

Mains Cold Water Booster Tank Facility

Fairfield General Hospital

Design & Access Statement

May 2024

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Introduction

0.0 Introduction

This Design & Access Statement has been prepared by DAY Architectural in support of an application for Full Planning Permission for the erection of a new Mains Cold Water Booster Tank Facility at Fairfield General Hospital and submitted to Bury Borough Council. This report provides an overview of the proposal from the early site considerations and constraints, through to presentation of the final scheme as submitted for consideration.

We believe that good design stems from the underlying 'Big Idea' or KDP (Key Design Principles) which should be strong enough to drive the whole design process and create a framework for design decision making throughout the evolution of a scheme, creating a sense of consistency and completeness.

DAY's Key Design Principles for the Mains Cold Water Booster Facility are just that; a catalyst from which the rest of the design stems. It should be a singular solution to the problems and opportunities identified through initial analysis of the brief, context and typology which will hold the design together throughout the process; a constant focus, regardless of the project stage, and a defender of the design solution.

0.1 Design Brief

Following a series of Pennine Acute Trust Surveys of the existing cold water infrastructure across site, reports have deemed the site wide storage and distribution strategy unfit for purpose. As a result of this and following Stakeholder review, this report provides an overview of the proposals for 2 new 125m³ cold water storage tanks and booster pump sets mounted above ground within a new 150m² building on the roundabout adjacent to the Block 67 Outpatients Department at Fairfield General Hospital.

0.2 Overview

DAY and its design partners were appointed by Northern Care Alliance NHS Group in November 2020 on behalf of Pennine Acute Hospitals NHSFT to commence the RIBA stage 1-7 Development for the new accommodation at Fairfield General Hospital.

DAY Architectural has a detailed and deep understanding of Hospital Estate through its historic and ongoing work there. This appreciation of the wider Estate means that our proposals for the facility are both considered and creative.

Architecturally the proposal calls for a 7 meter high enclosed unit with maintenance access and associated works that are sympathetic to critical adjacencies. The proposals herein have been designed through extensive contextual research in order to achieve a contemporary solution appropriate to the surrounding environment.

Due to the critical nature of this service, provisions have been made to allow for the completion of this project prior to the removal of the current systems adjacent to ensure a secure and continuous boosted cold water service is provided during the works, with a seamless changeover upon completion.

Due to the Tree removal works necessary to facilitate the erection of the unit, an Arboricultural Implications Assessment Ref: TRE/FGH as prepared by Mulberry has been provided for the works dictating planting mitigation measures that we propose to place on a second area of the site to improve the aesthetics of the area.

Alongside the Architectural and Arboricultural information provided, full Civils specification is provided for the surface water drainage, as prepared by AJP. Please refer to Section 4 - Overview for further information.



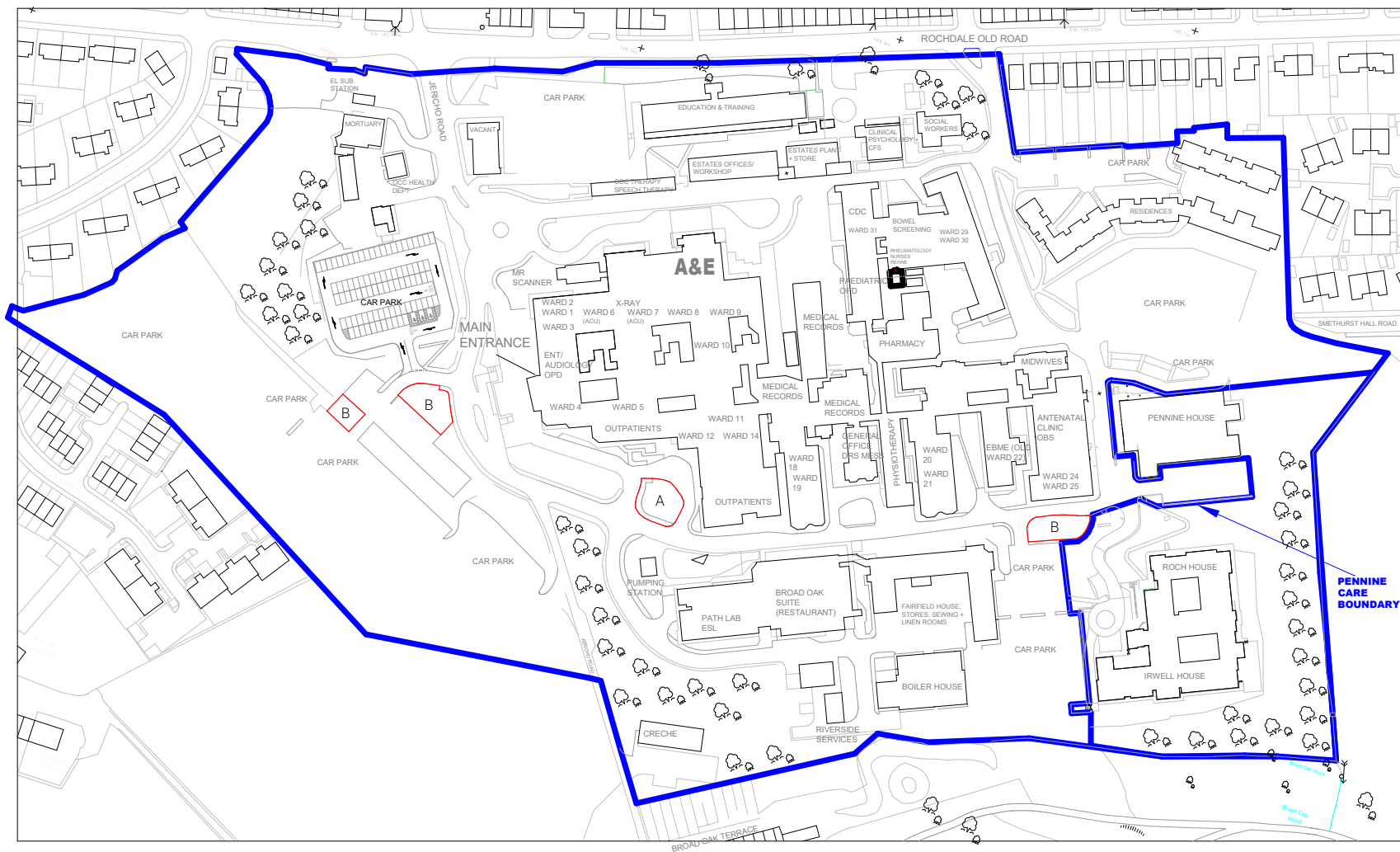


01

Site Analysis

Site Analysis

Site Location Plan



SITE LOCATION PLAN

- A Proposed Site Boundary of Works
Red Line Boundary - 310m²
- B Proposed Site identified for additional planting
as a Mitigation Measure for the Tree removal
to the Site Boundary of Works above.
Red Line Boundary - 688m²
-  Proposed Trust Ownership Boundary
- 130535m² / 13.05 Hectares.

