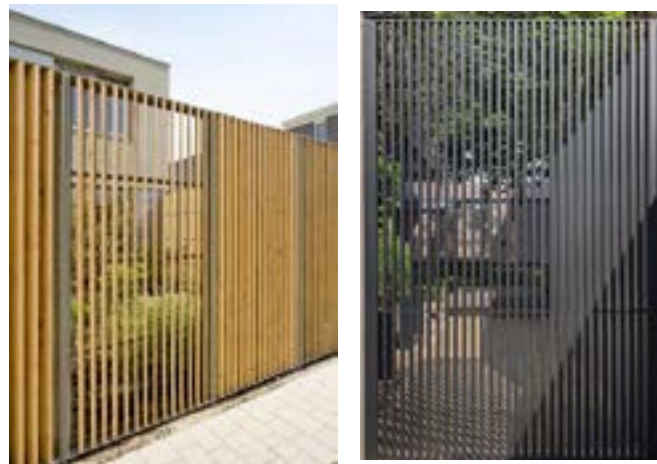
VENTILATION

Vertical panels will be used to create the main basis of the fencing. The panels will allow ventilation to pass through to the substation, whilst obscuring the view from the public. The overall mass of the fencing will be reduced with this technique.



OBSCURING THE VIEW

By using a louvred system, the substation can still be covered without comprising ventilation for the equipment. The louvres can be angled accordingly to hide the substation at the preferred angles.

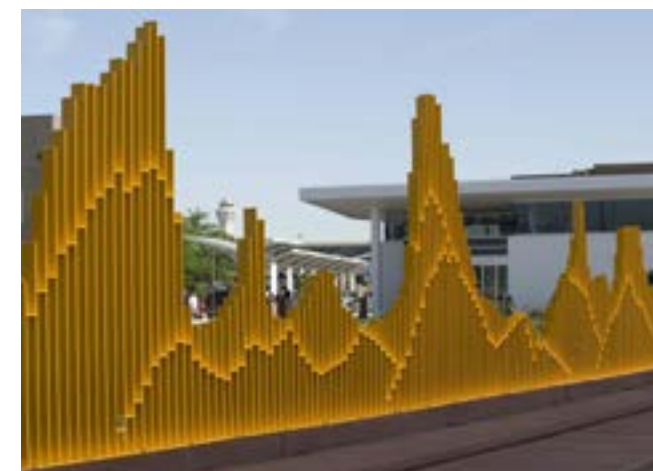
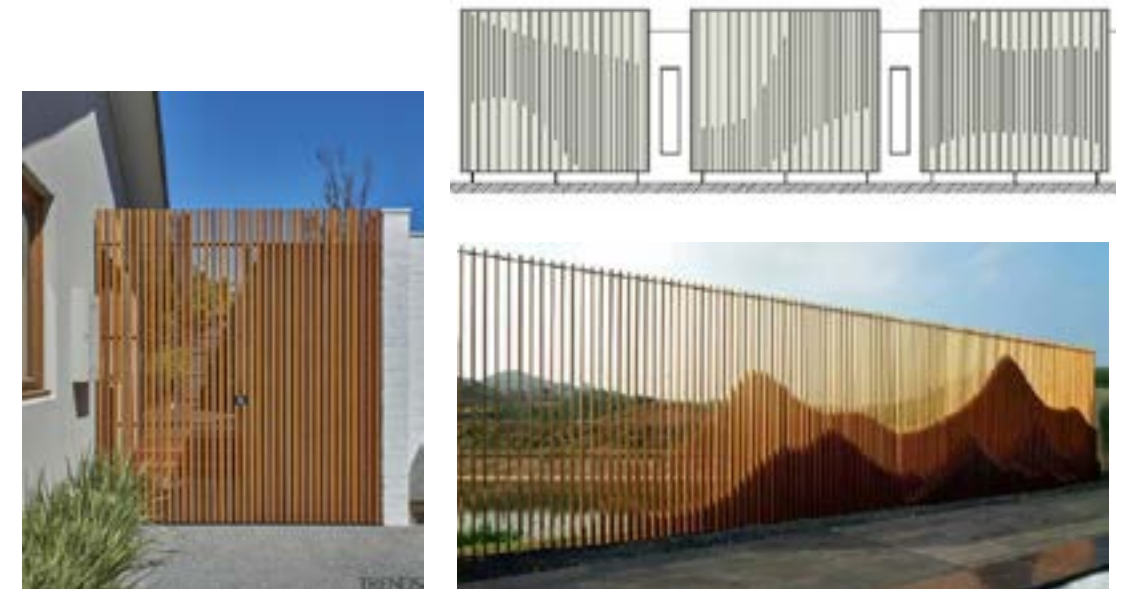


CONTEXTUAL

The design will relate towards the surrounding context, in particular the existing Breath Building. This will create continuity between the two and allow the fencing to integrate into the current landscape.



