



WREN SCHOOL - ROTUNDA

Design & Access Statement
June 2021

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1.0 DESIGN & ACCESS

INTRODUCTION

...CREATING A CONNECTION WITH THE PAST WHILST BUILDING A SUSTAINABLE FUTURE.



Example of an Iron Age Rotunda Round House



Proposed Rotunda Round House Eco-Classroom Design

INTRODUCTION

This Design and Access Statement has been prepared by Create It Studio Architects on behalf of our client to support a full planning application for a site located at **The Wren School, 61-63 Bath Rd, Reading RG30 2BB.**

Grid Reference: SU 69531 72394

This proposal seeks to attain full planning consent for the erection of a new eco-classroom at The Wren School.

The Wren School is a free secondary school, established to offer a school with a broad curriculum, innovative teaching in a supportive, contemporary environment.

The school's value statement is

'Each child, regardless of background, will receive a world-class education and be nurtured, challenged and inspired to aim high.'

This proposed classroom forms part of the school's vision to be inclusive to all pupils.

The proposal aims to provide a high-quality sustainably built eco-classroom that delivers the following:

- An on-site education resource for sustainability
- A wellbeing facility with a particular focus on disadvantage or vulnerable students
- An informed working classroom for existing students

The new eco-classroom will be located within the school compound and will be positioned to the South of the Sunken Garden.

The design and materials of the new classroom aim to inspire a highly sustainable design that sits well within the existing school surroundings and infrastructure.

In the Iron Age, the school site would have had several roundhouse structures located on the school site. The circular design lends itself well as being the contemporary version of the Iron Age roundhouses, creating a connection with the past whilst building a sustainable future.

This report is to be read in conjunction with all submitted reports and/or drawings that accompany this planning application.

PLANNING

PLANNING POLICIES

The **National Planning Policy Framework (NPPF)** provides guidance to Local Planning Authorities by which applications should be assessed and determined.

Additionally, the **Reading Borough Local Plan (2019)** consists of the following relevant policies:

Policy CC1 – Presumption in Favour of Sustainable Development
Policy CC2 – Sustainable Design and Construction
Policy CC3 – Adaption to Climate Change
Policy CC5 – Waste Minimisation and Storage
Policy CC6 – Accessibility and the Intensity of Development
Policy CC7 – Design and the Public Realm
Policy CC8 – Safeguarding Amenity
Policy EN2 – Areas of Archaeological Significance
Policy EN12 – Biodiversity and the Green Network
Policy EN14 – Trees, Hedges and Woodland
Policy EN18 – Flooding and Drainage
Policy TR3 – Access, Traffic and Highway-Related Matters
Policy TR5 – Car and Cycle Parking and Electric Vehicle Charging

PLANNING HISTORY

There have been many planning applications on this site in the past few years. Below is a summary list of key applications only, that identify the outline and reserved matters planning approval for the new school.

151175

A Hybrid application seeking outline planning permission for a new 6 form entry secondary school with all matters other than access reserved for consideration at a later date and detailed permission for 118 dwellings, access, car parking, landscaping and amenity space, following the demolition of the existing buildings

Approved in April 2016

161877

Application for approval of reserved matters following outline approval. (151175)

Approved Oct 2016

PRE-APPLICATION CONSULTATION

We have endeavoured to work closely with the local planning authority to establish the current proposal.

Formal Pre-application advice was issued on **18th May 2021** by **Tom Hughes**, Planning Officer at Reading Borough Council. Please refer to the attached copy.

The Pre-Application response acknowledges the acceptability of the eco-classroom with regards to its design and siting.

For the sake of clarifying points raised in the pre-application response, the classroom will not be located in the playground area. It is to be located on woodlands currently unused to the South of the Sunken Garden. This location is chosen as it does not impede on the existing playground or circulation routes throughout the school site. Additionally, the new classroom will not alter the number of school pupils. The facilities will be used by existing students and there is no plan to increase the number of students as a result of this classroom.



The Wren School
61-63 Bath Road
Reading
Berkshire
RG30 2BB

Frances Martin
Executive Director for Economic Growth
and Neighbourhood Services

Civic Offices, Bridge Street,
Reading, RG1 2LU

☎ 0118 9373787

Our Ref: 201816

Direct: ☎ 01189374150

e-mail: Tom.Hughes@reading.gov.uk

18 May 2021

Your contact is: Tom Hughes, Planning

Dear Sir/Madam,

PRE PLANNING APPLICATION ENQUIRY RESPONSE

Enquiry Reference: 201816
Address: The Wren School, 61 - 63 Bath Road, Reading, RG30 2BB
Proposal: Erection of outdoor eco-classroom

Thank you for your enquiry. I sincerely apologise for the delay in responding.

The following information was supplied:
Proposed Site Plan
Proposed Designs (two options)
Photographs

Site Location
The Wren School comprises a recently renovated secondary school, located between Bath Road and Southcote Lane. The school comprises two 3 and 4 storey L-shaped, interlocking buildings, and a separate sports hall. Sports pitches are located to the western end of the site. Between the main school buildings and Bath Road is located a sunken garden. Several trees subject to an Area TPO are located to the Bath Road frontage, and the western site boundary. Through the site runs a Green Link, records of protected and priority species, and areas of contaminated land and archaeological significance.