Site Plan Location highlighting Boundary of works in relation to the wider Fairfield General Hospital site.

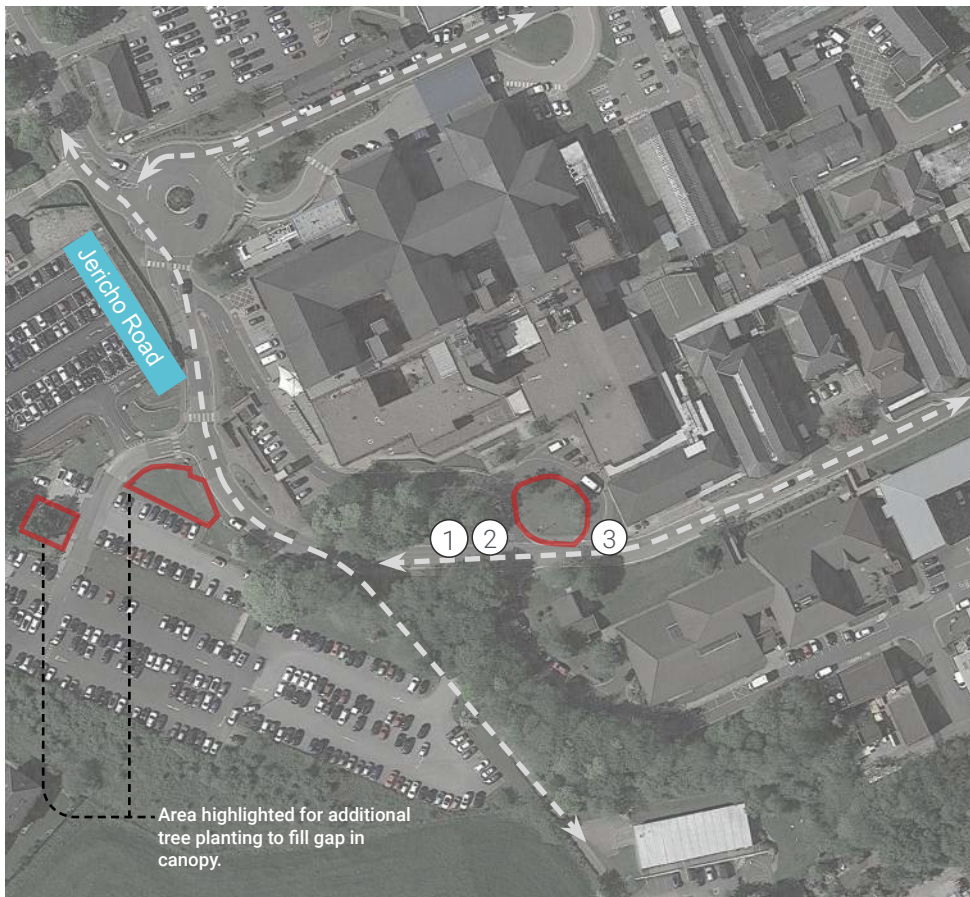
Existing Site Plan



Existing Site Plan

01 Site Context & Analysis

Fairfield General Hospital Context



Tarmac



Red Brick



Field Grass



Mature trees



Overriding Materiality
Appearance - Red Brick to Built Environment and Green Context

Existing contextual palette



**Primary Approach
View from Hospital
circulation road**

Large presence of Mature Trees acting as screen.



**View toward
Outpatients**

Prominence of site highlighted creating opportunity for feature architectural element.



