

BENCHMARK

A R C H I T E C T S



DESIGN AND ACCESS STATEMENT

ECDC Crematorium
for

East Cambridgeshire District Council

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1.0 INTRODUCTION

This document has been prepared on behalf of East Cambridgeshire District Council by Benchmark Architects to illustrate the development proposals for a new crematorium and associated services and administration building, function building, memorial garden, natural burial areas, pet cemetery, car parking, landscaping and a new access point on the northern boundary on a site owned by the council on the A142 between Mepal and Chatteris.

These proposals have been carefully considered in consultation with a professional design team including; Project and Cost consultants MAC Consulting & The CDS Group (CDS). This document is intended to be read in conjunction with the Planning Statement prepared by Nexus Planning, on behalf of CDS, in support of the planning application in addition to the landscaping and masterplan proposal documents prepared by CDS.

1.2 DESIGN BRIEF

This document presents the proposal for the construction of a crematorium and associated service and administration building, function building, memorial garden, natural burial areas, pet cemetery, car parking and landscaping. The crematorium building is to accommodate a flexible multifaith hall for approximately 100-125 people and the associated crematory facilities. A building to accommodate staff will adjoin the main chapel building. In addition, the creation of a flower court and memorial wall will be located along a series of pathways throughout the site. A separate function building will be located adjacent to the crematorium building that will provide space for a function room and toilets. Landscaping features include raised timber board walks, new trees and a natural burial ground. Parking for 123 cars is being provided across the site and will include 19 disabled bays. An existing access point to the north of the site will be upgraded, providing access for recreational users. This can be used by members of the community and will operate separately to the crematorium facilities.



concept sketch

1.3 BACKGROUND

In 2019, East Cambridgeshire District Council appointed Benchmark Architects to undertake a feasibility and concept study for a new crematorium at Former Mepal Outdoor Centre, Chatteris Road, Mepal, Ely, Cambridgeshire CB6 2AZ.

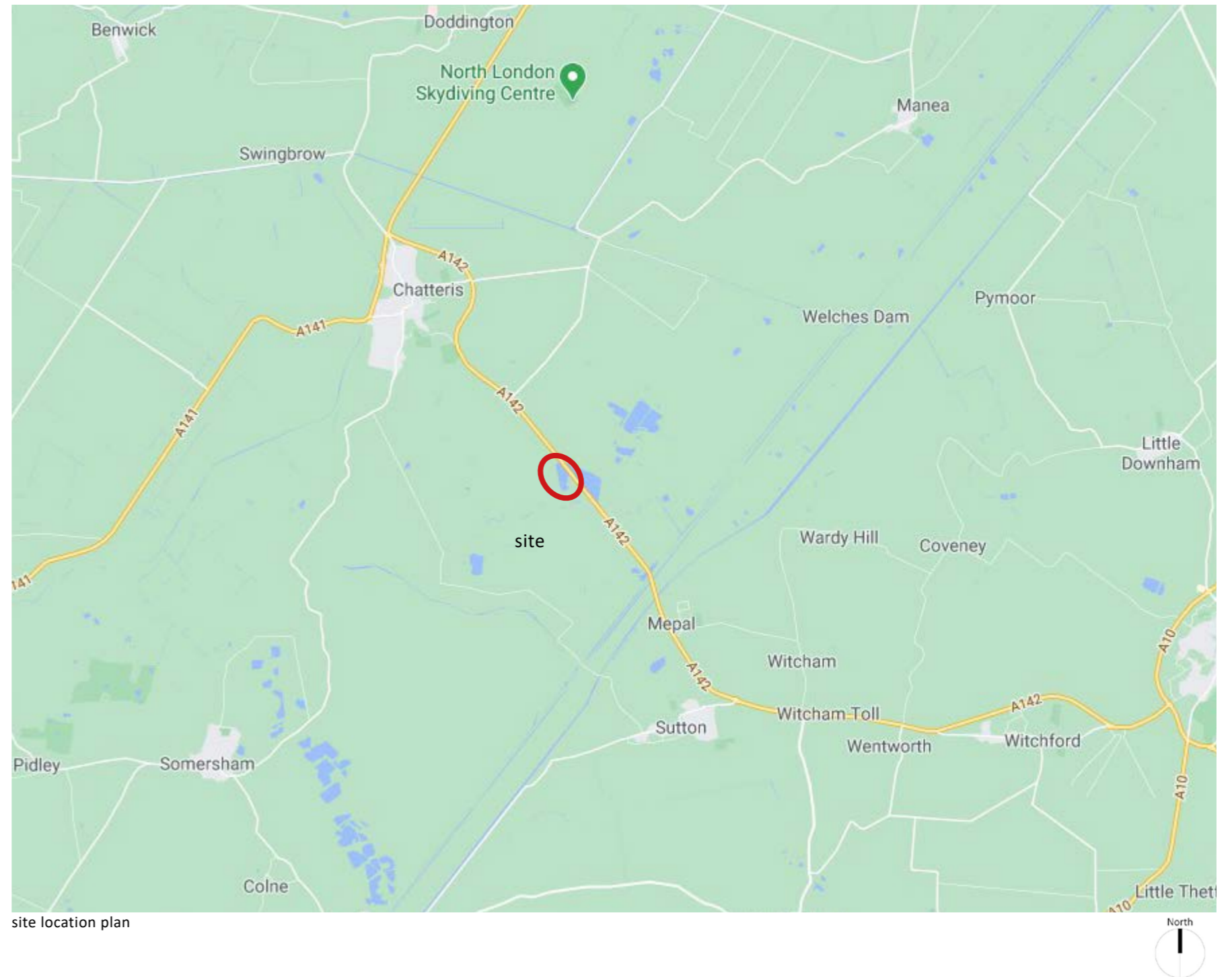
With the existing Fenland Crematorium currently located 9.6 miles to the north of the proposed site in March, the proposed crematorium development could provide an alternative cremation facility with reduced waiting times for services and reduced traveling times for East Cambridge District residents.

The site for the proposal is described over the following pages.

1.4 SITE LOCATION

The site is located on the A412 between Mepal and Chatteris. The Former Mepal Outdoor Centre site is owned by East Cambridgeshire District Council. It has previously been a quarry site, and a large lake has formed in place of the excavation.

The site is identified on the adjacent map circled in red.



SITE LOCATION

The site is located to the west of the A412 between Mepal and Chatteris. It is surrounded by open farm land, agricultural buildings and light industrial units. The Pretoria Energy plant is located to the north of the site. The site is located approximately 12km to the west of Ely.

The site is highlighted in red on the adjacent aerial photograph.



1.5 SURROUNDING CONTEXT Site Photographs

The following photographs illustrate both the context of the site and views towards and away from the site. Each photograph is noted to explain the viewing direction.

Please also refer to the detailed landscape and visual impact assessment that has been carried out by CDS.



view looking south on A412 - site on right



view looking north on A412 with site on the left in the distance



view looking south towards sandy "beach" area

1.5 SURROUNDING CONTEXT Site Photographs



view looking north from "beach" across lake



existing activity centre buildings



view looking north across lake - Pretoria Energy plant in the distance

2.0 SITE ANALYSIS

Site History

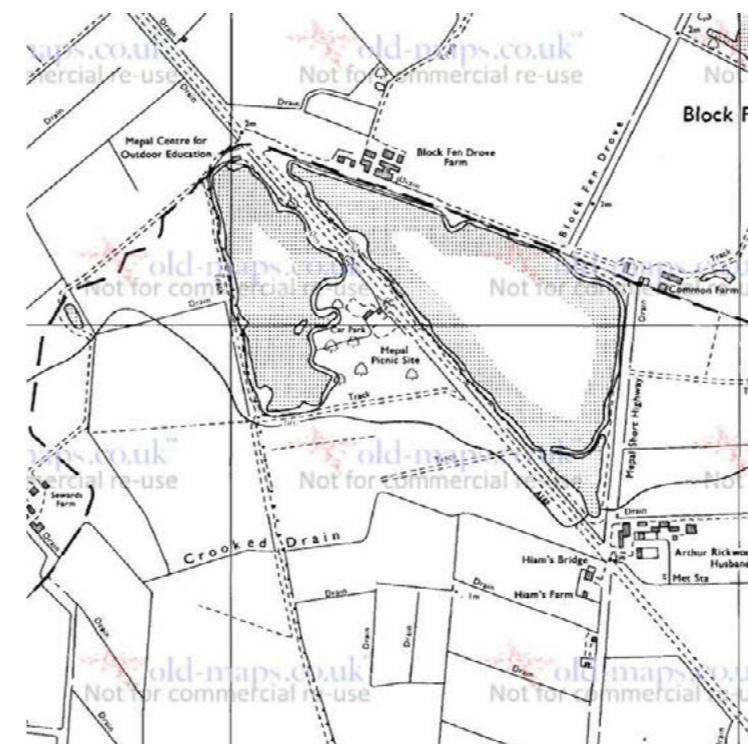
Adjacent are historic map illustrations of the site over the last century. In 1927 the site was open countryside and fields only. By 1952 the site was being excavated as a quarry. In 1979 the quarry had become a lake and a picnic and outdoor education site established and continued into 1981 and beyond. The site is currently disused having been the former home to the Mepal Outdoor Centre.