Proposal
The proposal is for the erection of an eco-classroom, on land at the top of the sunken garden by the sports hall, on the existing tarmac courtyard. The eco-classroom would afford the opportunity for an educational space with a focus on sustainability, also serving as a pastoral/therapeutic space for disadvantaged or vulnerable pupils. Two design options have

been proposed: a pod design, 75sqm, of timber construction with green roof and walls; a rotunda design, 72sqm, of timber construction with a sedum roof.

Planning Policy

The following local and national planning policy and guidance is of relevance to your proposals:

National Planning Policy Framework

Reading Borough Local Plan (2019)

Policy CC1 - Presumption in Favour of Sustainable Development

Policy CC2 - Sustainable Design and Construction

Policy CC3 - Adaption to Climate Change

Policy CC5 - Waste Minimisation and Storage

Policy CC6 - Accessibility and the Intensity of Development

Policy CC7 - Design and the Public Realm

Policy CC8 - Safeguarding Amenity

Policy EN2 - Areas of Archaeological Significance

Policy EN12 - Biodiversity and the Green Network

Policy EN14 - Trees, Hedges and Woodland

Policy EN18 - Flooding and Drainage

Policy TR3 - Access, Traffic and Highway-Related Matters

Policy TR5 - Car and Cycle Parking and Electric Vehicle Charging

Sustainable Design and Construction SPD (2019)

Appraisal

The principal of the development is acceptable, enabling the school to enhance their educational offer, and meeting sustainability objectives set out in the Local Plan. Subject to technical details being agreed, as set out below, the proposed siting of the eco-classroom on hard standing at the top of the sunken garden is acceptable. It is presumed that the land upon which the classroom would be sited is currently used as a playground/transitional space. This should be clarified with any future application. If the siting of the eco-classroom would require existing external arrangements/practices to be altered, this should be specified too.

Two design options for the eco-classroom have been proposed. Either design would receive officer support at application stage. I draw your attention to the requirements of Class M of the building regulations regarding accessibility. The provision of green roof/walls is welcomed. Details should accompany any future application. A biodiverse green roof, rather than a sedum roof is preferable.

The site is subject to Area TPO 93/003. Any future application should demonstrate the extent of excavation required to facilitate the proposal, to determine the impact of it on existing tree roots. The position of adjacent trees (trunk, canopy, spread and species) should be detailed on a plan, whether they are young or mature. This is to establish whether the proposal would impact on future tree growth, or result in a pressure to prune. The proposal affords the opportunity for further biodiversity enhancement. The provision of insect hotels/boxes and additional planting around the classroom would be welcomed.

The site is located within an area considered high in potential for archaeological material or features, owing to the presence of an Early to Middle Iron Age Settlement, directly adjacent to the school, excavated ahead of development in 2016. It is likely that any form of ground works will require some form of archaeological mitigation, in the form of archaeological evaluation or watching brief. Given the local potential, an area strip may also be required. As above, with any future application please provide details of the extent of excavation required to facilitate the proposals.

With any future application please confirm whether the proposals would result in any increase in pupil/staff numbers. Any significant increase may require additional on-site parking provision.

Conclusion

The principle of the proposed development is acceptable. Care should be taken to ensure that the development is sympathetic to its educational setting and to mitigate the impact on trees and archaeology. The proposal represents an excellent opportunity to meet Reading's climate objectives, whilst enhancing the educational offer to young people.

Submitting a planning application

The Council's Planning Application Validation Information Requirements document should be read prior to submitting an application. This document can be found on the Reading Borough Council website at: www.reading.gov.uk

The following is required should an application be submitted:

Correct fee

Correct application form and certificates

Site Location with the application site outline in red, to a scale of 1:1250 showing at least two road names

Block Plan showing the proposed development to a scale of 1:200

Scalable floor plans and elevational drawings

Schedule of external materials to be used (walls, roof, fenestration etc)

Details of excavation required

Tree Protection Plan

Please note that the advice contained within this letter, or attached report, is that of an officer of the Borough Council and is provided without prejudice to the decision of the Borough Council in the event of a formal application for planning permission.

DESIGN & ACCESS

BACKGROUND

The Wren School was formed in response to the shortage of secondary school placements in and around the Reading area under the Government's Free School Initiative. The school opened in September 2015 in temporary accommodation. In 2016, planning was approved for the construction of a new school. Construction commenced in 2017 and was completed in 2019.

The site forms part of the Hybrid Consent for the whole former Elvian School Site and Coley Park.

The Coley Park site was originally acquired by the ESFA for the Wren School, but it was agreed to carry out a land swap after collaborating on the combined planning application as the school was considered more suitable in its currently proposed location.

CONTEXT

The existing site is situated within Reading Borough Council, 2.5mile South-West of central Reading Town Hall.

The site enjoys excellent public transport links and local amenity services. The wider vicinity contains a mixture of residential development in the form of houses, apartment blocks and hotels and commercial developments in the form of small offices, retail, clinics and leisure facilities.

The Wren School is bounded by Bath Road to the North and Southcote Lane to the South.

The main school building sits centrally with access from Bath Road, the sunken garden to the North-West and sports halls to the South West.

Bath Road is the historic route from London to Bath that passes through Reading and contain several listed structures along the route adjacent to the proposed site, including the following:

- 76 Bath Road, Grade II listed (Entry No. 1321987)
- Boundary stone near 76 Bath Rd, Grade II listed (Entry No. 1303794)
- Bath Road bridge, Grade II listed (Entry No. 1409263)

The above-listed structures are located some distance from the proposed site and therefore, the proposed classroom has no bearing on their setting.