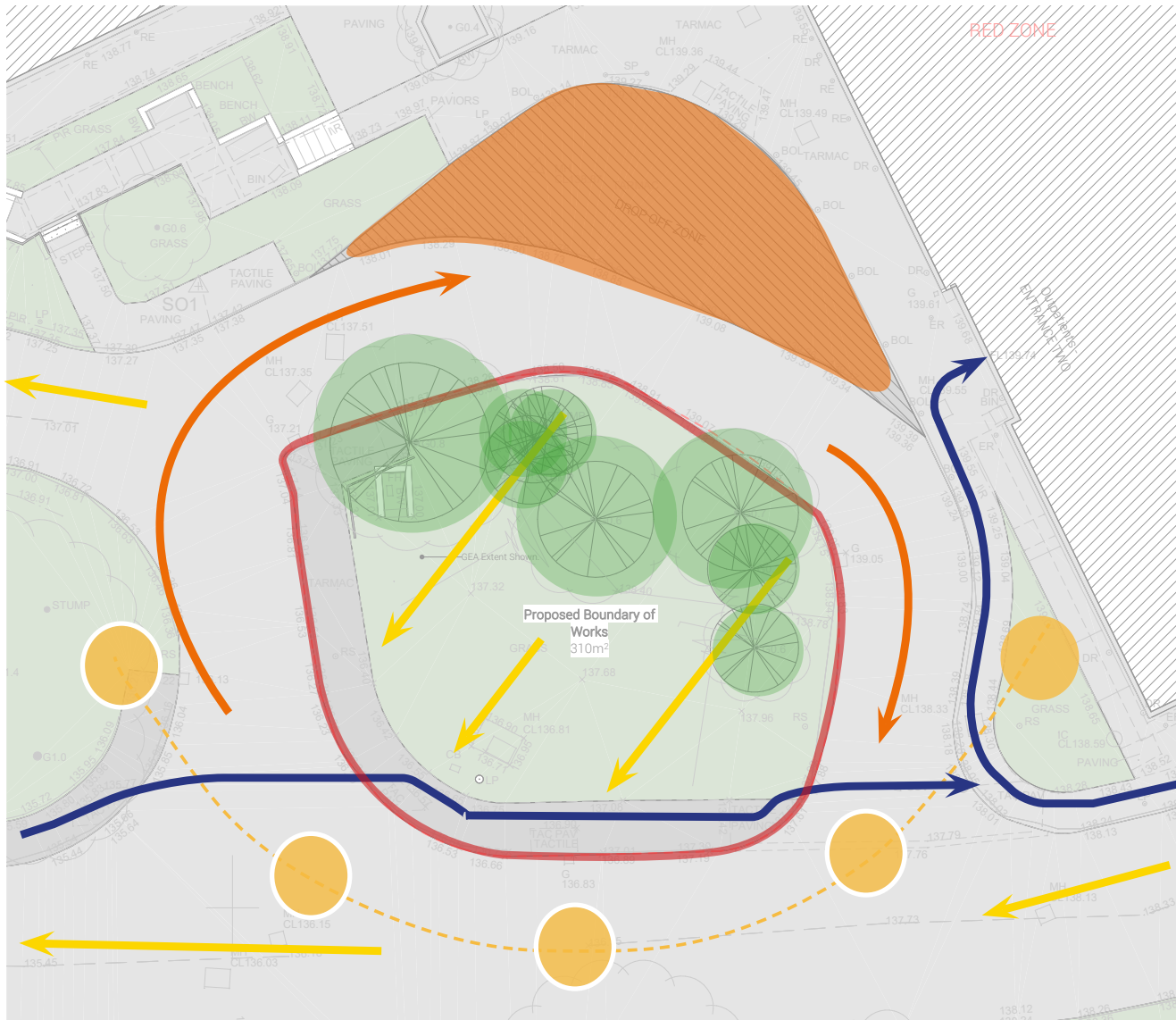
**Pedestrian view
towards Outpatients /
drop off**

Large presence of Red Brick and topography highlighted.

01

Site Context & Analysis

Site Constraints & Opportunities



Legend



Proposed Site - Drop off roundabout.



Outpatients drop off route to be affected by the proposed works, alternative locations and programme to be reviewed between Trust and Contractor.



Key pedestrian routes across site routes to be diverted during works and retained following completion.



Topographical changes across site requiring retaining walls.

Existing cold water storage Tanks adjacent to remain live throughout the duration of the works, and necessary diversions.



Sun-path diagram, South West Facing Site.



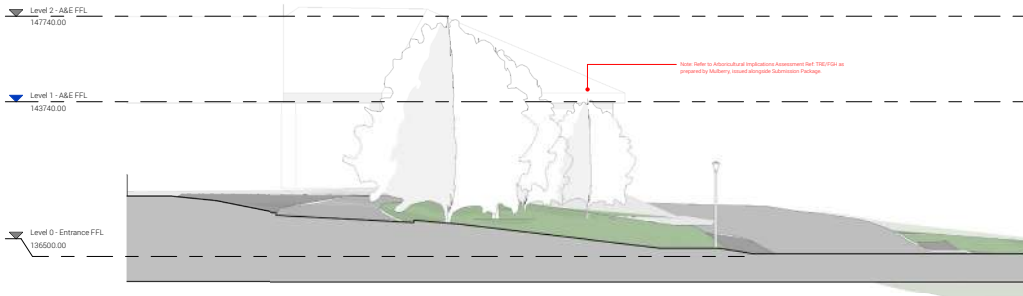
Prevalence of 5no. Trees on site to be removed to facilitate the works. Arboricultural survey completed with recommended Mitigation measures to be included ahead of planning submission.