Map 1927



Map 1952



Map 1979



Map 1981

KEY CONSIDERATIONS Existing site features

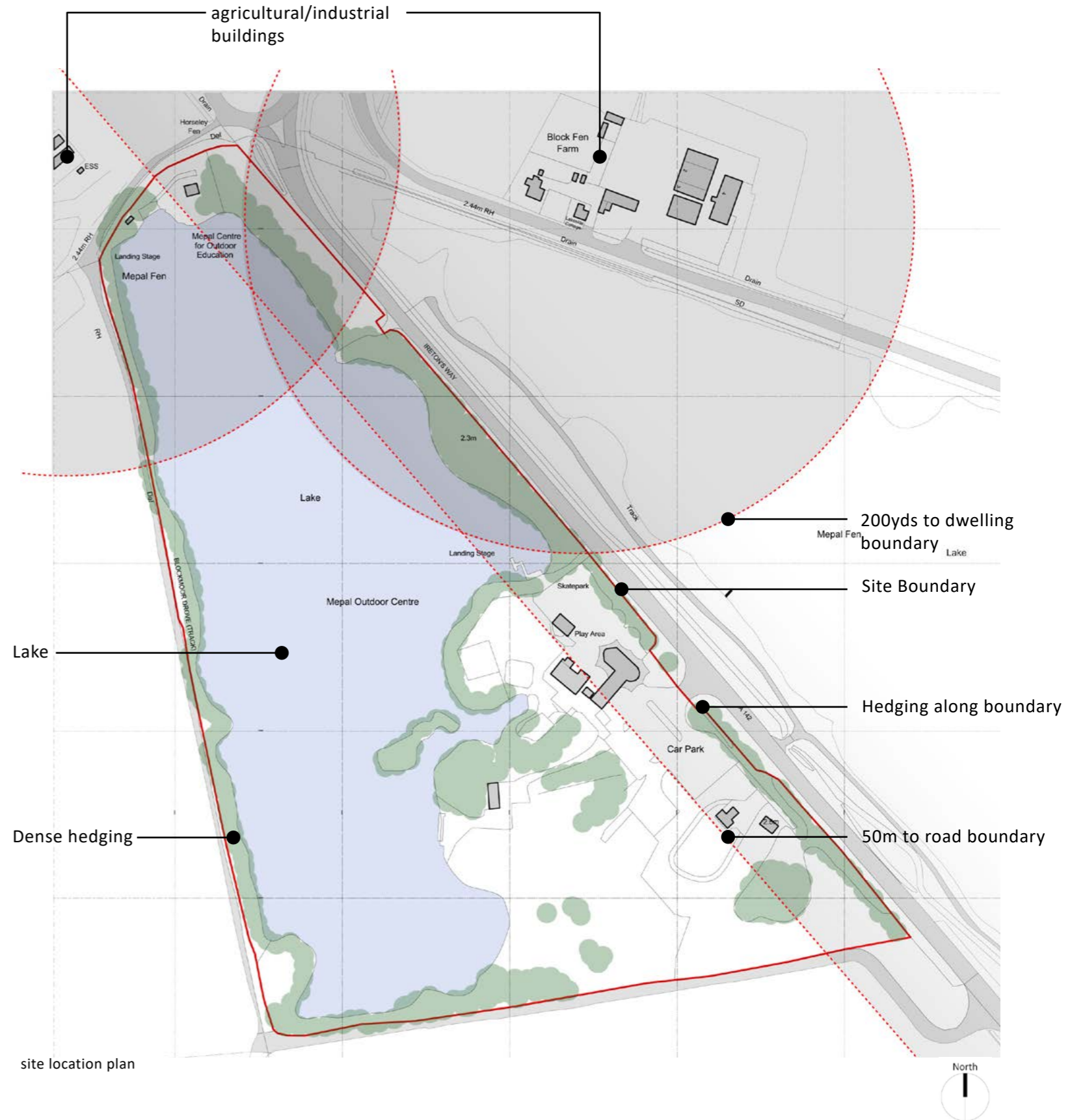
The 12.96ha site on the A412 is currently the former home of the disused Mepal Outdoor Centre.

The site runs north to south with a single boundary to the highway.

The site is surrounded by farmland, light industrial units and the Pretoria Energy plant to the north.

Dense hedging and trees run along all four boundaries, a tree survey identifies trees considered significant. A report has been attached to this application.

The predominant feature of the site is the large lake that occupies the void created when the site was a quarry. A small cluster of existing buildings and an area of hardstanding is located to the south of the site. The new development is proposed to be situated in the approximate position of the existing buildings.



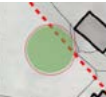







KEY CONSIDERATIONS Constraints and Opportunities

This diagram demonstrates the constraints and opportunities on the site that have informed the design process. It shows physical limitations such as topography, access and natural site features.

By recognising key constraints and opportunities on site, we have been able to establish key principles which will help shape the development.

The diagram opposite sets out the constraints of the 'build zone' for any new crematorium buildings. These need to fall outside of a 200 yard radius from any dwelling and 50m from any roadway.

-  Proposed site entrance
-  Proposed site exit
-  Category A/B Trees with RPZ
-  Existing Structures
-  Dense planting
-  Noise onto site
-  Sun path
-  Views over lake



3.0 PLANNING CONTEXT

Relevant Planning Policy

The Development Plan for East Cambridgeshire is the starting point for decision making and currently comprises the "East Cambridgeshire Local Plan 2015" (ECLP) which sets out the vision, objectives, spatial strategy and policies to deliver planned growth for the District to 2031.

ECLP Policies of relevance to the current application are outlined below:

- EMP3: New employment development in the Countryside;
- EMP4: Re-use and replacement of existing buildings in the countryside;
- ENV1: Landscape and settlement character;
- ENV2: Design;
- ENV4: Energy efficiency and renewable energy in construction;
- ENV7: Biodiversity and geology;
- ENV8: Flood risk;
- ENV9: Pollution;
- COM3: Retaining community facilities;
- COM4: New community facilities;
- COM7: Transport Impact;
- COM8: Parking Provision.

Other material planning considerations in that context are considered to comprise:

Supplementary Planning Documents

- Design Guide SPD (2012);
- Developer Contributions SPD (2013);
- Renewable Energy (Commercial Scale) SPD (2014);
- Contaminated Land SPD (2015);
- Cambridgeshire Flood and Water SPD (2016); and
- Draft Natural Environment SPD (2020)

National Policy

- The National Planning Policy Framework 2019
- Planning Practice Guidance
- National Design Guide

4.0 DESIGN CONCEPT

raised walkways & woodland landscape

...drawing on the existing woodland landscape and the original Mepal bridge crossing, the concept is based on the introduction of new structures nestled into the existing site, with raised access walkways linking the different parts of the masterplan...



DESIGN CONCEPT Building layout

The new crematorium for East Cambridge District Council has been designed to provide a series of spaces within a series of different volumes. The main buildings are connected by a flat-roofed links and a covered external canopy at the front of the main service hall.

Each space has a distinct function and has been designed to fall into a sequence as visitors make their way through the building from arrival at the waiting building, into the entrance foyer and through to the main chapel. A formal, processional entrance provides direct access to the chapel from the Porte Cochere.

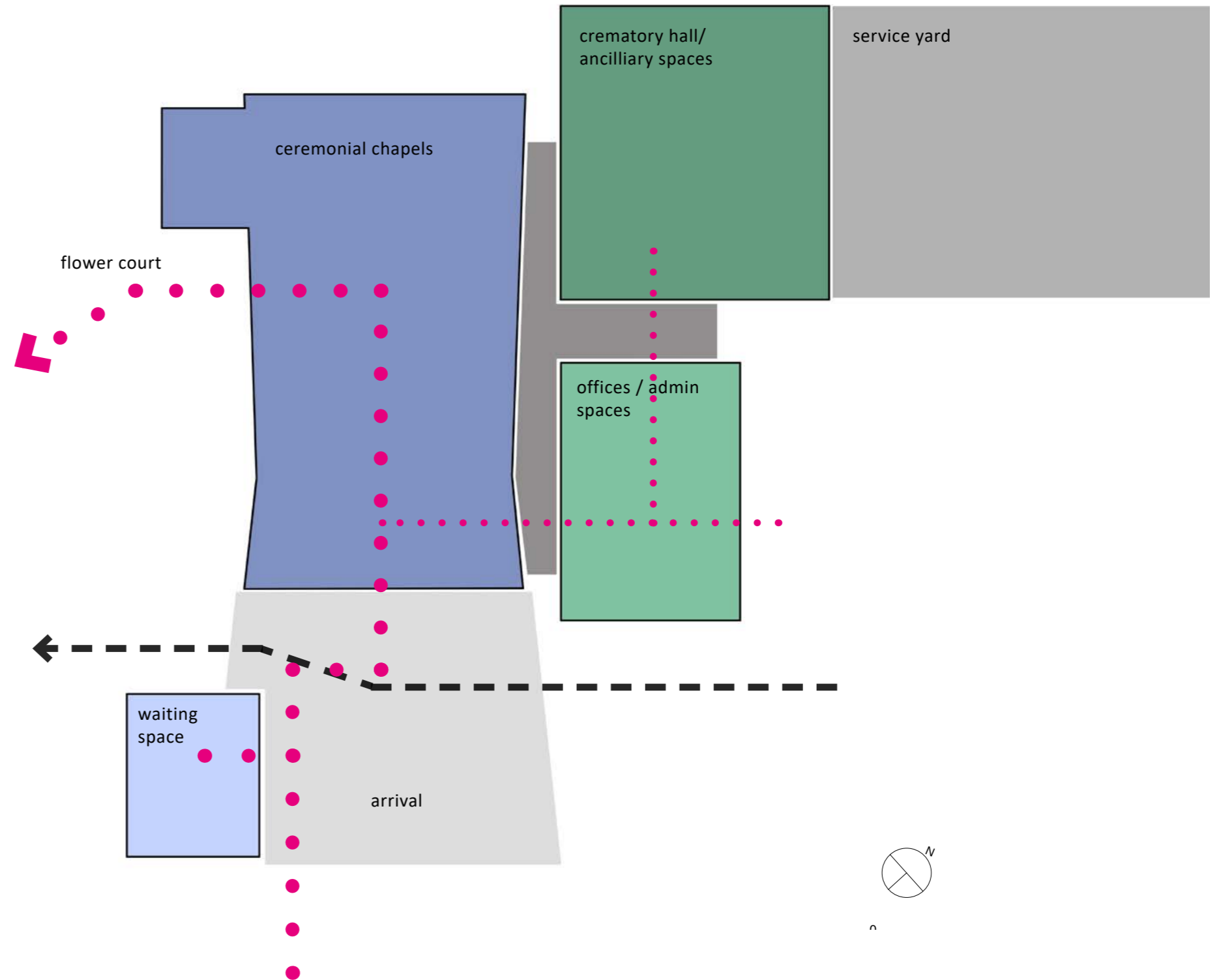
The crematory hall and admin facilities are located to the side of the main chapel. This allows suitable connections for coffins to be manoeuvred into the committal space in addition to allow admin staff to access the main chapel if needed.