The Wren School is a new build school completed in 2019 and provides a valuable service to the local community. The building itself consists of a 4-storey grey and buff colours brick-clad structure with a sports hall, parking, central courtyard and the sunken gardens located to the North-West of the site.

The Sunken Gardens is a large break-out area that has been lowered to provide a secluded area that is screened to the North by mature trees and soft landscaping. The sunken garden is designed with a circular path that runs along its perimeter and a grassy area in the centre. The school's sports hall is located to the South of the Sunken Garden.

USE

This proposal seeks to attain full planning consent for the erection of a new eco-classroom at The Wren School.

The Classroom would be primarily for the following uses:

An on-site educational resource for Sustainability

By creating an inspiring outdoor Eco Classroom, the school will teach students how to visualise what a truly Sustainable building can look like, how it saves and reuses energy and materials wherever possible, how it blends into and compliments the natural world, really making Sustainability issues 'come to life' for students and staff alike.

A wellbeing facility for all students, with a particular focus on the disadvantaged or vulnerable students, to host wellbeing activities, 1-1 counselling and small group work

By providing a calming, informal, alternative outdoor space, situated within trees and nature, we will be able to offer counselling, group sessions and 1 on 1 therapeutic work, this will make an incredible difference in the engagement and outcomes for these struggling students.

The outdoor room would always be staffed by an experienced member of the safeguarding team and students could access this throughout the day to attend a range of workshops, counselling/coaching services and access a range of additional wellbeing and holistic resources in a safe and nurturing environment.

The design incorporates an additional break out rooms where more personalised and confidential services such as counselling/nurse appointments can take place.

An informal working classroom for 28 students

Even before the pandemic, we were very aware that an additional classroom would be very useful for the school, especially with the additional Bulge Class in 2019/20 and the opening of the Sixth Form in September 2020. With the additional need for Social Distancing, this outdoor classroom space will become indispensable, enabling certain lessons and meetings to be carried out in a safe and distanced manner.

DESIGN PROPOSAL

The Rotunda Roundhouse design has been chosen for the eco-classroom because it accords with our objectives to maintain the environment using locally sourced timber products, constructed locally, heavily insulated and aesthetically pleasing. The proposed development would extend and enhance the existing ethos of the school by supporting our care of the environment, our place within the community and most of all by allowing us to construct a lightweight but practical building with an environmentally considerate footprint and minimal impact on the site, thus preserving it for generations to come.

The proposed designs and proposed locations are largely influenced by the existing site. It is sitting on an unused area of the site South-West of the Sunken Garden designed to avoid impacting the existing playground or breakout areas.

The new eco-classroom structure with disabled access ramp will be sitting in an open area of the site, previously populated by trees that have recently been cleared due to dieback.

The scheme satisfies the school's requirements in terms of size, and accommodation needs for an eco-classroom.

The following points have been the key considerations throughout the design process.

- A quality, inspirational design.
- A sustainable approach to construction and environmental servicing.
- Good use of the site.
- A building that is welcoming and provide security.
- Accessibility for wheelchair users and DDA provisions
- Good organisation of spaces, easily legible and accessible.
- Internal spaces that are well-proportioned fit for purpose and meet the user's needs.
- Good environmental conditions.
- Minimised impact on existing external spaces.
- Use of new and sustainable materials.

SITE LAYOUT

The proposed eco-classroom is to be situated to the South-West of the existing Suken Garden adjacent to the sports hall.

Access is gained via ramp access and entry made via a double-glazed aluminium door protected by a small canopy.

The design of these modular structures can be constructed easily in the proposed location and makes use of an area of underutilised open space.

The proposal will not use any of the playground areas and will not require the removal of any existing trees.

SCALE

There are 2 key heights proposed for the scheme which balance the extensions when viewed within context as follows;

- 4.5m approximate Ridge height of the 20-degree roof.
- 2m approximate Top of Eaves height of roof at its lowest point.

The scale of the existing school building is unaffected by this proposal.

APPEARANCE

The circular design form is the oldest architectural form for habitable spaces and can be found throughout the world.

By the end of the Iron Age many people lived in hill forts that were surrounded by walls and ditches to defend villages from external attacks. Inside the hill forts, families lived in round houses. These were simple one-roomed homes with a pointed thatched roof and walls made from wattle and daub, a mixture of mud and twigs.

In the Iron Age, the school site would have had several roundhouse structures located on the school site. Therefore, this design lends itself well as being the contemporary version of the Iron Age roundhouses, creating a connection with the past whilst building a sustainable future.

The Rotunda Roundhouse is an eco-friendly lightweight modular building. It will be constructed off-site within a clean workshop environment and assembled on-site in panels to form the circular-shaped structure with a cone-shaped roof.

Modular construction methodology allows for the highest possible build quality and enables a fast construction program on-site.

Each element of the building is made from sustainable materials and every effort is made to review the environmental impact of each material introduced in the construction of the building. This is to ensure the end product is environmentally sympathetic to its surroundings.

The proposal will be clad with locally sourced timber with sedum and wild-flower roof.

The Buildings will be elevated on “ground screws” in order to minimize the impact on the existing ground condition. This allows us to mitigate the requirement of excavation for foundation footings and reducing the impact on the local ecology and in particular to any nearby tree roots. Additionally, it mitigates the use of concrete from the building sub-structure adding to the environmental credentials of the building.