Existing considerations

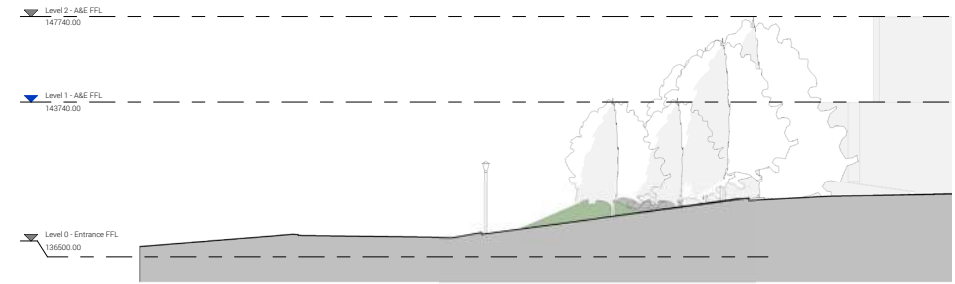
01

Site Analysis

Existing Street Scene - Elevations



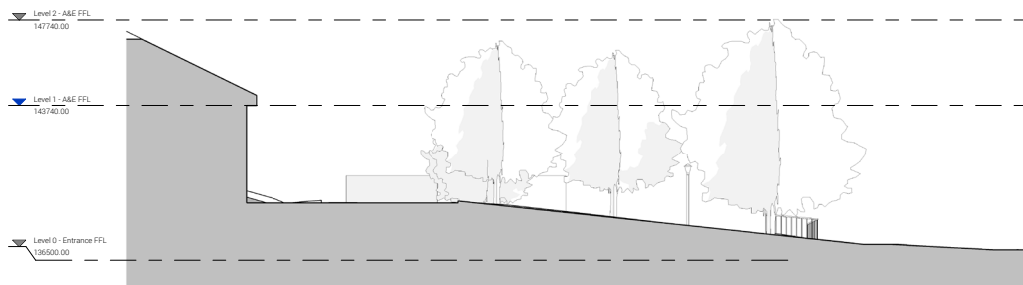
Elevation 1



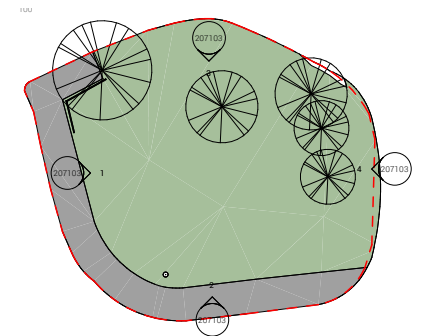
Elevation 4



Elevation 2



Elevation 3

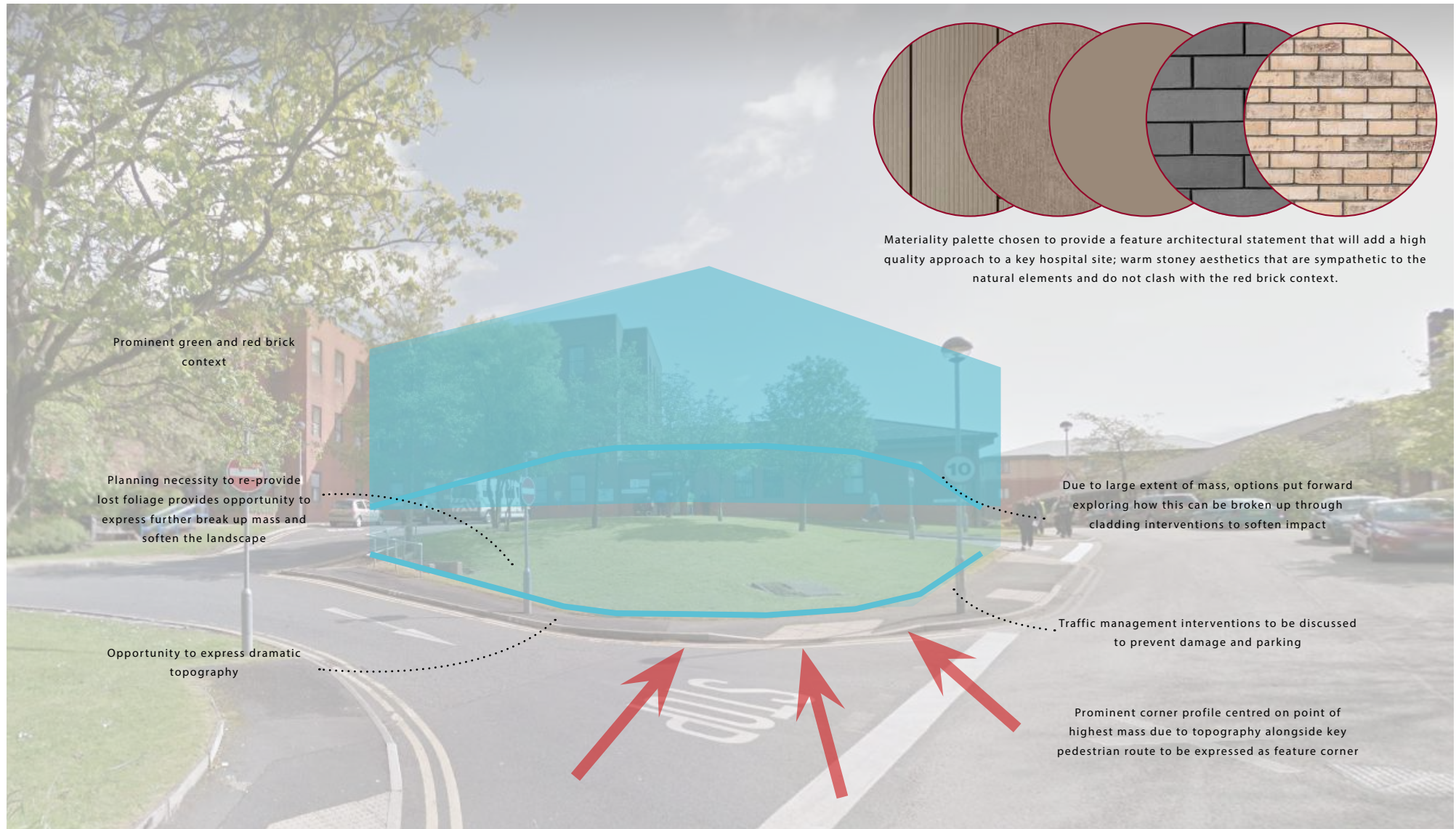


Elevation Location Plan

02 Design Concept

02 Design Concept

Materiality & Key Design Principles



EXISTING VIEW TOWARDS OPD

02 Design Concept

Design Overview

3.1 Scale:

The proposed scale of the development is established by function and the servicing requirements of the 2 no. 125 m³ water tanks housed within, yet the envelope is designed to remain in keeping with the contextual storey heights and natural, earthy materiality palette. All associated mechanical ventilation and electrical plant equipment essential to support the water distribution is housed internally, allowing a clean, feature 'box' to further reduce the mass, with any external louvres to be RAL matched to suit. The cladding arrangement on the facade has been broken into 3 defined panel sections with a change of materiality and shadow gaps that ground the proposal and help to reduce the impact that could arise with a 7m tall single plain.

The new extension footprint will create approximately 150m² gross internal floor area at Ground Floor level, which due to the stepped nature of the existing topography results in a partially buried proposal, reducing any potential impact on the surrounding context from a 7m elevation to the south-west corner (as shown adjacent) to 4m to the north-east corner, adjacent to the Outpatients Drop-off.

3.2 Design:

The extension has been designed sympathetically to its surrounding context, with the application of materials that provide a robust, high quality design that is complimented by a carefully considered approach to existing site logistics. A standing seam roof with a mansafe fall arrest system have been specified to further minimise the volume created by the new extension and keep all site lines upon approach clean and uncluttered. The constraints of the site have been carefully considered so that the proposals do not impact on any existing pedestrian access or escape routes.