The form of the building has been developed to accentuate the principle spaces. This aids navigation of the building which is an important aspect for public users who may be unfamiliar with the building layout.

Key

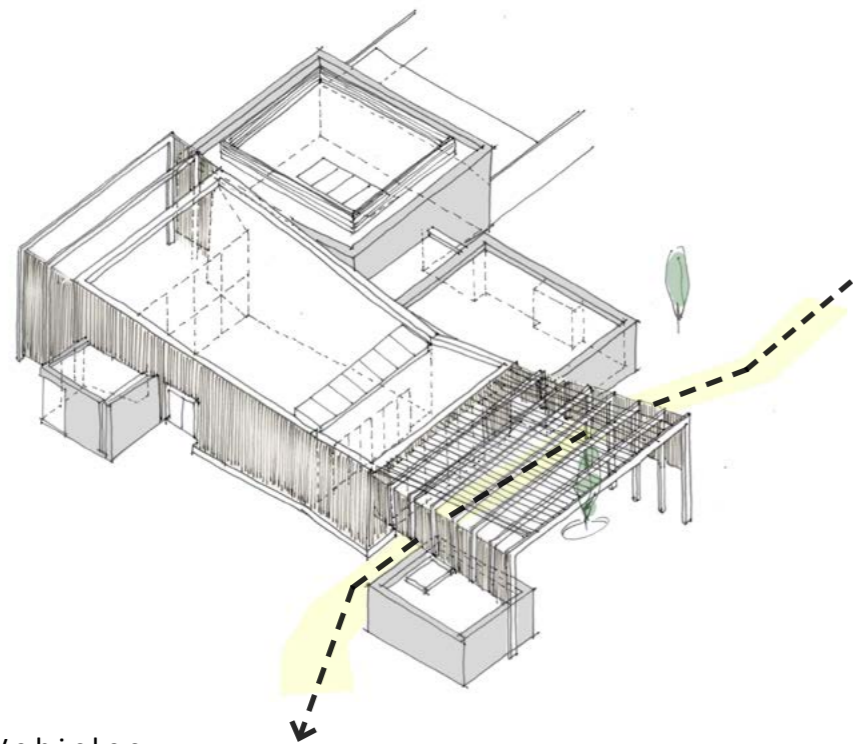
 Pedestrians

 Vehicles

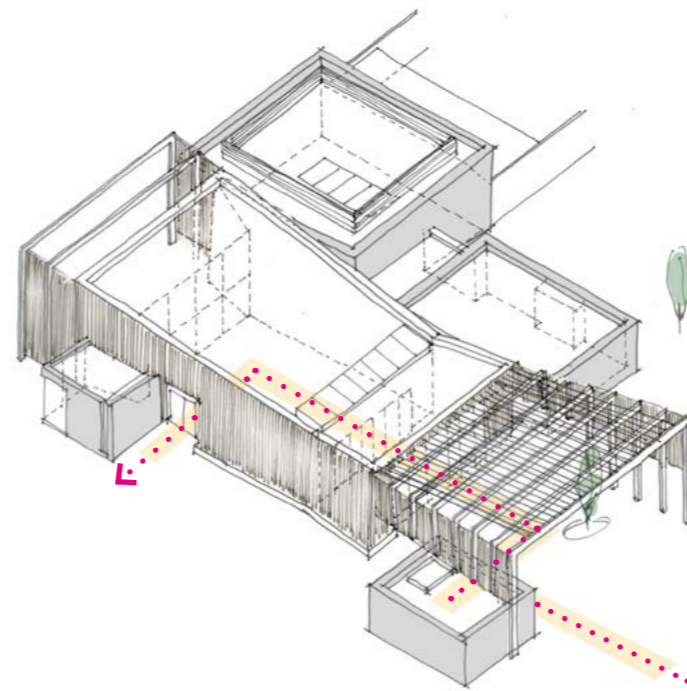


concept building layout diagram

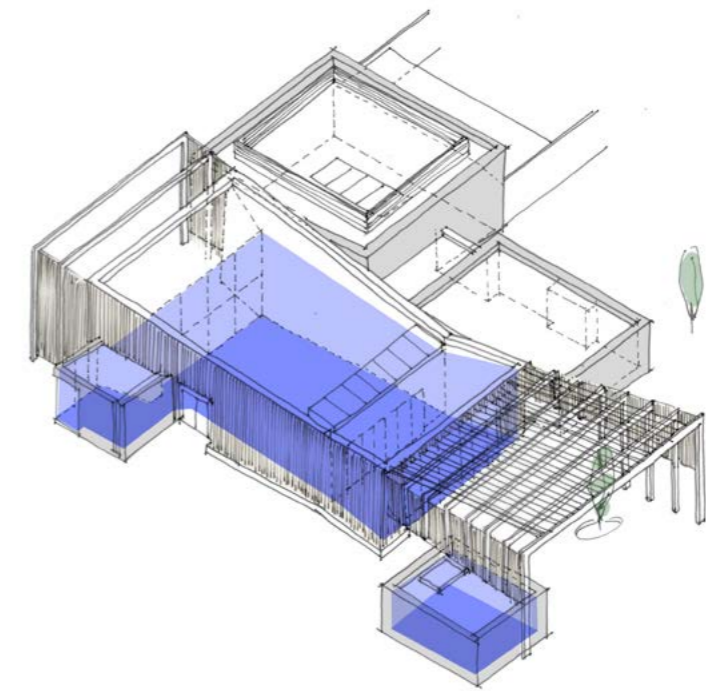
INITIAL BUILDING ARRANGEMENT DIAGRAMS



Vehicles

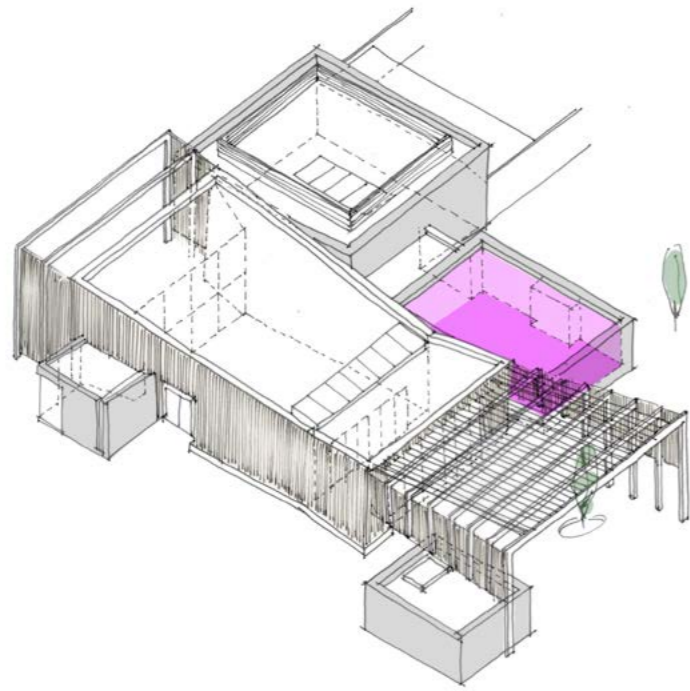


Pedestrians

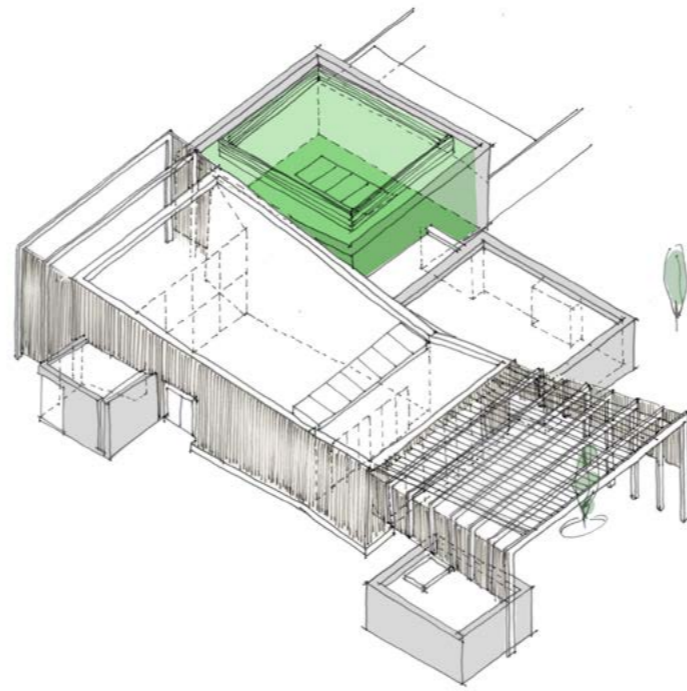


Chapels and Waiting Area

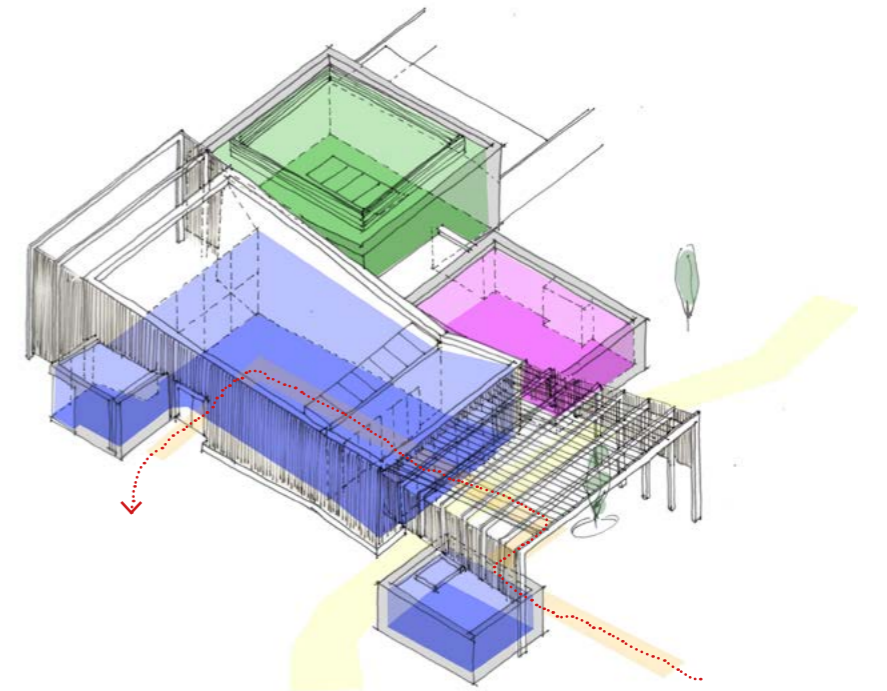
INITIAL BUILDING ARRANGEMENT
DIAGRAMS



Admin and Ancillary Spaces



Crematory Hall

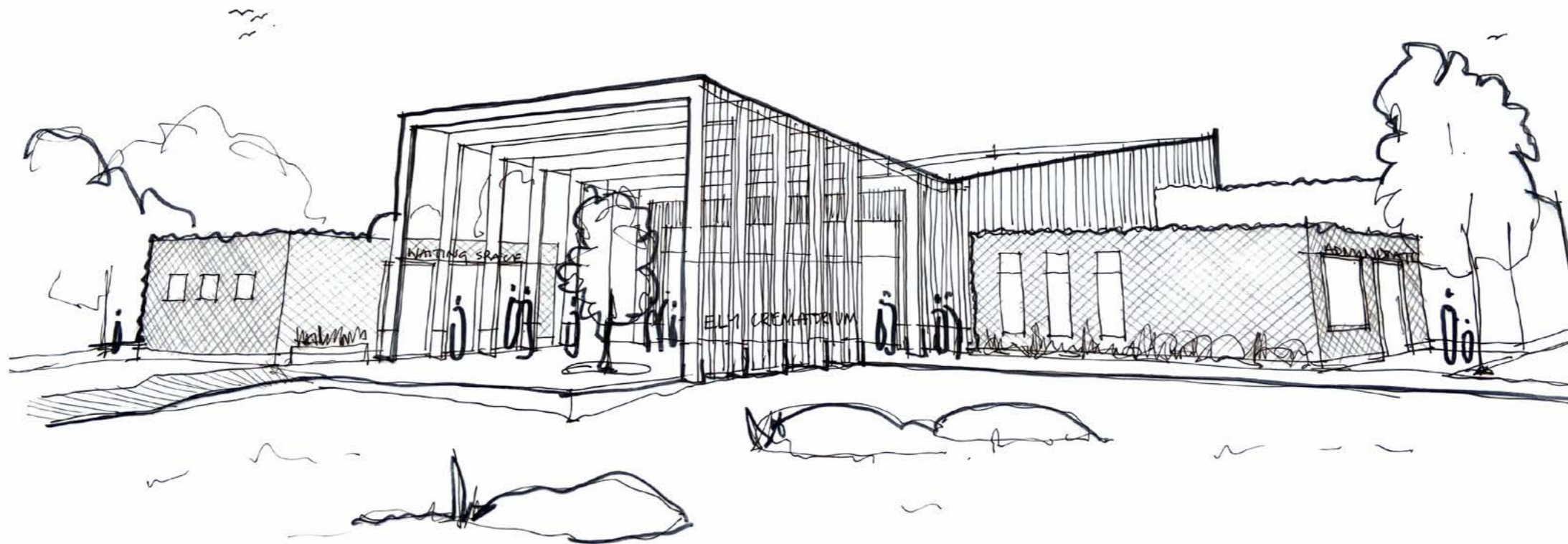


Zones combined

SCALE AND MASSING

The building elevations have been designed to enhance the concept of a series of independent, linked volumes nestled into the landscape. A difference in form and materials between the main chapel and subsidiary spaces allows the main chapel to be clearly defined from the rest of the building.

The image below shows an early concept sketch of the building. The site is a combination of woodland, open scrub land and of course the lake to the north and west. Existing hedging to the eastern boundary will restrict views of the building from the road. Once on the site, users will catch glimpses of the building as they approach the car park.



concept sketch

SCALE AND MASSING

The hierarchy of each space is evident by the volume and mass of each element. The service hall is the tallest section of the building and is approximately 1.9m higher than the crematory hall. This height difference extends to 2.4m at the edges of the timber canopy. The admin area and waiting building sit at a lower height, this accentuates striking form of the main chapel building.

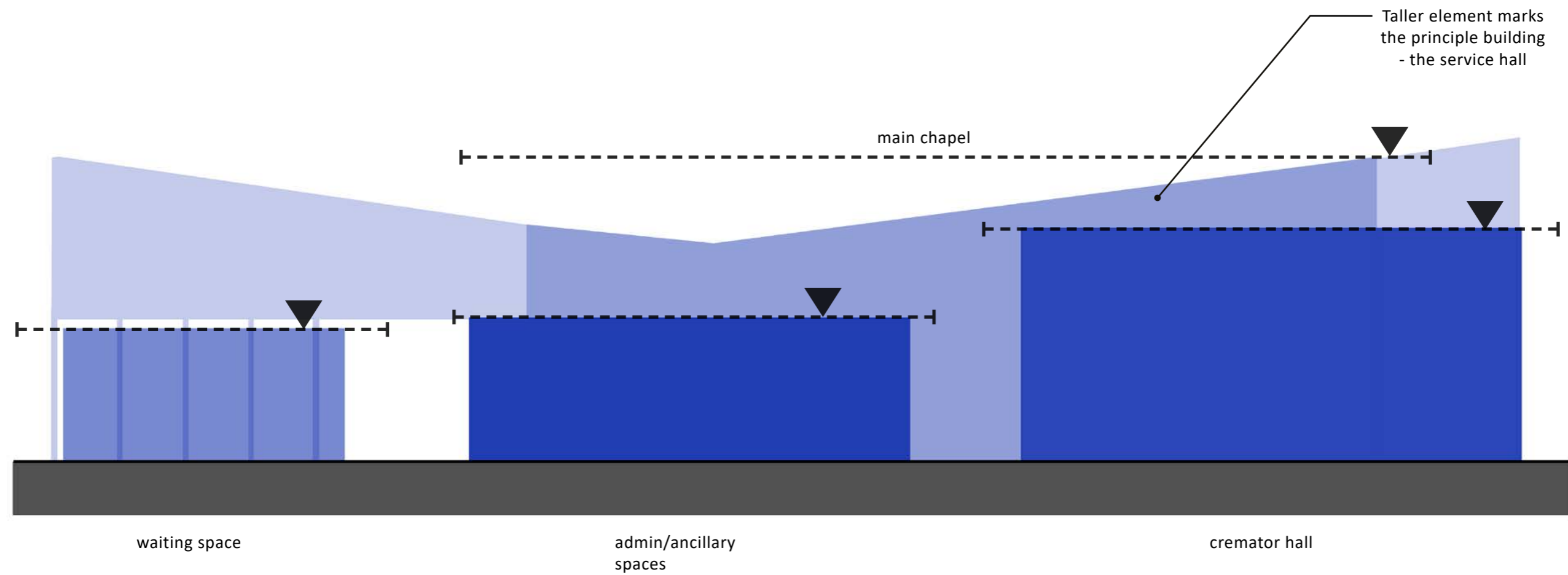


diagram showing hierarchy of spaces

DESIGN DEVELOPMENT

Design Influences - Building

The buildings and forms below have influenced the design as it has developed. These early principles of the design for the crematorium have been carried through into the new proposals. The contrasting nature of the black and natural timber helps to accentuate the striking form of the building.



DESIGN DEVELOPMENT

Design Influences - Landscape

Proposals for external hard and soft landscaping have been prepared separate to this document. Please refer to CDS documents for more information.

Hard landscaping materials will all be permeable to ensure minimal drainage interventions within this sensitive location.

Material colours and textures will be selected to compliment the character of the site and its history, using:

- permeable, aggregate scattered macadam to the roadways through the main car park

- resin bound aggregate to the curving central path
- clay block pavers to other car park pedestrian routes
- crushed compacted stone / self-binding aggregate to the natural burial area roadway