LANDSCAPING

A tree survey has been included as part of this planning application and reference should be made to this document with regards to the existing tree location and species.

The roof of the eco-classroom will be a green roof consisting of a sedum roof. Sedum roofs have been shown to benefit a limited range of invertebrate species. Sedum flowers provide foraging for pollinators, especially bees in the summer months.

As part of the school's commitment to biodiversity the school already has numerous bat boxes and badger provisions around the whole site. We would be happy to add further insect boxes to encourage the ecology of insects such as bees and ladybirds etc. Furthermore, additional planters will be added around the classroom.

The building has been designed to have the least impact on the existing ground and tree roots. This will be achieved by using ground screws that act like ‘pegs’ in the ground and carefully inserted without the requirement of large excavation that can damage tree roots.

BUILDING LAYOUT

The classroom will be a single-storey building, elevated off the ground on ground screws with ramp access.

Entry is made via a protected canopy entrance. The central circular space forms the main classroom space for teaching. Several adjacent ancillary spaces project out from either side including kitchen, DDA WC and SEN rooms for Special Educational Needs purposes. A rear decking area is provided with timber balustrades.

ARCHAEOLOGY

The existing school site is located on a sensitive archaeological site dated back to the early to middle of the Iron Age settlements. Extensive studies were carried out during the construction of the new school along with a watching brief, which did not find any important archaeological findings.

The proposed classroom is designed to be lightweight and lifted off the ground. As there will be no excavation work required due to the use of ground screws, we believe this proposal will have no impact on the archaeological site.

ACCESS

The classroom will comply in all respects with Part M of the Building Regulations and will be approached via a ramped access with a maximum with 1:12 slope to a level platform outside the principal front entrance.

Disabled access will be gained via this entrance, which will be provided with a disabled access compliant threshold, and the door purposely made wider in keeping with the contemporary design to accommodate ease of access.

The whole of the ground floor will be level and will provide the necessary spaces including a suitably sized DDA toilet for the building to comply with Part M.