VISUAL CONCEPT

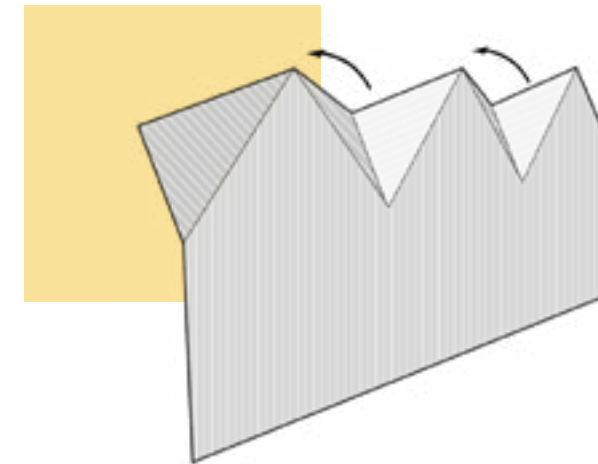


02 Design Concept

Initial Design Ideas

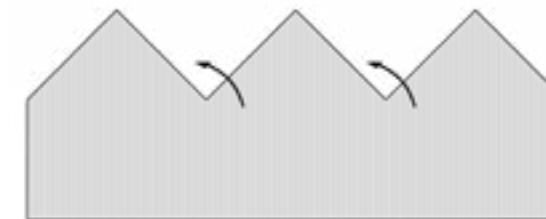


CONCEPT



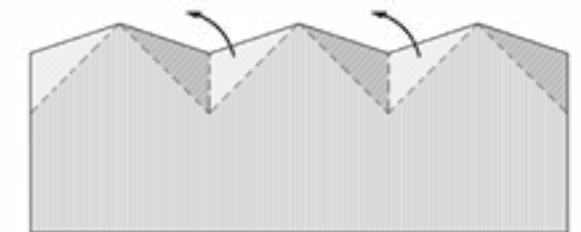
As the maximum height of the sub station is estimated to be around 6 metres, the screen has implemented a 'folded design' to reduce the tall mass of the fencing.

The panels will be angled, to provide ventilation whilst hiding the substation from the public eye.



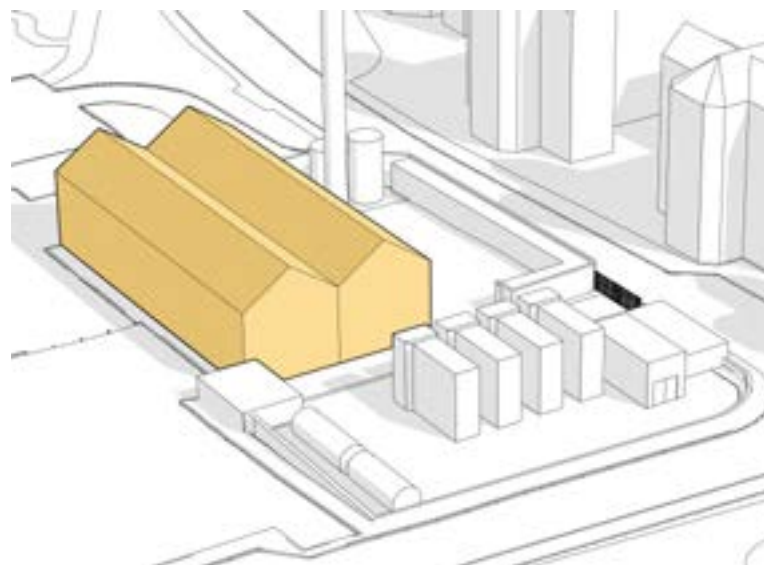
Without the folds

The lowest point of the fencing could be a safety risk with trespassers entering the site easily.