- main parking bays will be laid with a cellular compacted gravel system
- the overflow section with a cellular turf system.

The aim for the landscape is that it should nestle comfortably into the site and avoid the appearance of standard public car park such as those seen at retail parks or superstores.



DESIGN DEVELOPMENT

Design Influences - Interior

In addition to the external appearance of the building the internal spaces have been considered from an early stage. It is the intention to create an uplifting, hopeful and comforting space. A light, reflective and inclusive atmosphere with high levels of natural light, fresh air, controlled acoustics and views out onto the lake and landscape beyond.

Design influences are drawn from many of the spaces illustrated here. These early principles of the interior spaces for the crematorium have been carried through into the proposals.



internal multi-faith hall space with natural light and high, lofty ceiling

a neutral material palette throughout the building will promote a peaceful and contemplative environment

plenty of natural daylight will help to create a sense of calm in the main service hall

the material palette will be extended into the committal space to create a pleasing atmosphere for cremation viewers

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5.0 DESIGN PROPOSALS



DESIGN PROPOSAL Layout - Masterplan

The proposed masterplan adjacent shows the distribution of spaces and buildings around the site. Please refer to separate documents provided by The CDS Group for more detail.

The access road leads to the main car park where clearly defined routes for visitors, the funeral procession and service vehicles are provided.

The car park for visitors is kept away from the building but within walking distance of the crematorium. The pedestrian route into and out of the crematorium has been kept separate to avoid clashes between visitors arriving and leaving a service.

A sinuous walkway running the length of the car park will provide the main pedestrian access route to the building, ending at the porte cochere.

The funeral procession stops beneath the porte cochere at the front of the main service hall. The pick-up area is at the exit to the flower court.

The remainder of the site is landscaped. Further details of this has been provided in a separate document by The CDS Group.

The architecture and landscape is designed to guide you through a series of spaces externally and internally. It is a key consideration that visitors enter and leave in one direction to ensure funeral parties do not meet when leaving and arriving.

Each space has a distinct function and has been designed to fall into a sequence as visitors make their way through the building from arrival under the port cochere, into an internal waiting area and then through into the Service Hall. On leaving the Service Hall visitors are guided along by timber lined pathways to the flower court overlooking the lake.