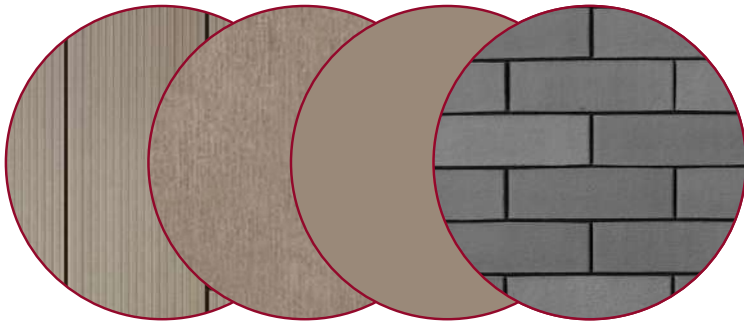


Design Overview- Grounded Equitone Panels - Profile to mirror Topography

Proposed application of the materiality and concept investigations explained previously to create a single, defined mass that is broken by the striking form that expresses the dramatic change in topography. The application of the Equitone Linea Cladding profile is broken from the bottom up which grounds the proposal and adds definition as the sun tracks the prominent corner and creates shadow definition to the grooved cladding profile.

02 Design Concept

Architectural Approach



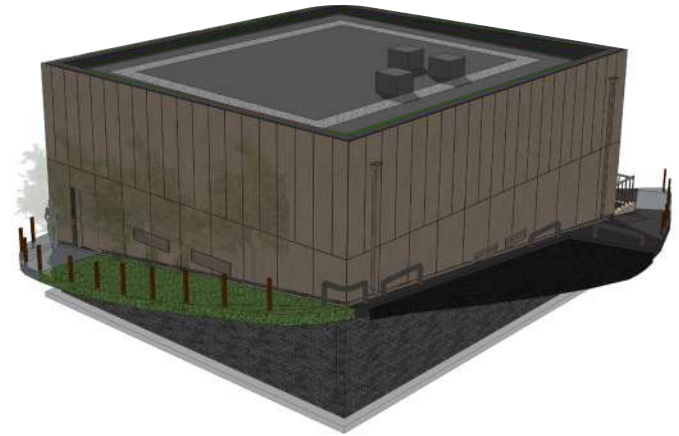
EQUITONE LINEA
HESSIEN LT60

EQUITONE TECTIVA
HESSIEN TE60

LOUVRES/DOOR
BEST MATCH RAL

SHALLOW BRICK PLINTH
PAINTED ENGINEERING BRICK

PROPOSED MATERIALITY PALETTE



REAR VIEW - TOWARDS OPD DROP OFF



VIEW FROM EXISTING UNIT TOWARDS OPD

02

Design Concept

Proposed Visual - Towards Outpatients Department



VIEW FROM EXISTING UNIT TOWARDS OPD

02

Design Concept

Proposed Visual - Towards East Elevation

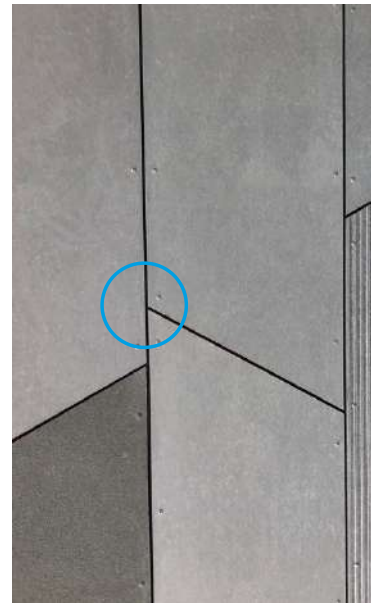
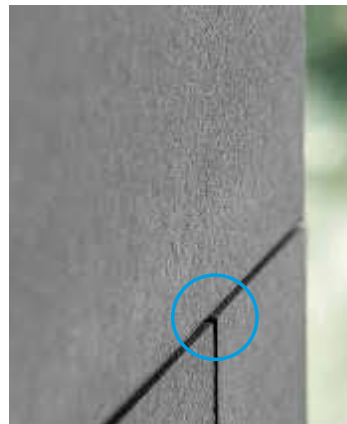
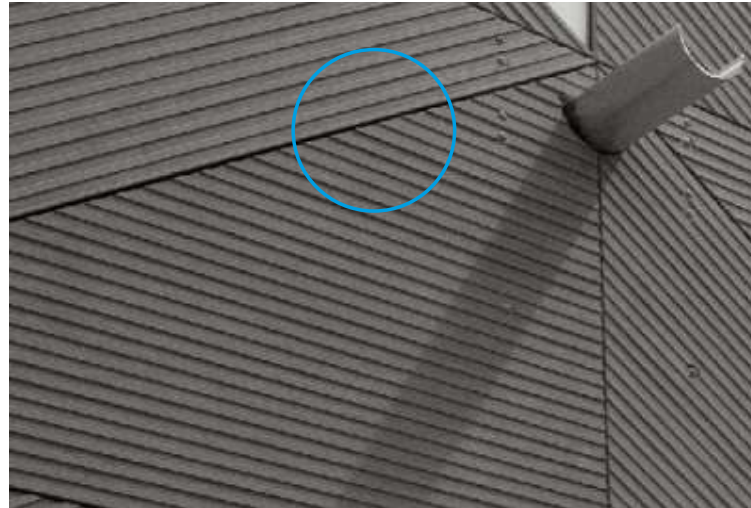


VIEW FROM TOWARDS EAST ELEVATION

02

Design Concept

Equitone - Precedent Images



EQUITONE HESSIEN - MATERIAL SAMPLE IMAGES



Denotes Key areas of Inspiration applied to proposals.