With the folds

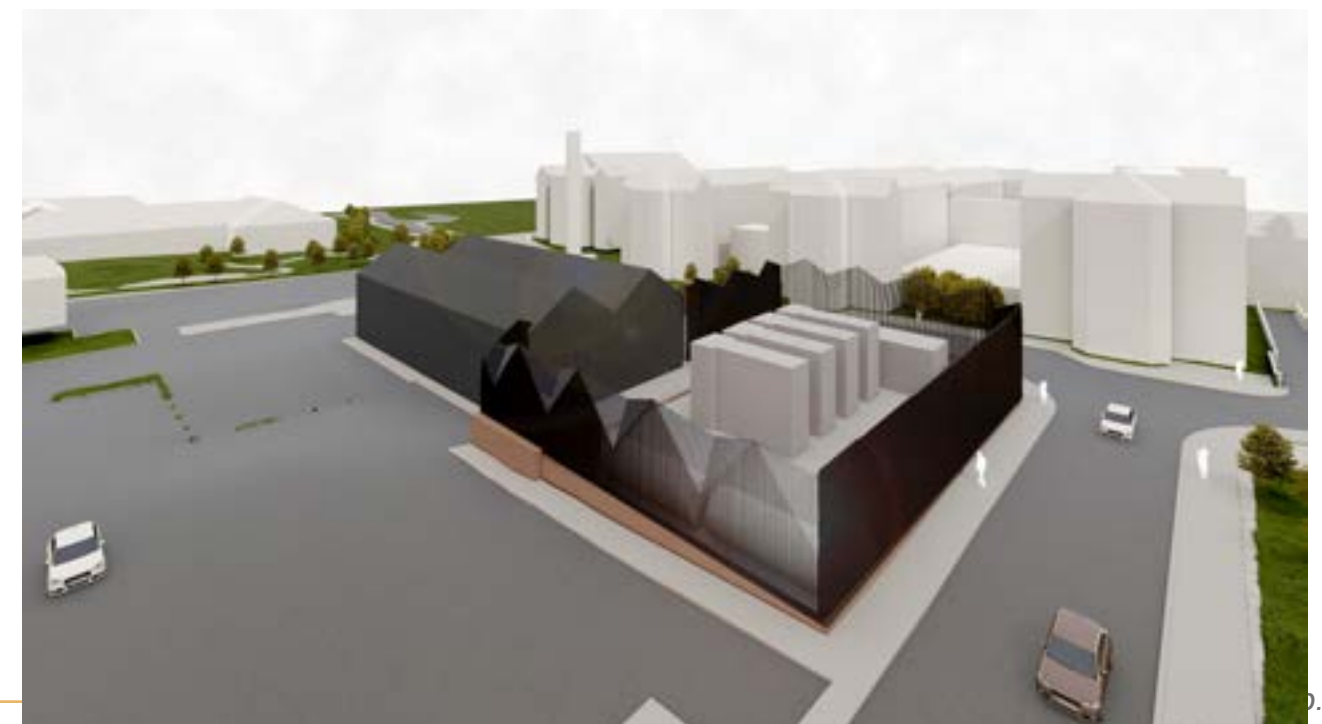
The folds increase the height to stop people climbing the fence, and a form of visual dimension is added.



CREATING CONTINUITY

The design reflects the form of the adjacent Breath Energy building, to help tie in the existing buildings and create a consistent appearance.

The fencing will also project a similar grey colour palate, in the form of aluminium panelling, to create relation between the existing energy building.



02 | Design Concept

Initial Design Ideas



View from Central Drive



View from the rear car park



02

Design Concept

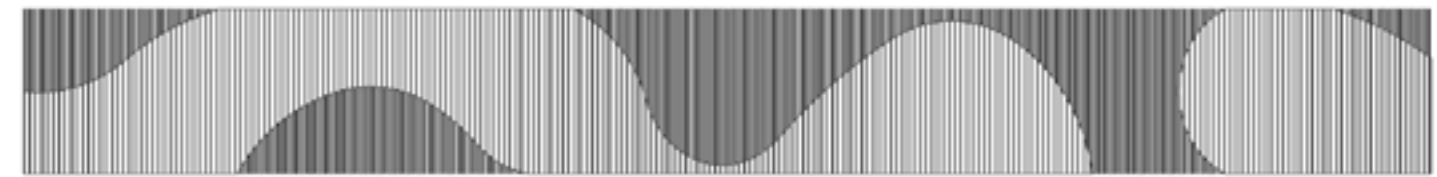
Initial Design Ideas



REFLECTING THE LANDSCAPE

The curvature design of the fence mimics the organic landscaping of the 'New Park House development's' site, which is located south east of the substation and has passed planning approval.

The rounded nature of the fence will tie into the proposed landscaping, and give a visually softer approach towards the fencing.



The design will create a dimensional impression, with the curvature pattern alternating in visual form, as people view the fence from different angles. The panels will be both closed and open in different areas to provide both ventilation and invisibility.

The curved form will reduce the rigidity and mass of the fence, whilst creating a visual art installation for the surrounding hospital.



02 | Design Concept

Initial Design Ideas

ALUMINIUM FINS

The main body of the screening will be comprised of extruded aluminium fins for a strong durability and a clean and sleek grey finish to integrate with the adjacent Breathe Energy Centre.

The fins will be power coated to increase longevity and create a desirable finish to align to BEC.



CORRUGATED PANEL

The curved panels within the design could be constructed as an inset corrugated panel to reflect the existing materiality of the BEC. Also adding a layer of depth and interest along the linearity of the screening.