A memorial garden is located at the west of the site which can be accessed off the pathways leading from the flower court, or directly off the car park. Pedestrian access is provided from the memorial garden to the the function building which has it's own views out onto the lake.



proposed masterplan



DESIGN PROPOSAL Layout - Crematorium

The crematorium building combines a collection of independent volumes connected by single storey linking spaces. There is a natural flow from the car park to the waiting area and then onwards, through the building entrance to the main chapel. A timber boardwalk then leads users towards the external flower court before returning the car park.

The funeral party arrives under the cover of the external porte cochere at the front of the main service hall building. From here guests join the procession from the waiting space. Glazed entrance doors help to lead people through the spaces. The main chapel space is a large full height volume with a fully glazed north wall which looks out over the lake beyond. A full width roof light is located at the entrance to the chapel, this creates a brilliantly bright and lofty atmosphere. The hall is entered in the centre, on axis with the catafalque. The hall provides seating for up to 108 visitors and this can be increased by opening the partition to the entrance foyer for larger services. The glazing to the north is set back within the building, the roof will provide shading to reduce glare.

On leaving the service hall at the front of the space, the funeral party enter the walkway to the flower court. A smaller chapel is accessed off the main chapel to provide an intimate space for 12 people.

Office and administration facilities are can be accessed of the main entrance foyer, but would typically be approached via a dedicated entrance on the east of the building. A staff room is also provided which can be shared as a space for bearers.

Accommodation Schedule:

Waiting Building

Office/Admin

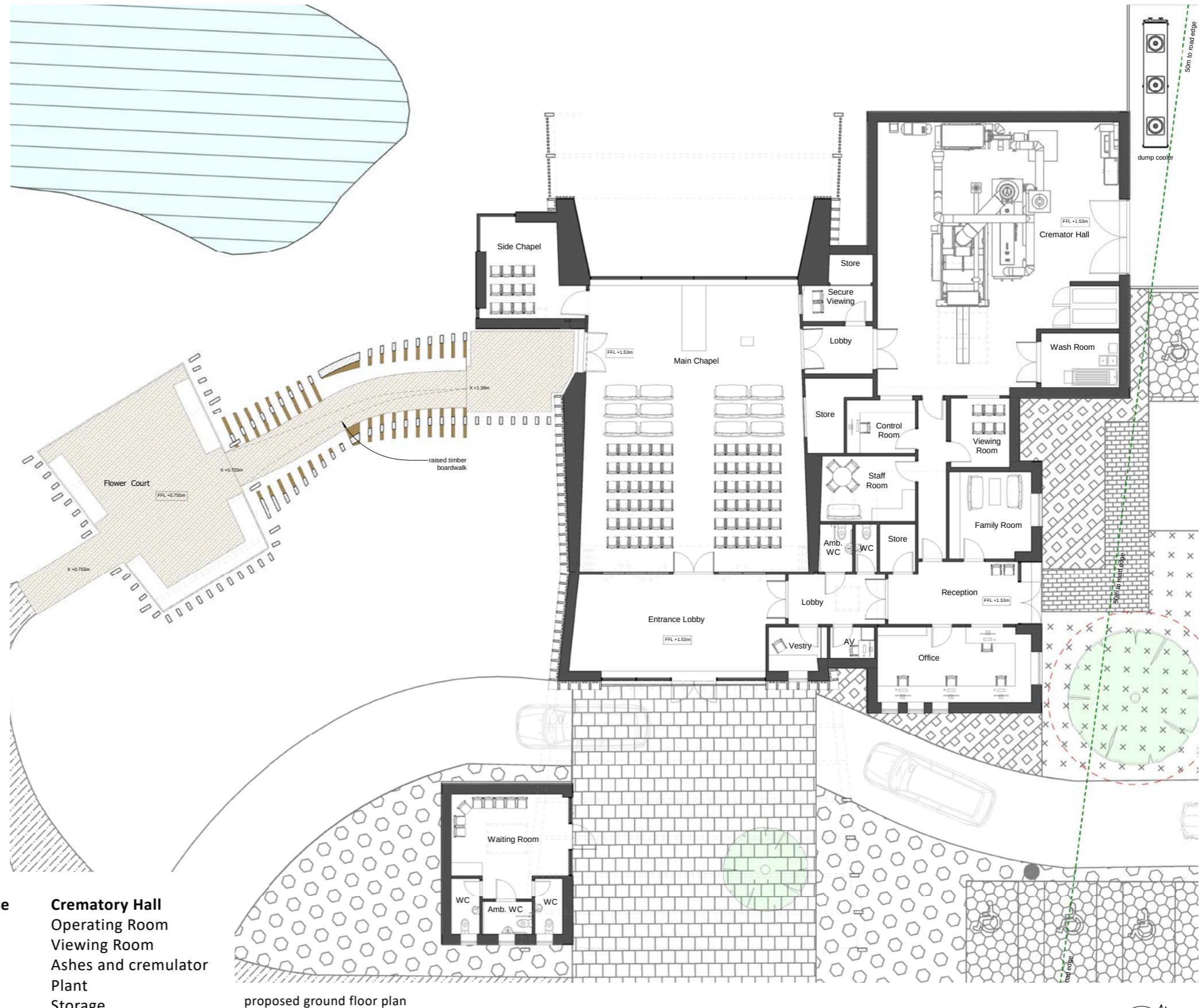
Office
Staff/Bearers Room
Storage
WC's
Family Room

Service Hall/Entrance

Main Chapel
Side Chapel
Entrance Foyer
Celebrant Room
AV Room
Secure Viewing Room
Storage

Crematory Hall

Operating Room
Viewing Room
Ashes and cremulator
Plant
Storage
Wash Room
Mortuary

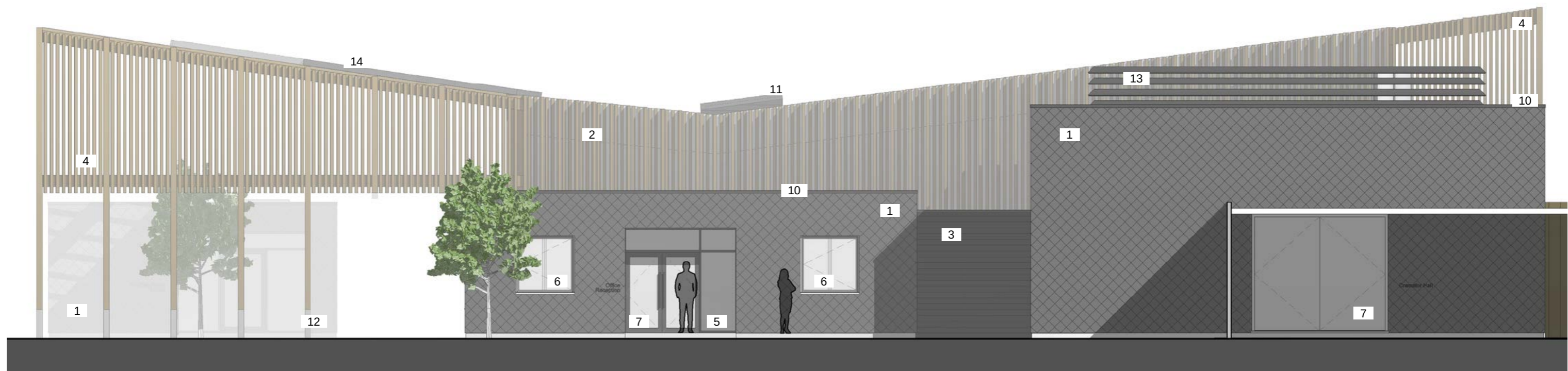


proposed ground floor plan



DESIGN PROPOSAL Appearance

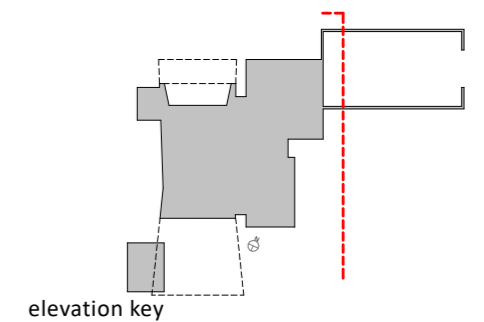
Side elevation with admin and cremator hall spaces and main chapel in background



proposed north east elevation

Materials Legend

- 1 - Recycled Plastic Shingles - Grey
- 2 - Vertical Timber Cladding
- 3 - Composite Facacde Board - Dark Grey
- 4 - Composite Timber Framed Canopy
- 5 - PPC Aluminium Framed Curtain Glazing
- 6 - PPC Aluminium Framed Windows
- 7 - PPC Aluminium Framed Doors
- 8 - Render
- 9 - Timber Fencing
- 10 - PPC Aluminium Coping
- 11 - Roof Glazing on Upstand
- 12 - Concrete Upstand
- 13 - PPC Aluminium Plant Screening Louvres
- 14 - Sloped Patent Glazing Canopy
- 15 - Ventilation Louvres
- 16 - Timber Framed Flower Court Canopy