03

Design Proposal

03 Design Proposal

Design Statement

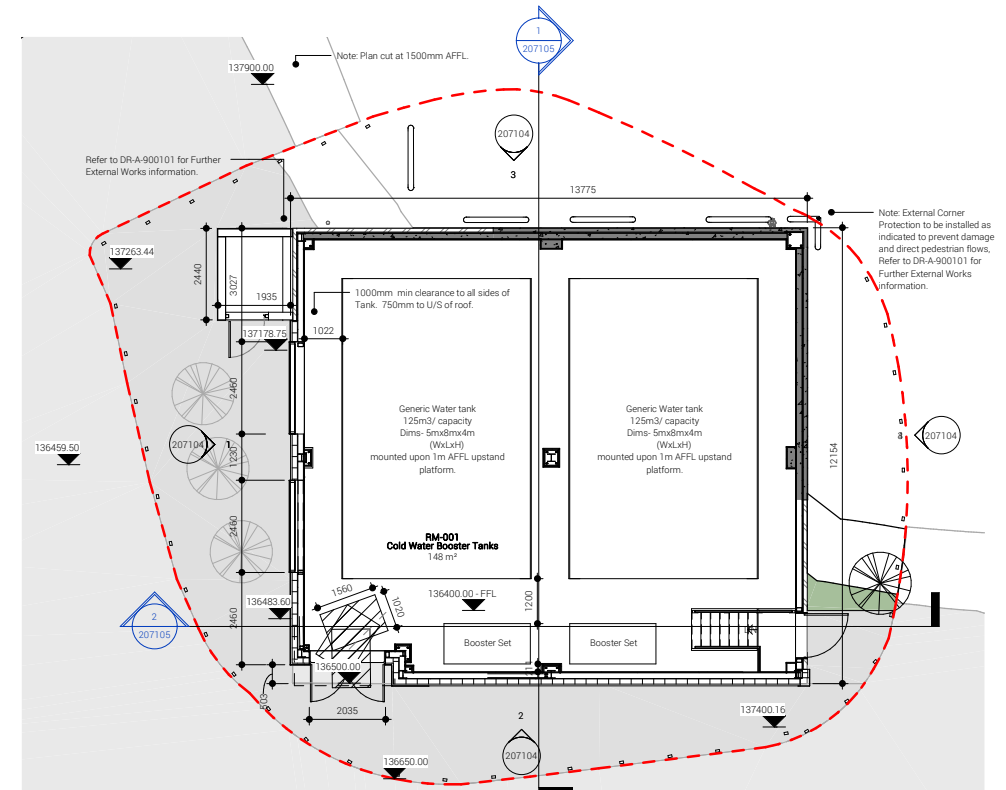
3.1 Use:

The proposed facility is to accommodate 2 no. new 125 m³ cold water tanks alongside 2 no. Booster units as well as all associated plant required for its operation. Ultimately, this ensures the continued provision of an essential service across the hospital site. Access, Escape provision and Security have been carefully considered and reviewed by all Trust operatives, maintenance teams, and Trust Fire Officers etc. to ensure that the proposal is fit-for-purpose and can be accessed safely and maintained when necessary.

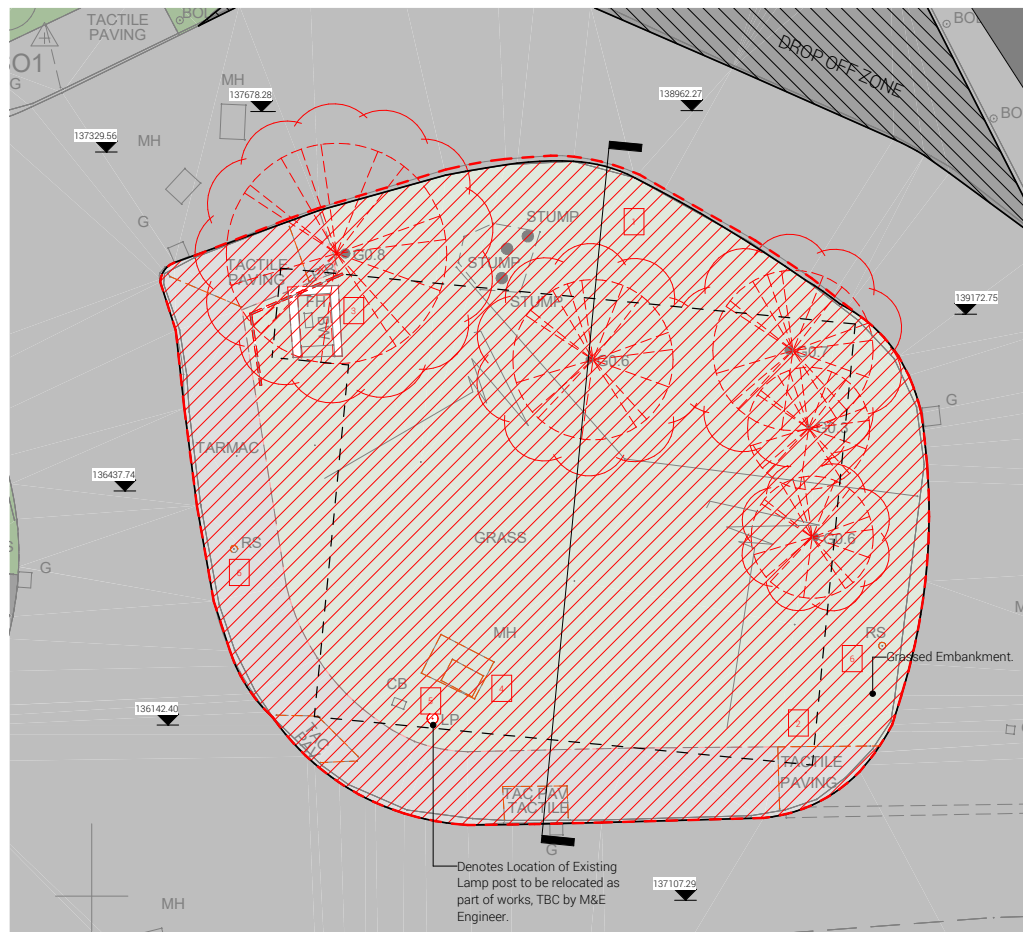
3.2 Layout:

The proposed development is driven by the size of the above-mentioned units and all appropriate maintenance and circulation distances required. A level access double doorset is provided as the primary access for the unit to the south-west of the site with a secondary escape doorset provided to ensure two means of escape in-case of emergency. It is anticipated that the room will be infrequently accessed with a low number of people required for active monitoring or maintenance.

To the northern facade a dedicated maintenance parking space is proposed to ensure that the adjacent patient and visitor drop off is not disturbed during infrequent external access. Internally, when the tanks require maintenance from above, a centrally located ladder-access gantry is provided to ensure this is achieved. Atop this gantry, ladder access to the roof is proposed to ensure that rooftop maintenance can be safely and centrally accessed without the need for external ladders or cherry pickers which could disturb any drop off flows.