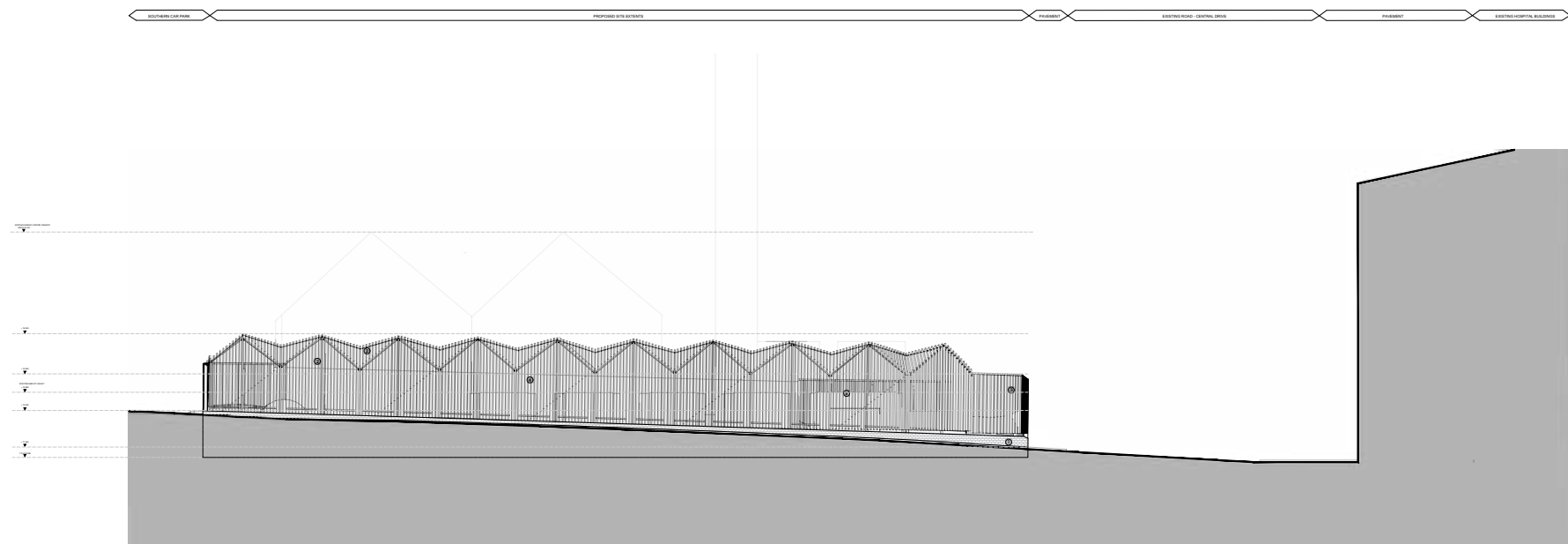
RHS rail supporting the aluminium fence



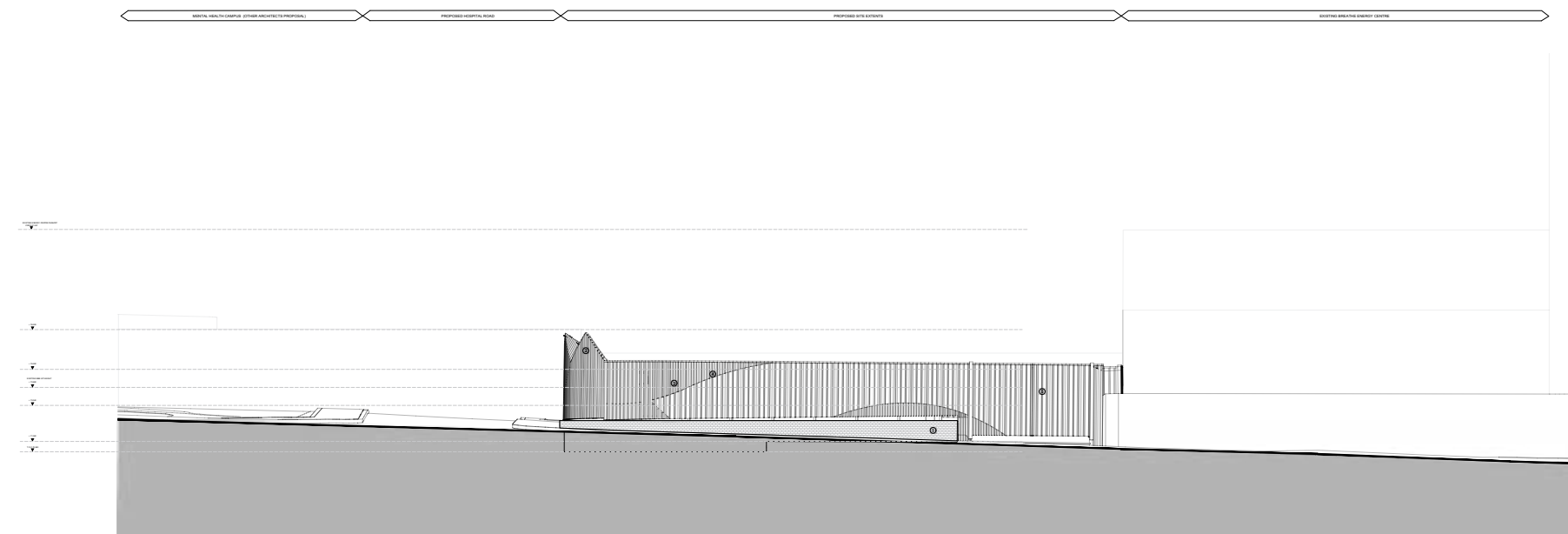


03 | Proposed Design

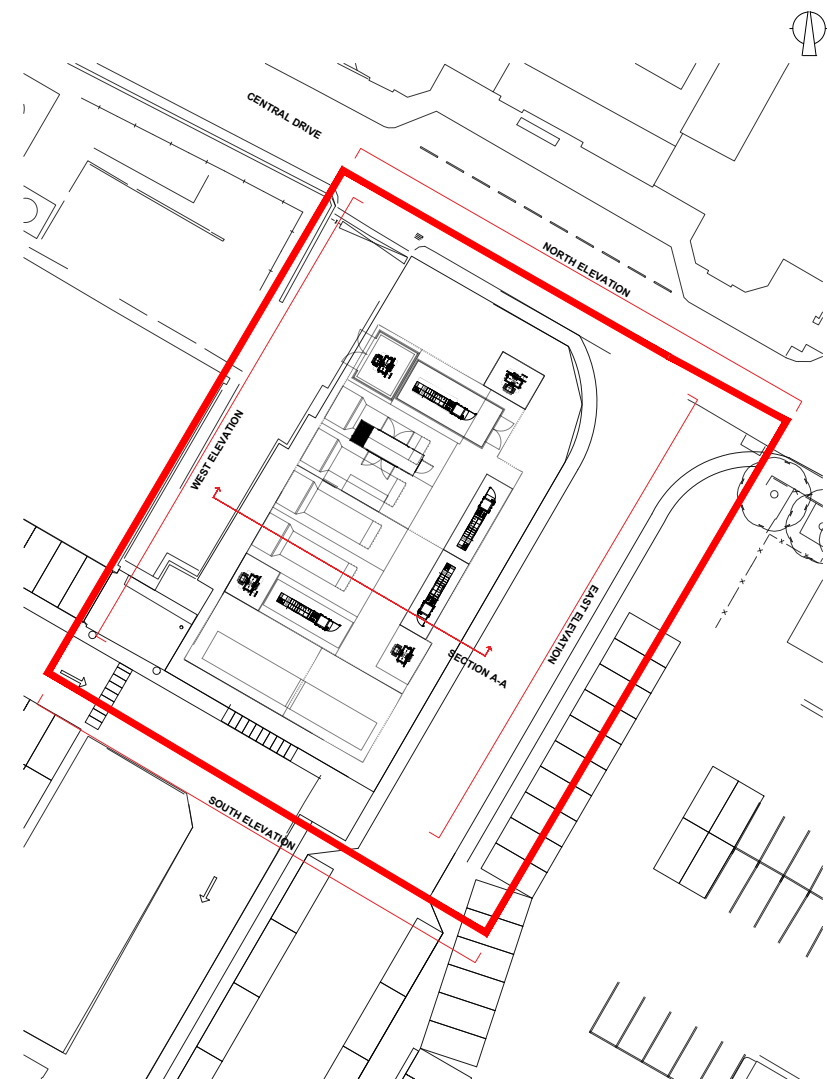