2.0 EXISTING SITE

SITE LOCATION & CONTEXT



Aerial Plan



Existing Site - Aerial View

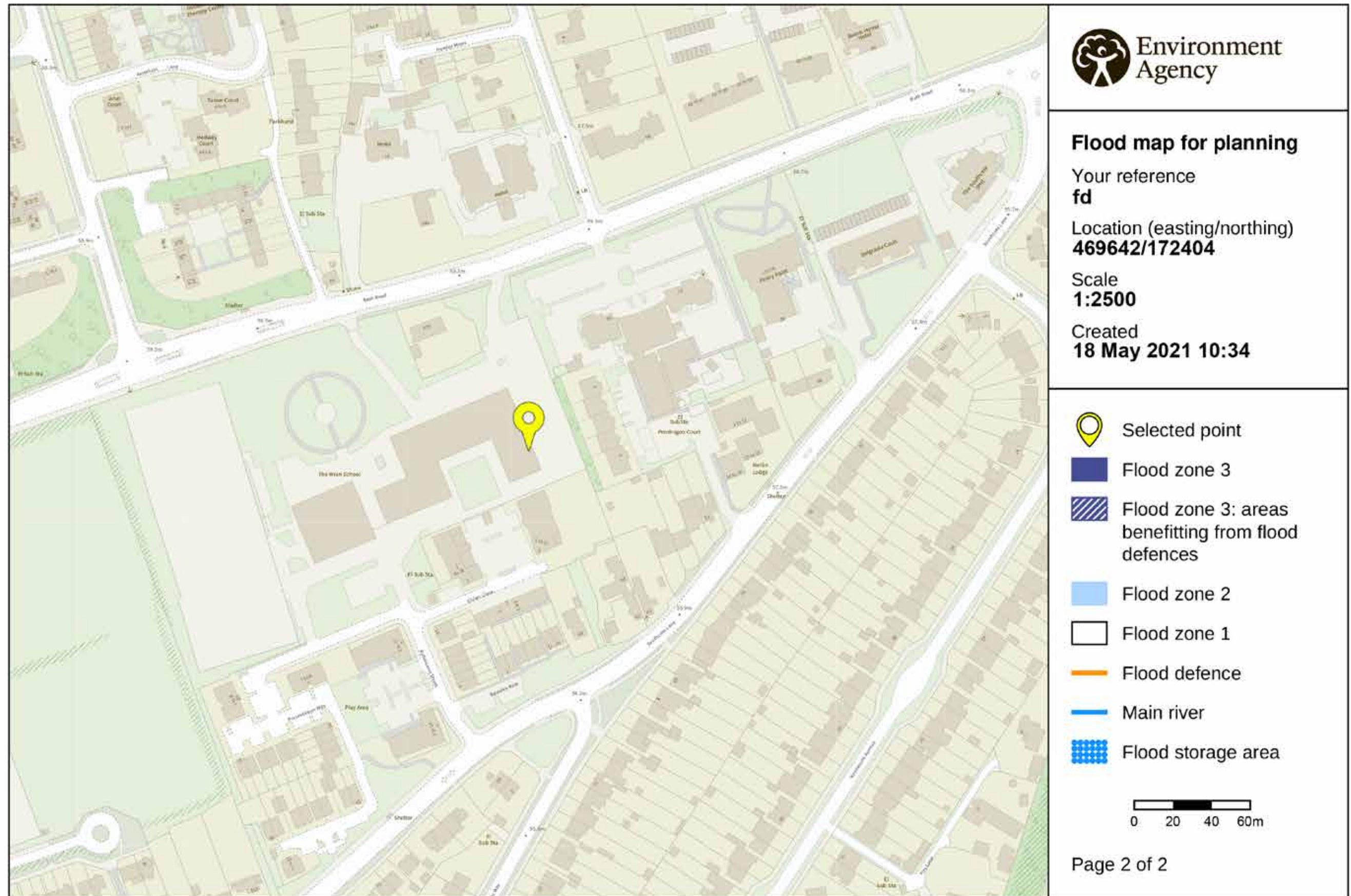


Bird's-eye View



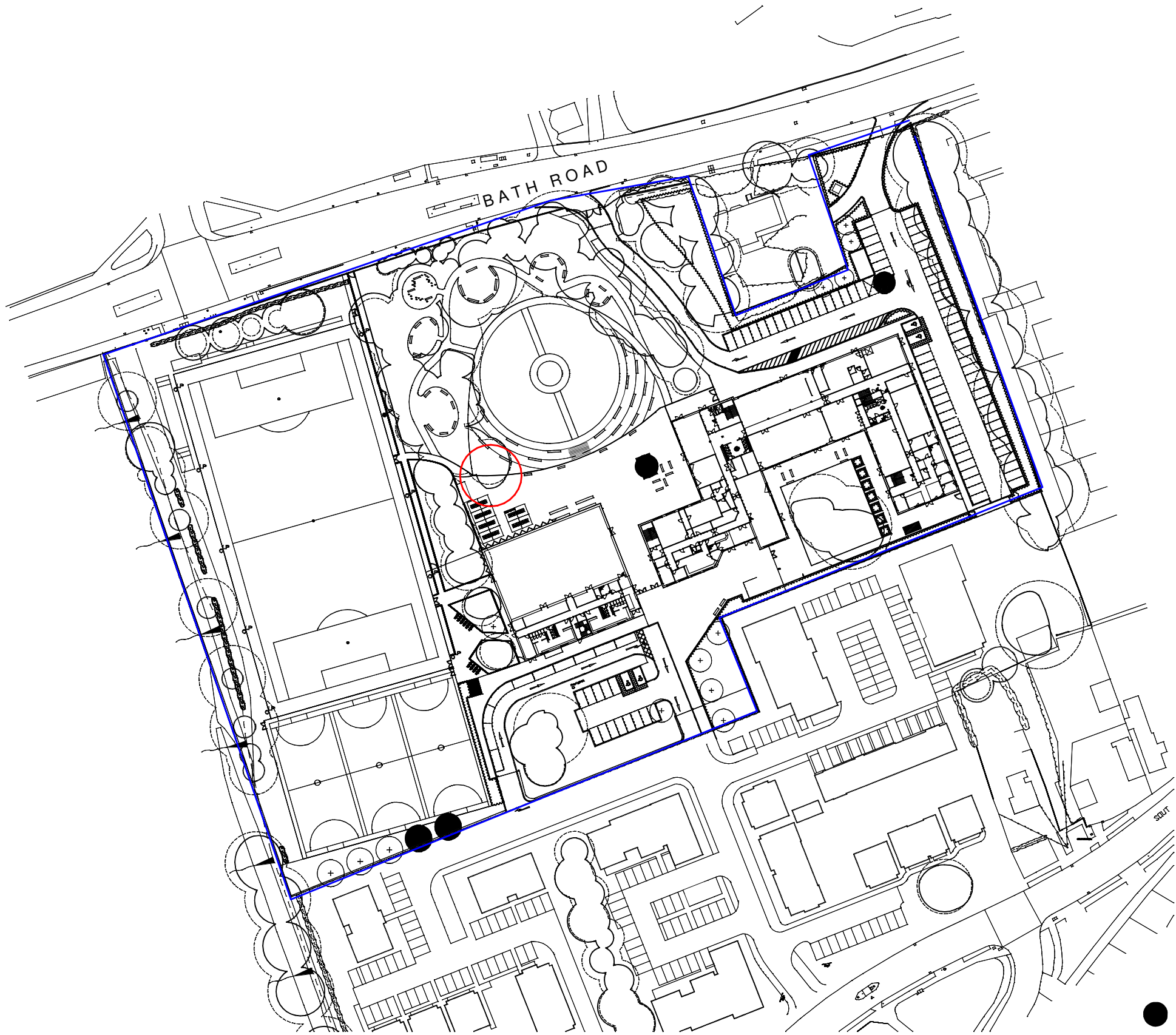
Bath Road View

FLOOD RISK PLAN



LOCATION PLAN

1:1250



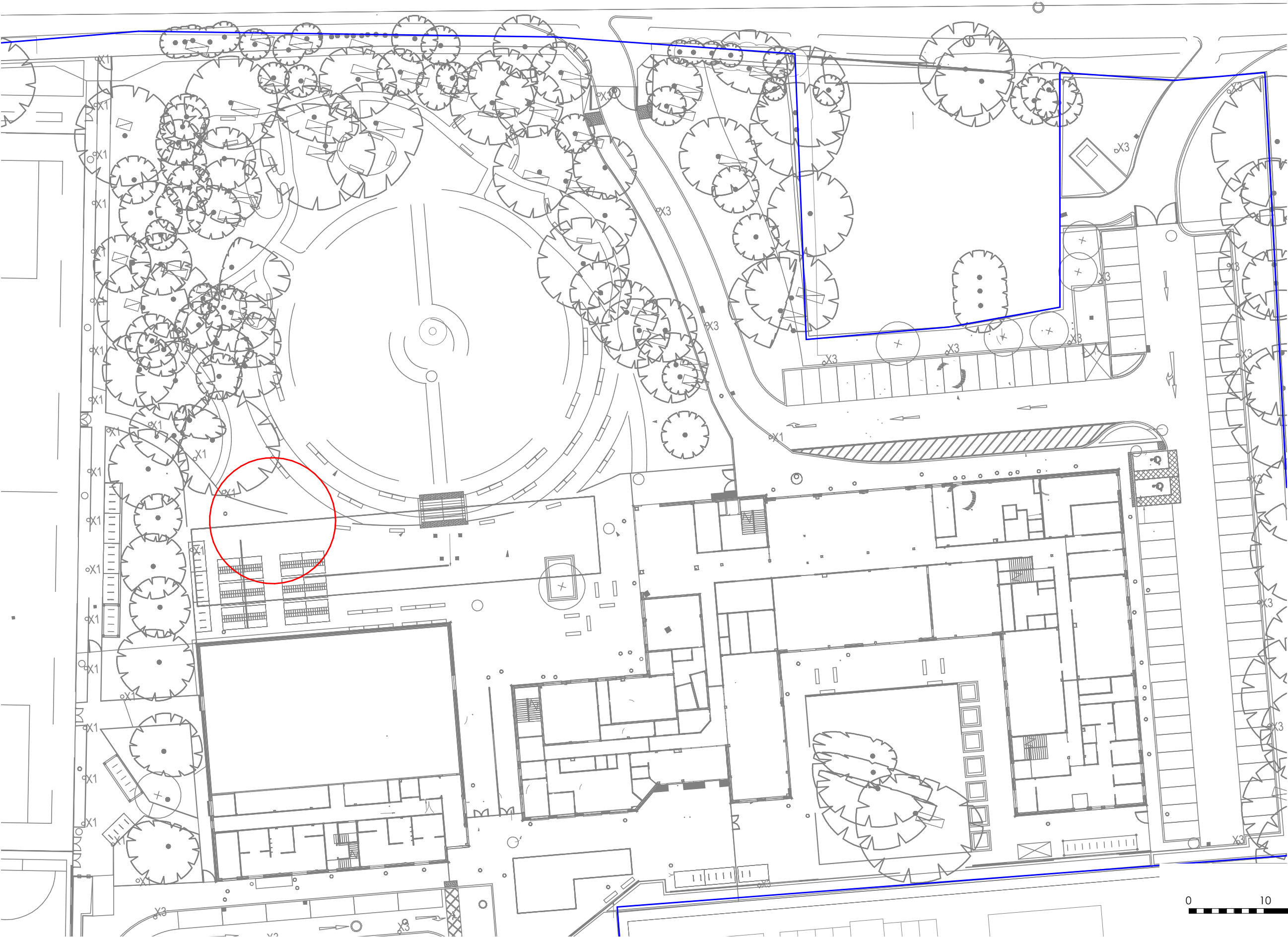
LEGEND

- Owned by the client
- Site Boundary

EXISTING SITE PLAN

1:500

BATH ROAD



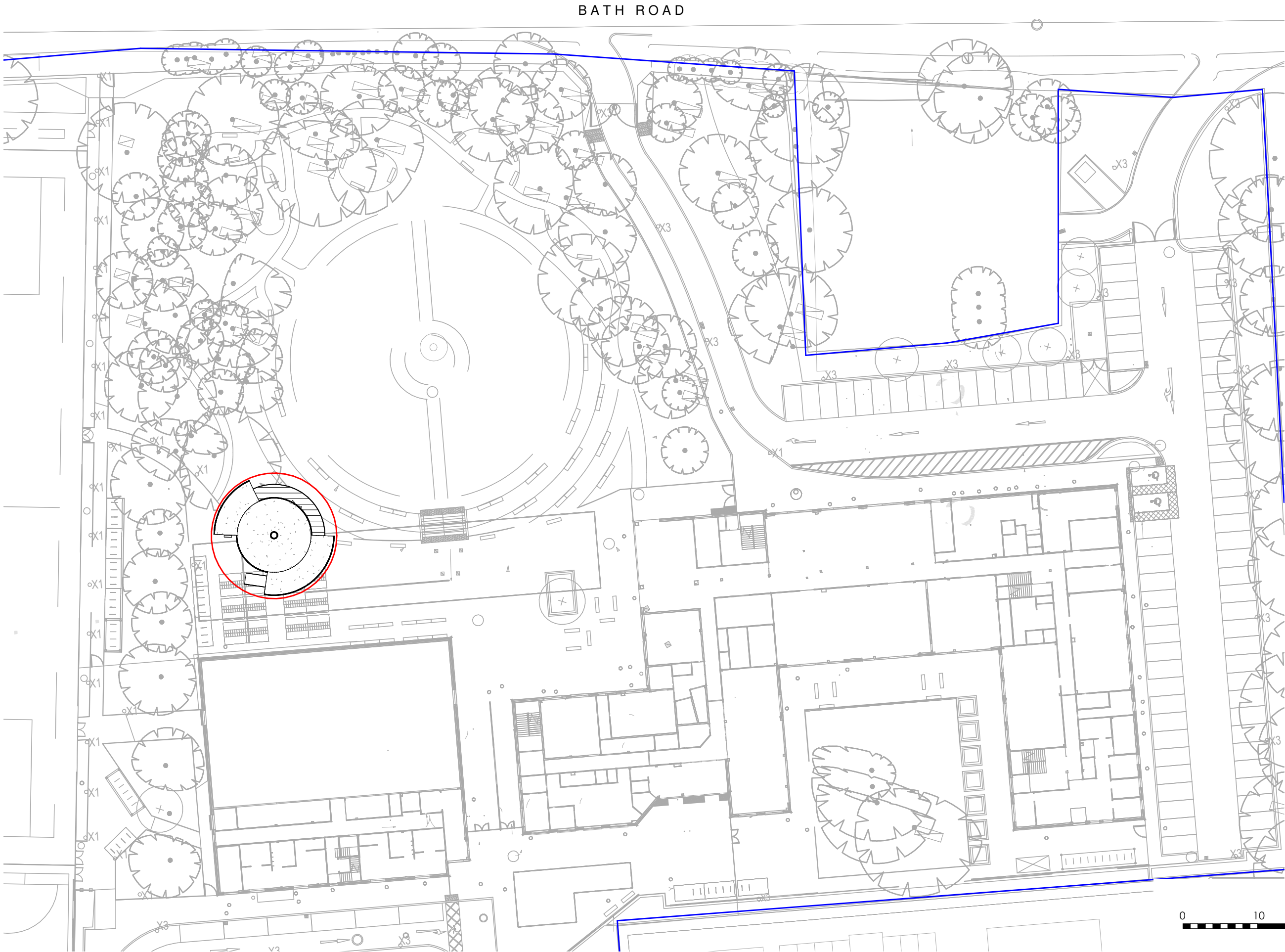
LEGEND

- Owned by the client
- Site Boundary

3.0 PROPOSED DESIGN

PROPOSED SITE PLAN