DESIGN PROPOSAL Appearance

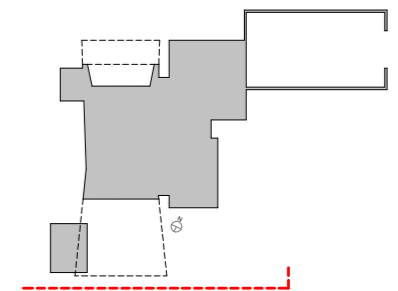
End elevation of main entrance, waiting room and admin space



proposed south east elevation

Materials Legend

- 1 - Recycled Plastic Shingles - Grey
- 2 - Vertical Timber Cladding
- 3 - Composite Facacde Board - Dark Grey
- 4 - Composite Timber Framed Canopy
- 5 - PPC Aluminium Framed Curtain Glazing
- 6 - PPC Aluminium Framed Windows
- 7 - PPC Aluminium Framed Doors
- 8 - Render
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- 12 - Concrete Upstand
- 13 - PPC Aluminium Plant Screening Louvres
- 14 - Sloped Patent Glazing Canopy
- 15 - Ventilation Louvres
- 16 - Timber Framed Flower Court Canopy



elevation key

DESIGN PROPOSAL Appearance

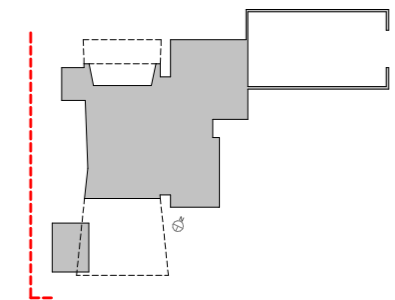
Side elevation with main chapel and canopy in the background



proposed south west elevation

Materials Legend

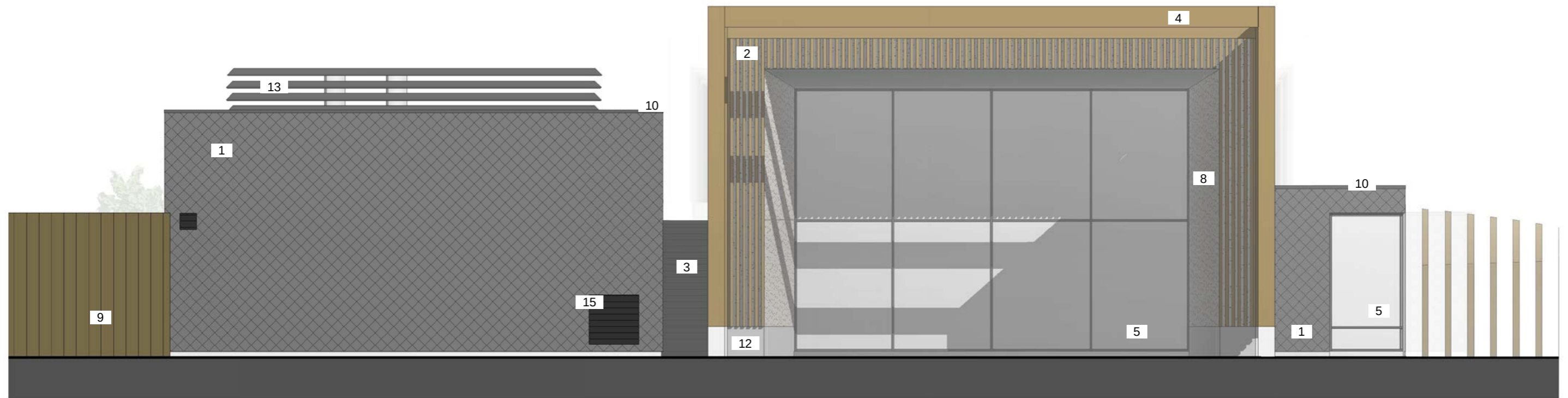
- 1 - Recycled Plastic Shingles - Grey
- 2 - Vertical Timber Cladding
- 3 - Composite Facacde Board - Dark Grey
- 4 - Composite Timber Framed Canopy
- 5 - PPC Aluminium Framed Curtain Glazing
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- 13 - PPC Aluminium Plant Screening Louvres
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- 15 - Ventilation Louvres
- 16 - Timber Framed Flower Court Canopy



elevation key

DESIGN PROPOSAL Appearance

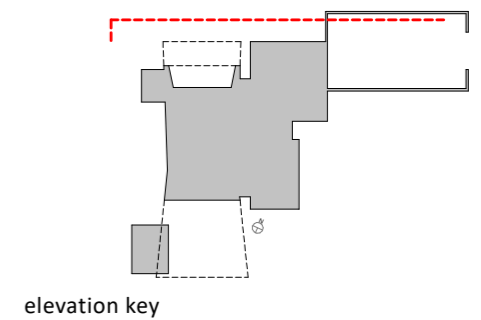
End elevation of crematory hall with main and small chapels



proposed north west elevation

Materials Legend

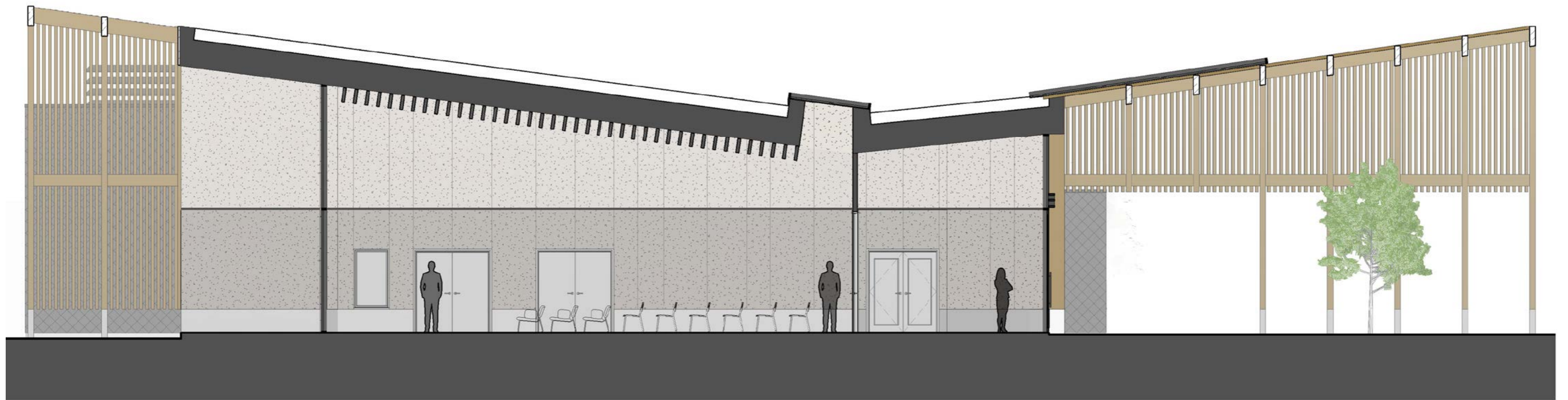
- 1 - Recycled Plastic Shingles - Grey
- 2 - Vertical Timber Cladding
- 3 - Composite Facade Board - Dark Grey
- 4 - Composite Timber Framed Canopy
- 5 - PPC Aluminium Framed Curtain Glazing
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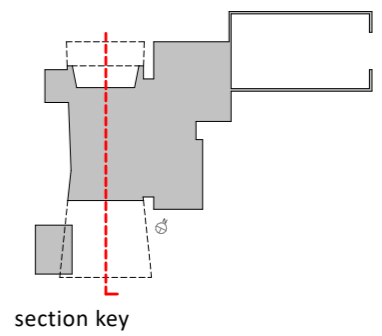
elevation key

DESIGN PROPOSAL Appearance

Long section through main chapel, entrance and porte cochere



proposed building section AA



DESIGN PROPOSAL Materials

The materials specified for the building are simple and aim to site comfortably within the site context. Stained timber fins will clad the main chapel building, this offers a vertical element to the elevations. Ancillary volumes are to be clad in a recycled uPVC shingle. These are sustainable and contemporary and help to accentuate the principle chapel structure. Timber clad canopy structures at either end of the chapel building will be stained to match the building cladding. The flat roofs will be finished with a single ply membrane or similar roofing material.