Proposed General Arrangement Plan



PROPOSED DEMOLITION PLAN

DEMOLITION SCOPE OF WORKS

- Denotes elements to be demolished
- Denotes elements to be retained
- Denotes GEA Boundary
- [Hatched Area] Hatch denotes All existing surface finishes to be removed as part of works, inc. Existing edge kerbs. Ground to be dug in line with Foundation requirements and propped ahead of Retaining wall casting to achieve internal FFL of 136400.00. Refer to Structural Engineers information for further details.

DEMOLITION NOTES

- 1 Bro. Existing Trees to be removed ahead of ground work preparations. Note. Contractor to refer to Arboricultural report and mitigation measures ahead of commencement of works.
- 2 All Surface finishes including grassed embankment, tarmac and tactile pavement to be removed as noted on hatched area above.
- 3 Existing Services Chamber inclusive of railing and partial retaining wall to be propped for removal ahead of replacement.
- 4 Existing Manhole to be capped as part of works, refer to Structural Strip out works.
- 5 Existing Lamppost to be removed ahead of replacement, refer to M&E Information.
- 6 Existing Roadsigns to be temporarily removed ahead of reinstatement upon completion. Temporary signage to compound to be allowed for during works.

ADDITIONAL NOTES:

Refer to Pre-Construction Information and all Designer's Risk Registers prior to starting demolition and strip out works, with particular reference to dealing with services and potentially hazardous material.

All works are to be carried out in accordance with the Contractor's Construction Phase Plan and method statements.

Work areas to be adequately hoarded at all times to prevent dust and to prevent noise and dust intrusion where possible.

Refer to M&E consultants drawings and specifications for removal and reinstatement of all services affected by the works including sanitary drainage and services.

Following services removals, all redundant openings through compartment/fire walls to be suitably filled to maintain compartmentation/fire resistance.

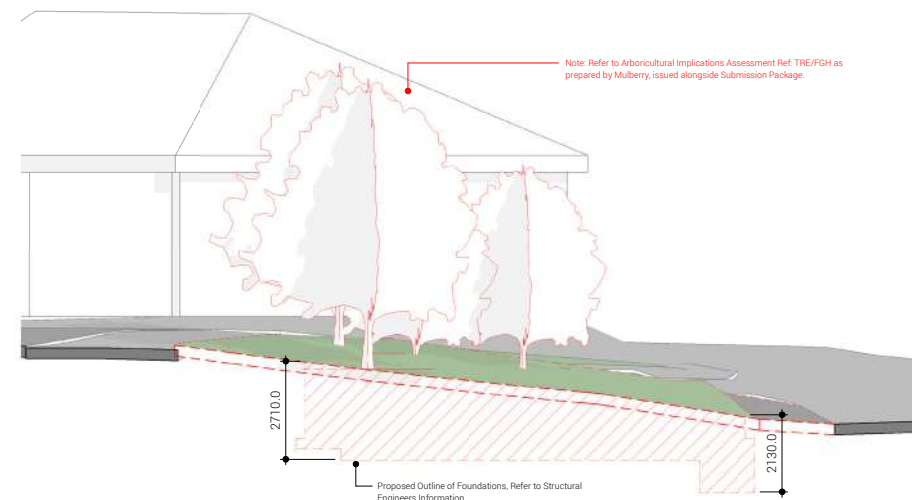
Carefully remove all ceiling mounted luminaires and offer back to the Trust.

Remove floor finishes including skirting and adhesive in all areas indicated, unless noted otherwise.

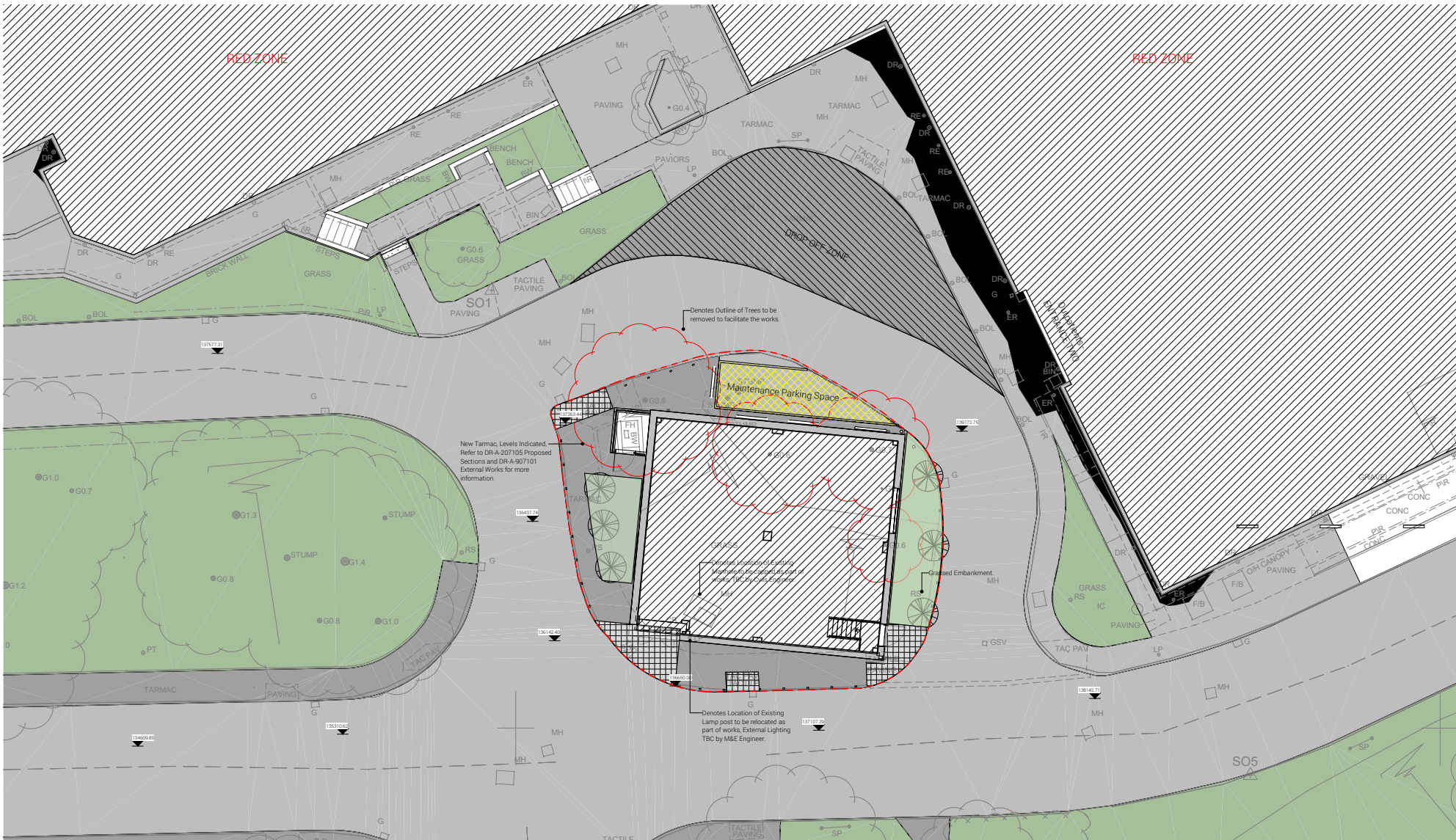
Allow for builders work openings to both walls and floors as M&E schedules/drawings.