Proposed Elevations



PROPOSED EAST ELEVATION_1:100



PROPOSED NORTH ELEVATION_1:100



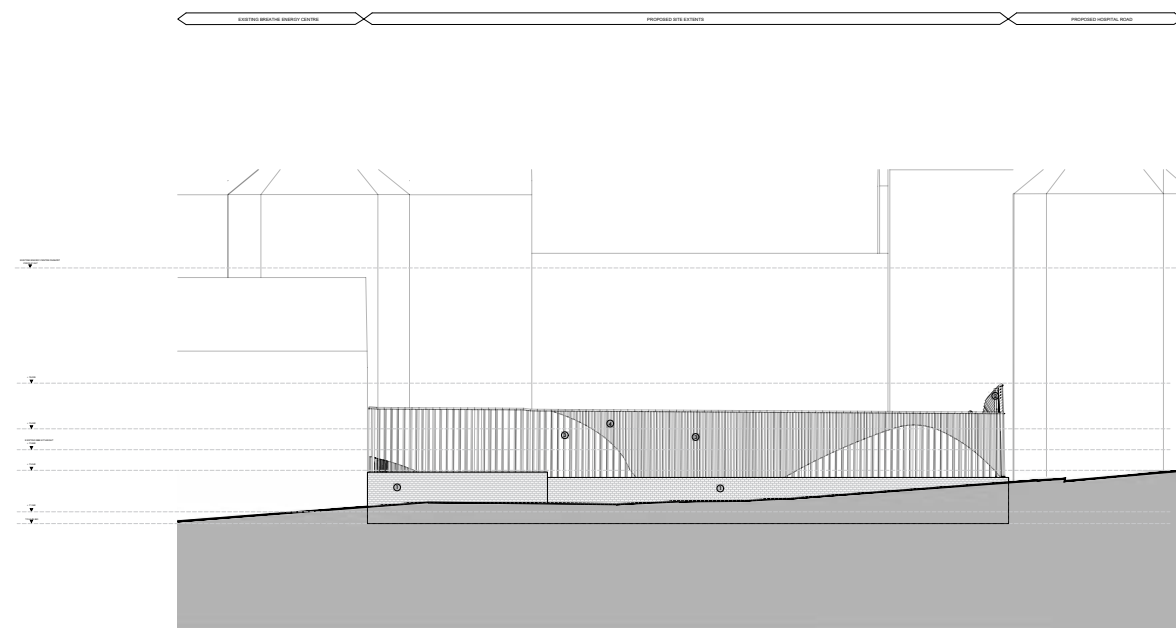
ELEVATION REFERENCE PLAN 1:200

Legend:

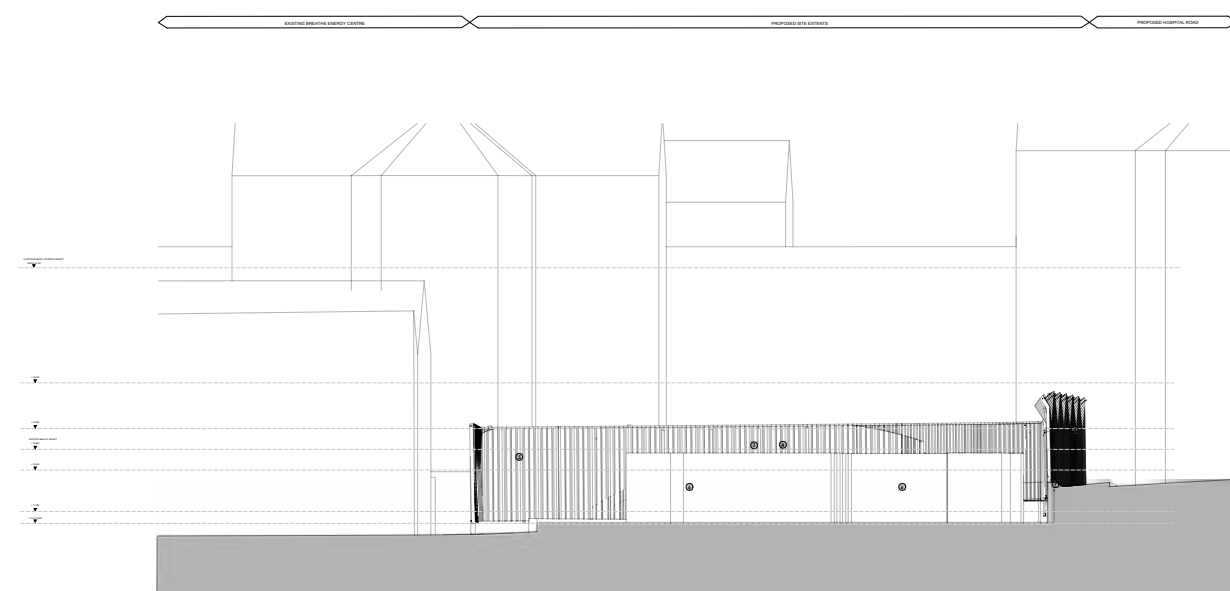
- ① Proposed new brickwork plinth. Red brick, spec TBC.
- ② Proposed new PPC aluminum vertical louvered panel system. Raked back profile with undulating pitch/s.
- ③ Proposed new PPC aluminum vertical louvered panel system, infill panels as per Architects design.
- ④ Proposed light backfill mesh panels for security.
- ⑤ Proposed new PPC aluminum vertical louvered panel system gate system for access into site and adjoining Breathe Energy Centre.
- ⑥ Existing M&E Equipment on site.