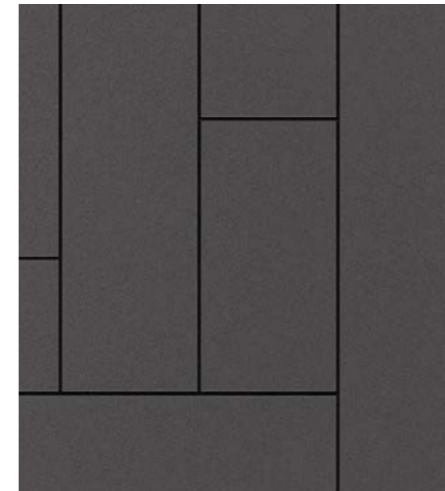
chamfered render



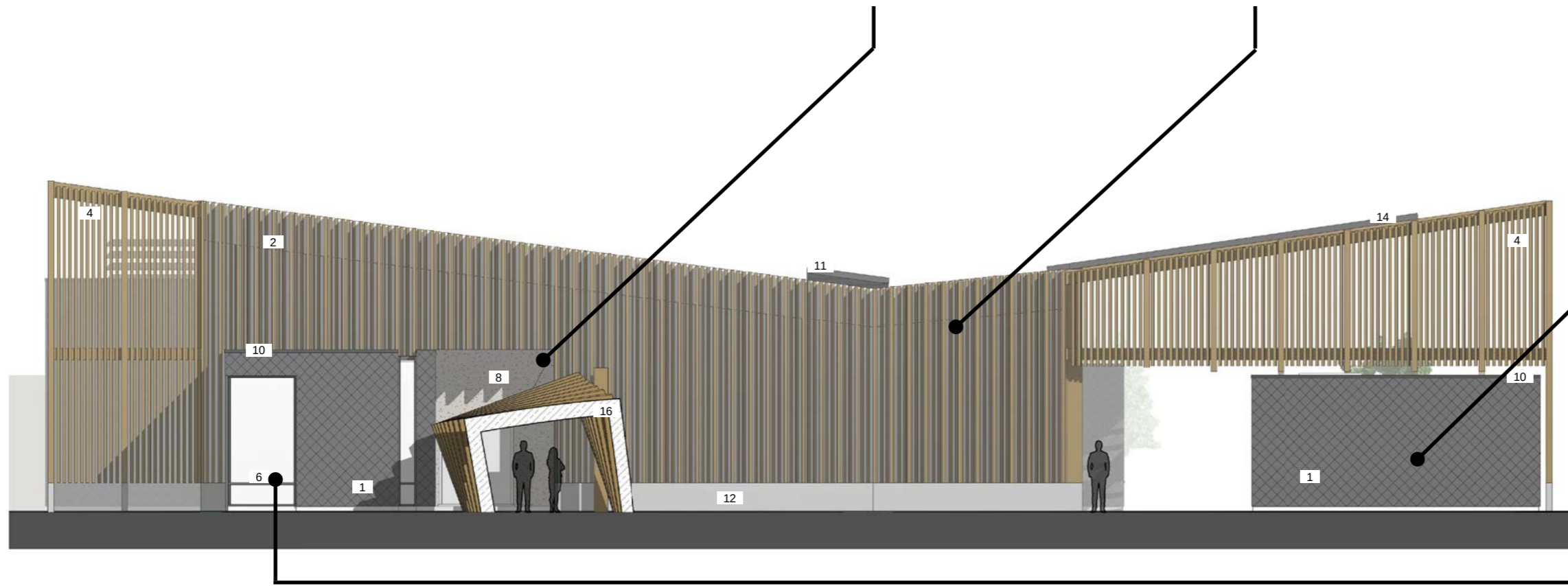
timber cladding on concrete upstand



composite facade cladding



uPVC plastic shingles



side elevation of service hall and section through flower court

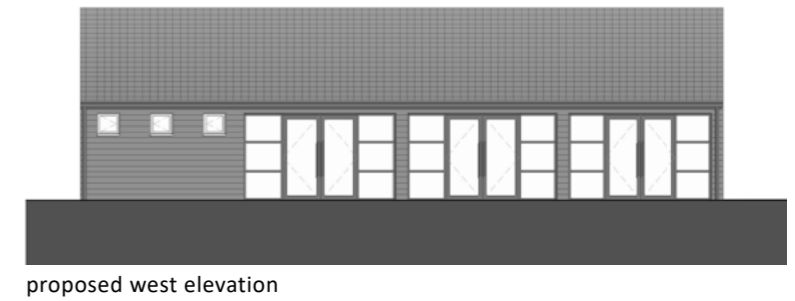
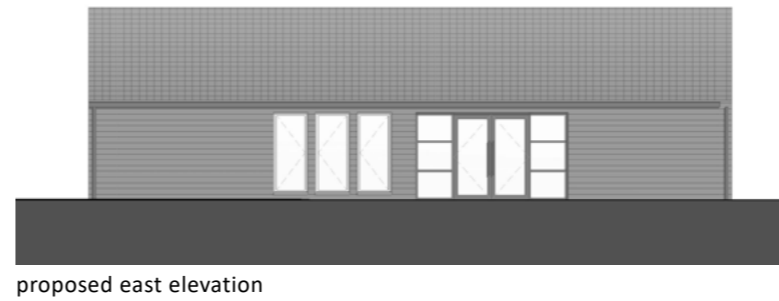
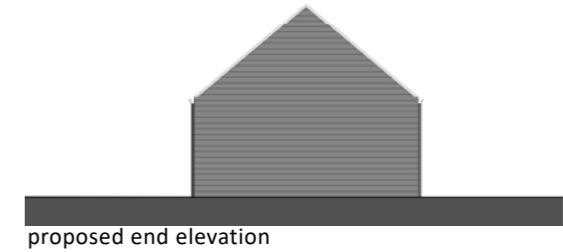
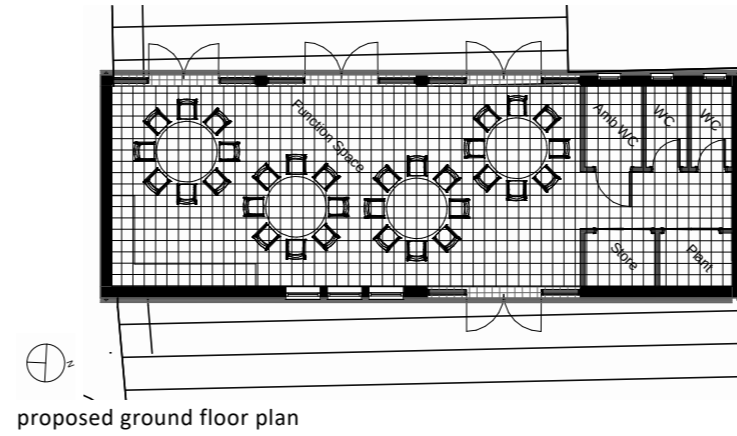


PPC aluminium windows

DESIGN PROPOSAL Function Building

The function building will be pre-fabricated using a design style similar to the HebHomes Accessible Longhouse. With a modular design, the function building will provide a multi-purpose gathering space suitable for seating 30 people for a buffet style meal. The building is intended to provide a very simple interior which is then emulated by the geometric exterior form.

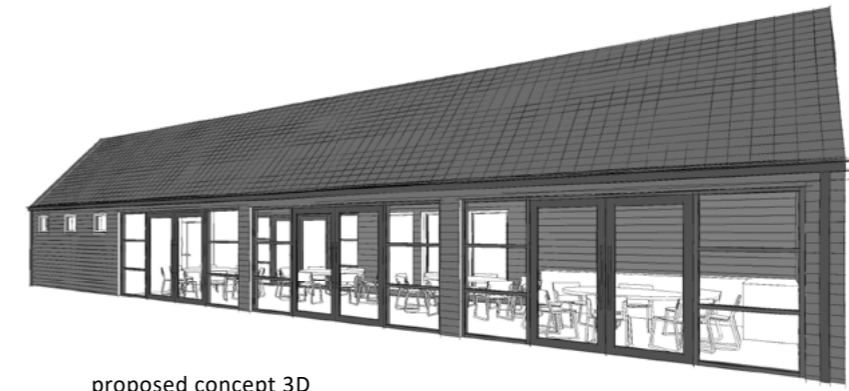
The function building is located on the site of an existing barn on the site. The design approach will be to emulate the existing but with a modern twist.



Existing structure to be replaced



HebHome - Accessible Longhouse

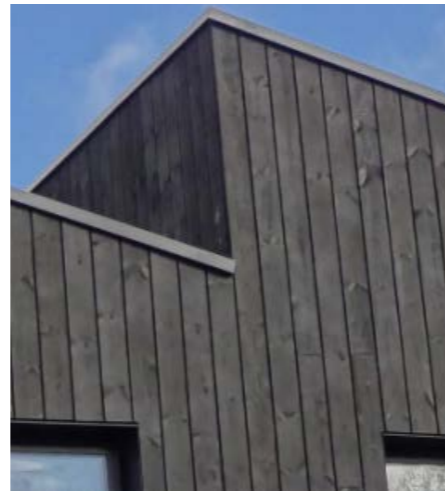


proposed concept 3D

DESIGN PROPOSAL Function Building Materials

The materials specified for the function building are simple. A dark stained timber with black corrugated roof will be matched with dark aluminium framed windows and rain water goods.