Allow for making good of all existing and retained elements which are affected by the above mentioned works.

• This drawing must be read in colour.



Proposed Site Plan



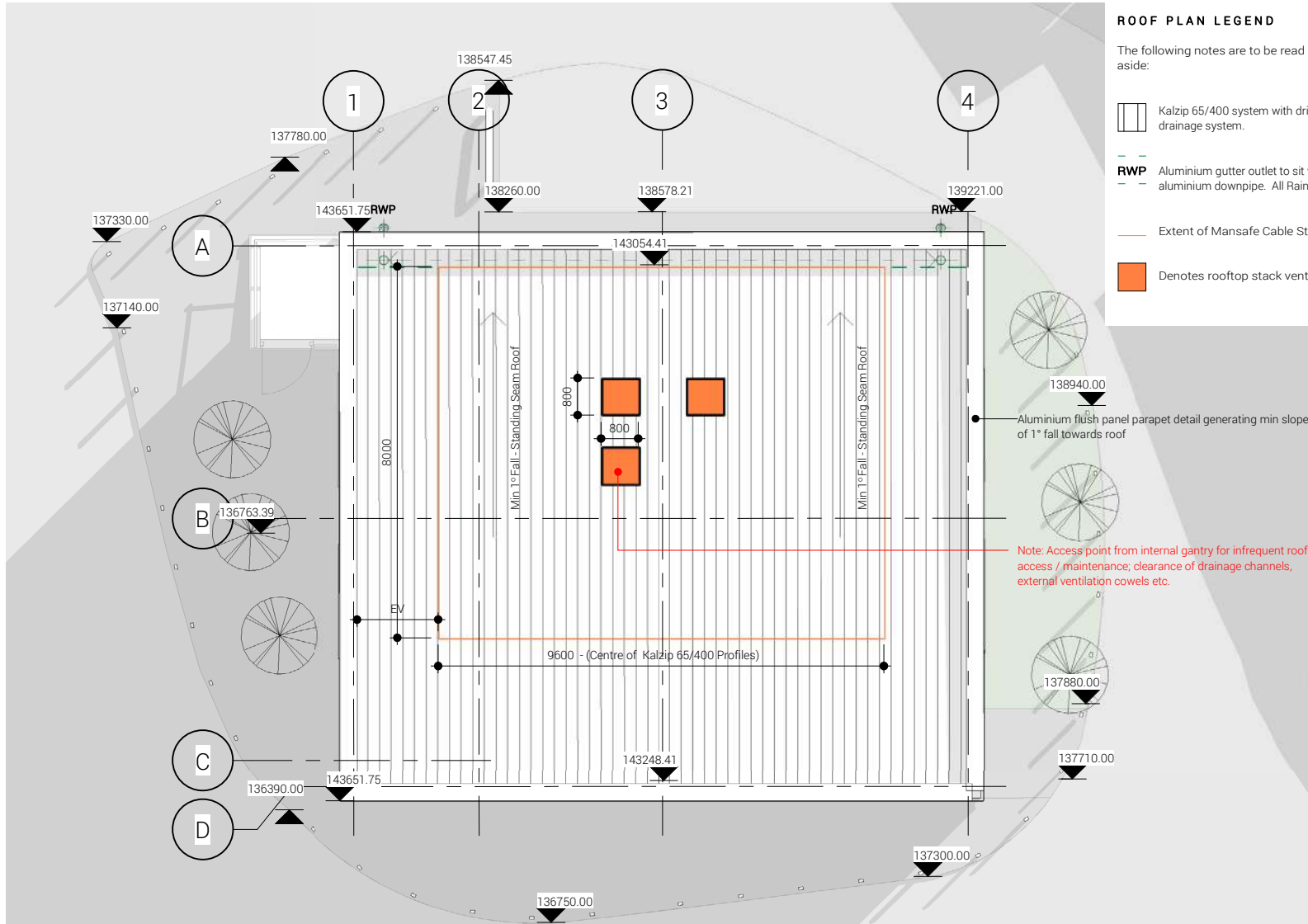
PROPOSED SITE PLAN

Proposed General Arrangement Plan



03 Design Proposal

Proposed Roof Plan



ROOF PLAN LEGEND

The following notes are to be read in conjunction with the symbol references denoted on the plan aside:

Kalzip 65/400 system with drip angle on edge. Underside to be flashed back to Kalzip KD33 Linear drainage system.

RWP Aluminium gutter outlet to sit within gutter liner with external rectangular aluminium hopper, and aluminium downpipe. All Rainwater goods to be PPC RAL Matched to Cladding.

Extent of Mansafe Cable Stay fall arrest system.

Denotes rooftop stack vents, refer to M&E Information.

PROPOSED ROOF PLAN