03 Proposed Design

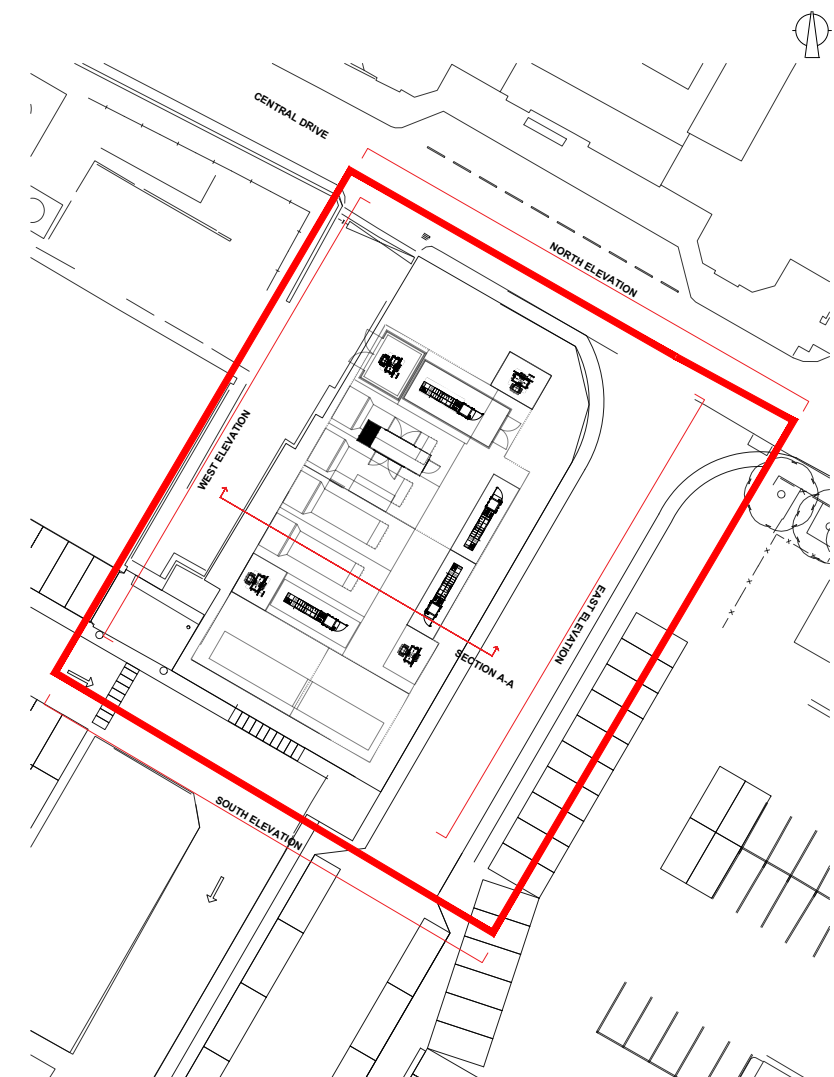
Proposed Elevations



PROPOSED WEST ELEVATION_1:100



PROPOSED SECTION A-A_1:100



ELEVATION REFERENCE PLAN 1:200

Legend:

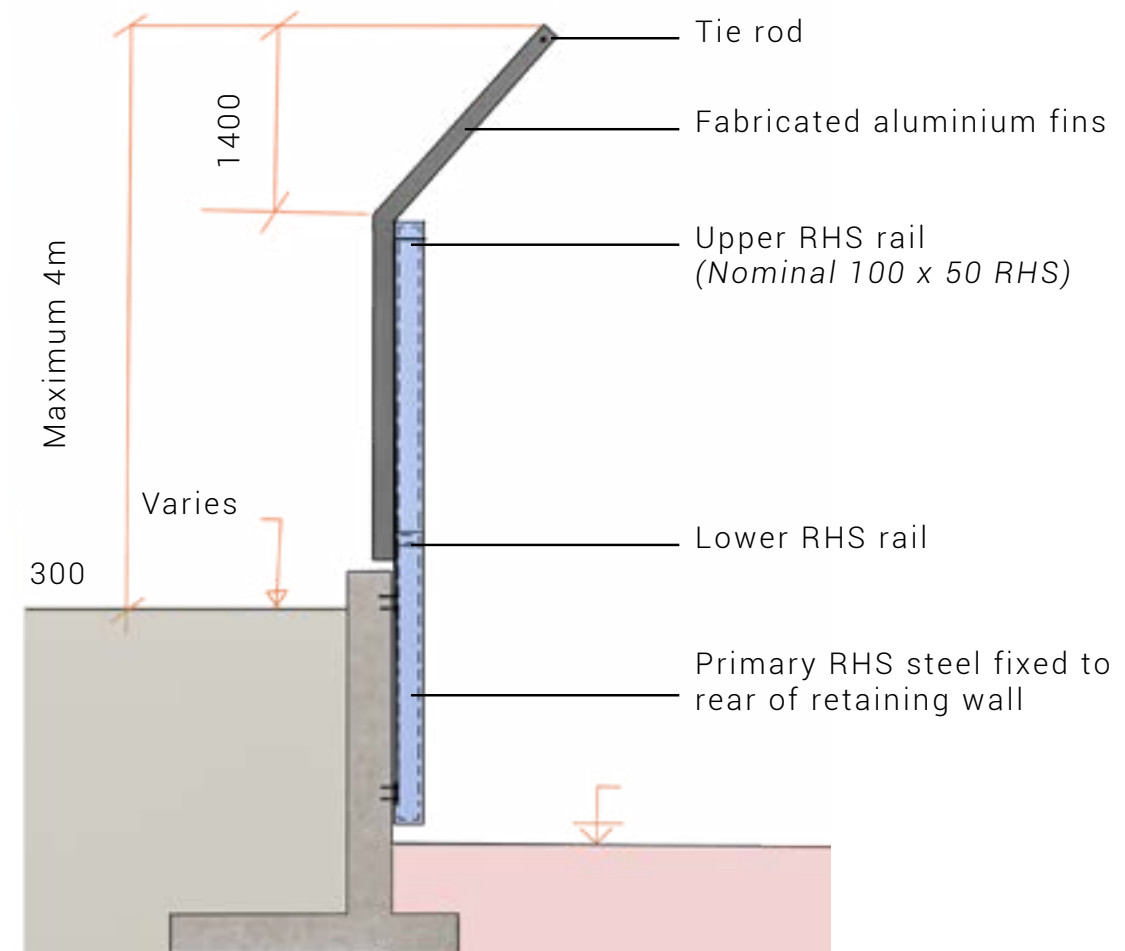
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03 | Proposed Design