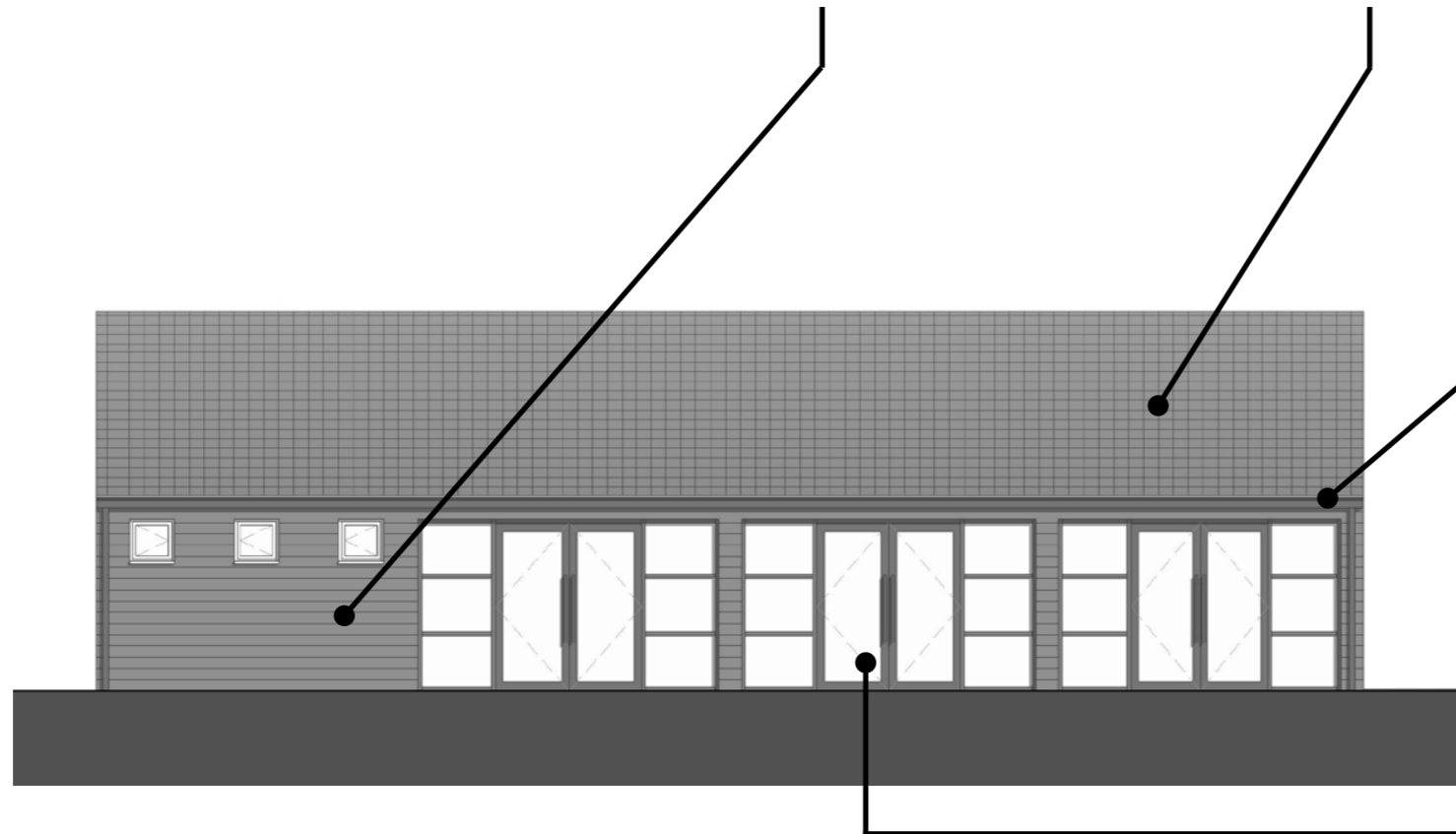
stained timber cladding



corrugated roofing



PPC rainwater goods



side elevation of function building



PPC aluminium windows

6.0 ACCESS






Vehicular and pedestrian access

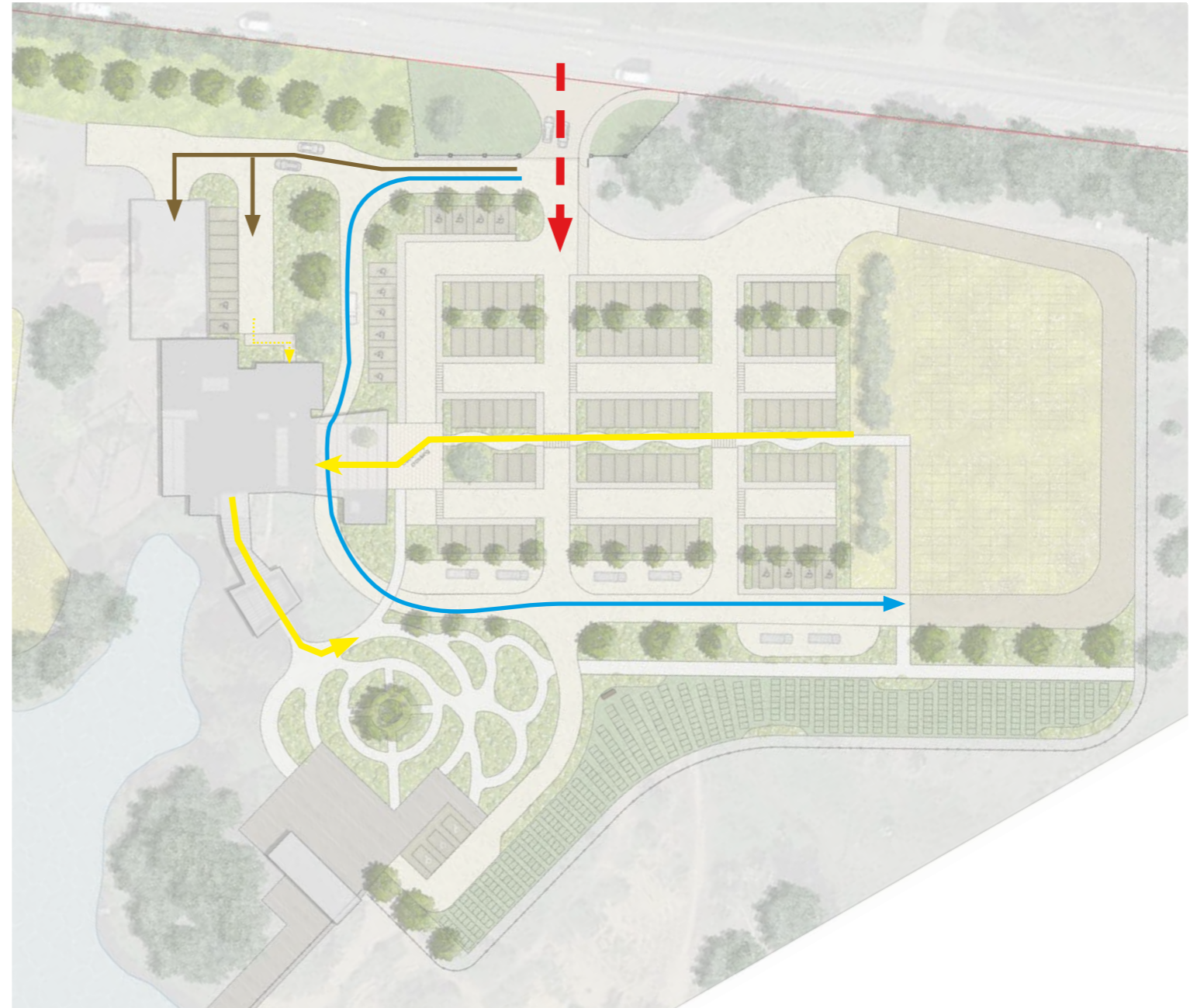
The site is accessed by vehicles and pedestrians from the east edge of the site, directly off the A142.

The funeral procession and visiting cars enter the site from the main road. At the car park entrance visitors will continue into the main car park. The funeral procession turns right and follows the road leading to the Crematorium. The hearse and limos follow this formal route to the porte-cochere drop off before continuing and waiting in the pick-up zone. Service vehicles, staff and office visitors will use the service road on the east to access the building.

The existing northern site access will be upgraded and maintained for passive recreational use.




Key

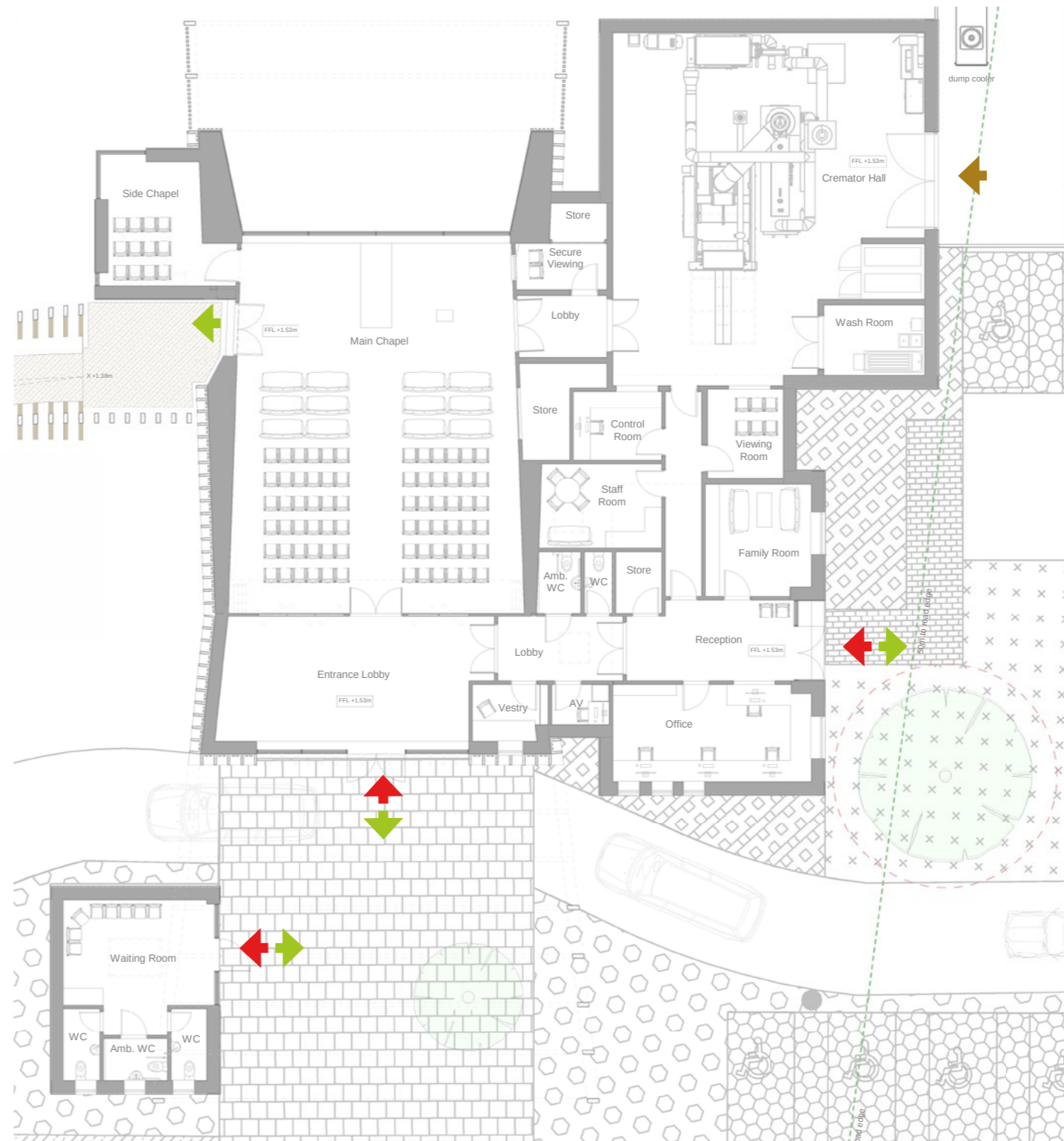
-  main entrance/exit access route
-  funeral party vehicle route
-  service vehicles and admin routes
-  principle pedestrian route
-  secondary pedestrian routes



Building access

All buildings have level access at all access and egress points.
All external and internal doors are accessible to all.

-  building access point
-  building egress point
-  staff / service entrance / exit



7.0 SUSTAINABILITY

The project includes a number of sustainable factors which contribute to both the energy performance and life span of the building.

The proposed uPVC shingles for the exterior facades are made from recycled plastic from waste materials such as windows and rainwater pipes.

The buildings will also employ a recovery system as part of the heating and hot water strategy whilst the size and volume of spaces allow for a natural ventilation strategy to be considered in the detailed design stage.

Electric parking points are provided throughout the parking areas.

The scheme also proposes the installation of solar panels on the roofs of the crematorium buildings and on-site battery storage to move the project to meeting 70% its' electricity needs through renewables.



Bins & Waste

All of the bin storage and waste and recycling storage is confined to the service yard.

All waste from the site and the buildings will be collected here and sorted. Waste collection will then be restricted to one location within the site. The service access road will be suitable for waste collection vehicles.



Parking

Parking for the project is principally focused on one main location, a large carpark positioned centrally within walking distance of the buildings. This car park provides 78 spaces of which 10 are disabled. A further parking area adjacent to the reception entrance provides additional 6 standard spaces and 2 disabled parking spaces. A final 34 overflow spaces are provide at the natural burial area, including 4 disabled spaces. A total of 22 electric charging points are provided across the parking areas. Hearse and mini-bus parking provision has also been included within the design. Recreational spaces to the north of the site have been described in alternative documents attached to this application.



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8.0 CONCEPT VISUALS



CONCEPT CGI



CONCEPT CGI - ENTRANCE



CONCEPT CGI - CHAPEL WINDOW



CONCEPT CGI - CHAPEL INTERNAL



CONCEPT CGI - AERIAL VIEW





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