Structural Design Intent



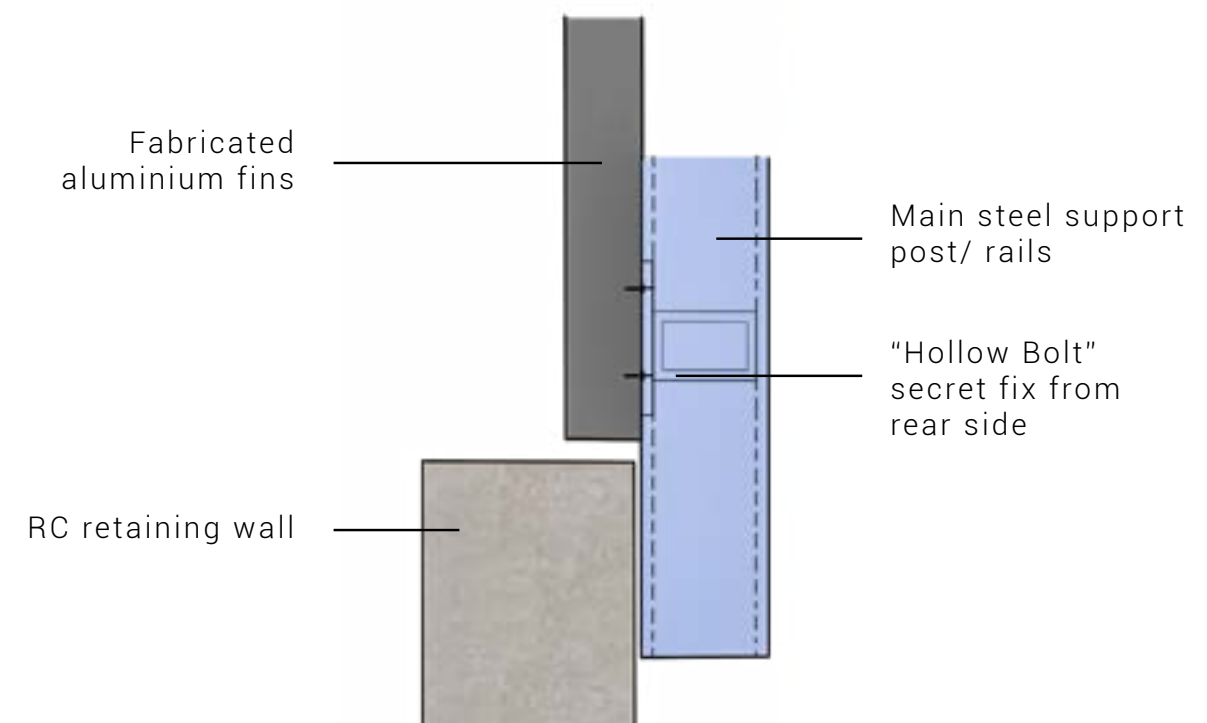
Sketch Section



Tie rod support



Rear RHS rail supporting the aluminium fence



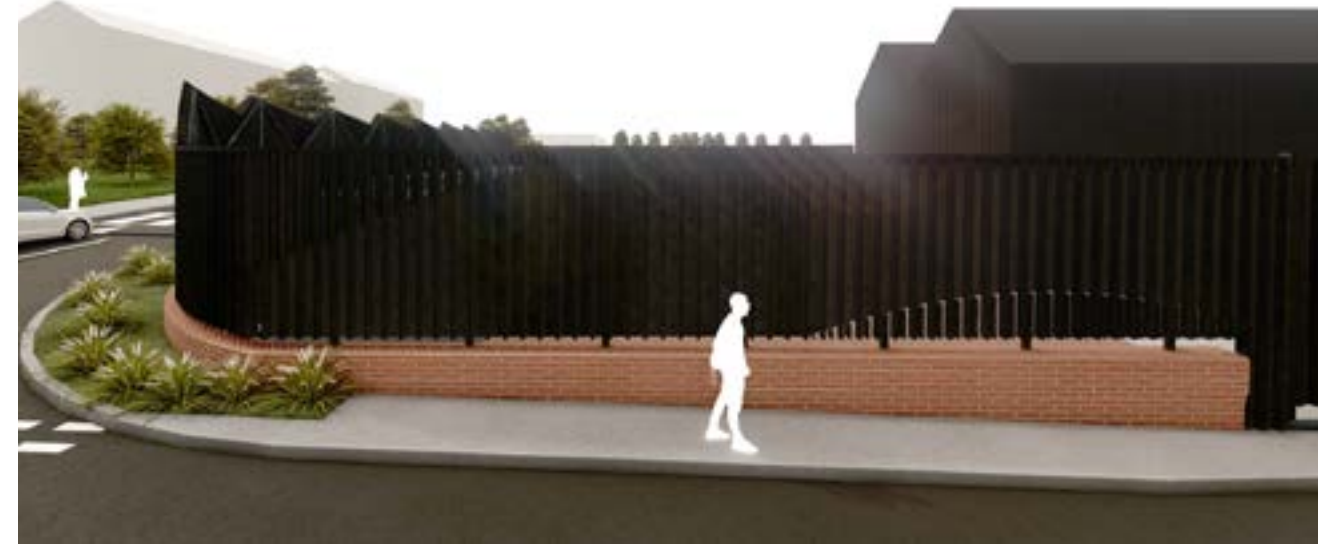
03 | Proposed Design

Proposed Visuals



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03 | Proposed Design

Proposed Visuals



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