1:500

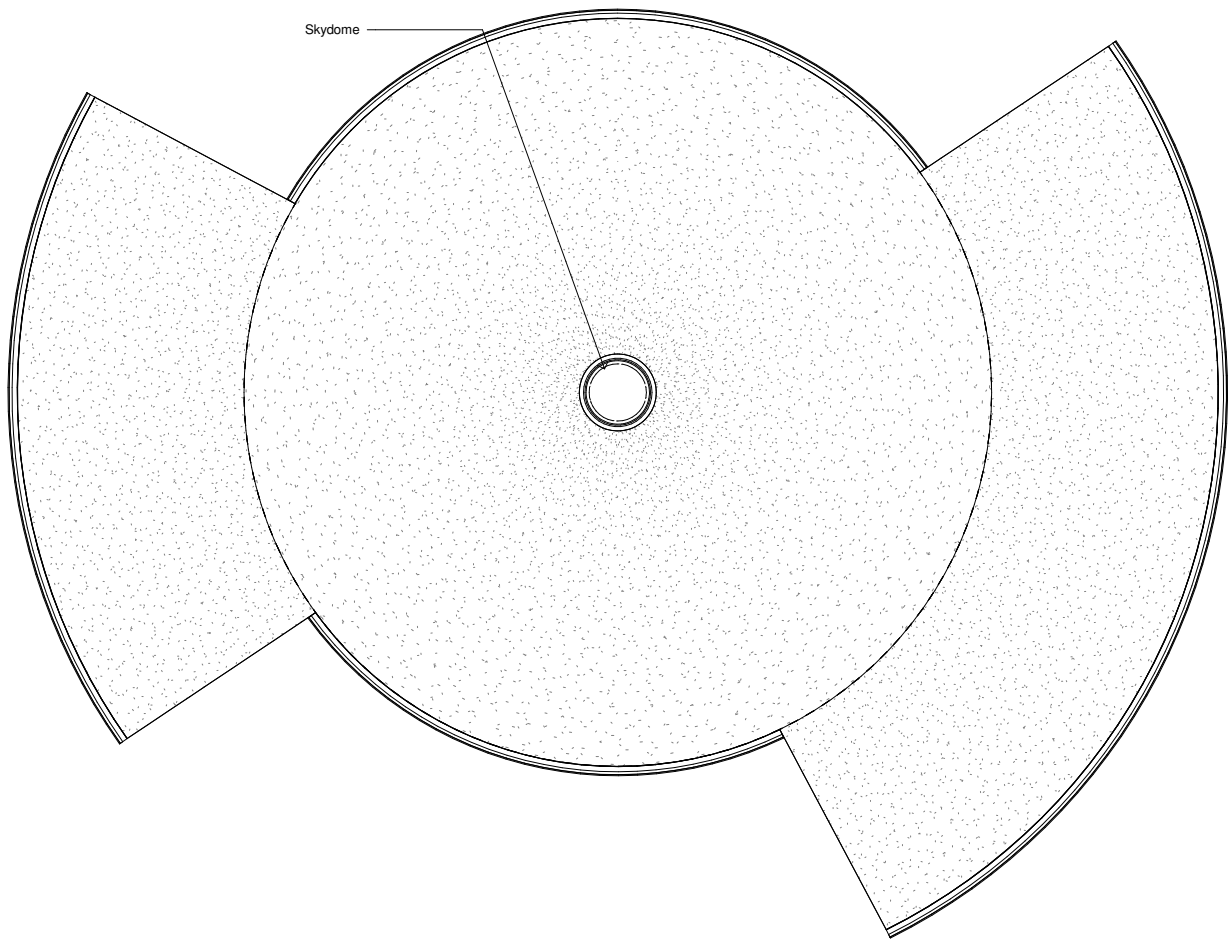


LEGEND

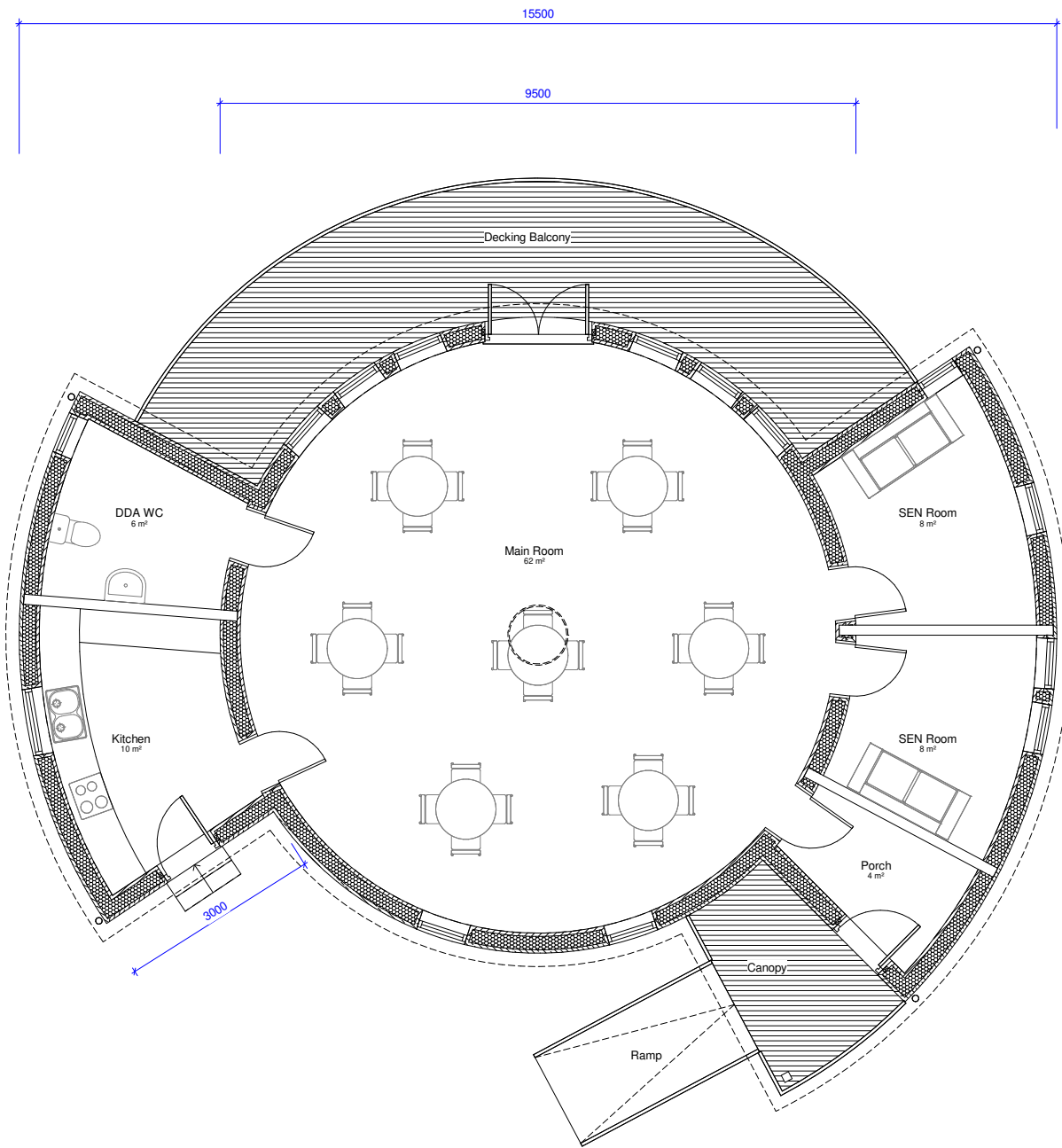
- Owned by the client
- Site Boundary

PROPOSED FLOOR PLANS

NTS



1 Proposed Roof Plan
1:50



2 Proposed Floor Plan
1:50

PROPOSED DRAINAGE PLAN

1:100

DRAINAGE NOTE

General:

All new drainage shall comply full with current Building Regulations Approved Document, Part H.

Where drains pass through walls, all voids to be filled to prevent entry of vermin.

No drain trench shall be excavated lower than the foundations of any nearby building unless:

1. Where the drain is within 1m of the foundation, the trench around the drain is filled with concrete finishing level with the underside of the adjacent foundation.

2. Where the drain is further than 1m from the building, the trench around the drain is to be filled with concrete to a level equal to the distance from the building, less 150mm.

Concrete encased drains shall have movement joints at intervals not exceeding 9m. Where appropriate, the drainage system shall incorporate measures to eliminate the possibility of rodent access.

Foul Drainage:

Provide minimum 100mm diameter foul drains laid to fall of a minimum 1:40 gradient. Pipes should be laid with even gradients and any change of gradient or direction with an access point.

Surface Water Drainage:

Above ground Rain Water Pipes will discharge to peagravel soakaway, 500mm(W) x 250mm(D) or alternatively connect to foul drainage, depending on client specification

Above Ground Waste and Drainage:

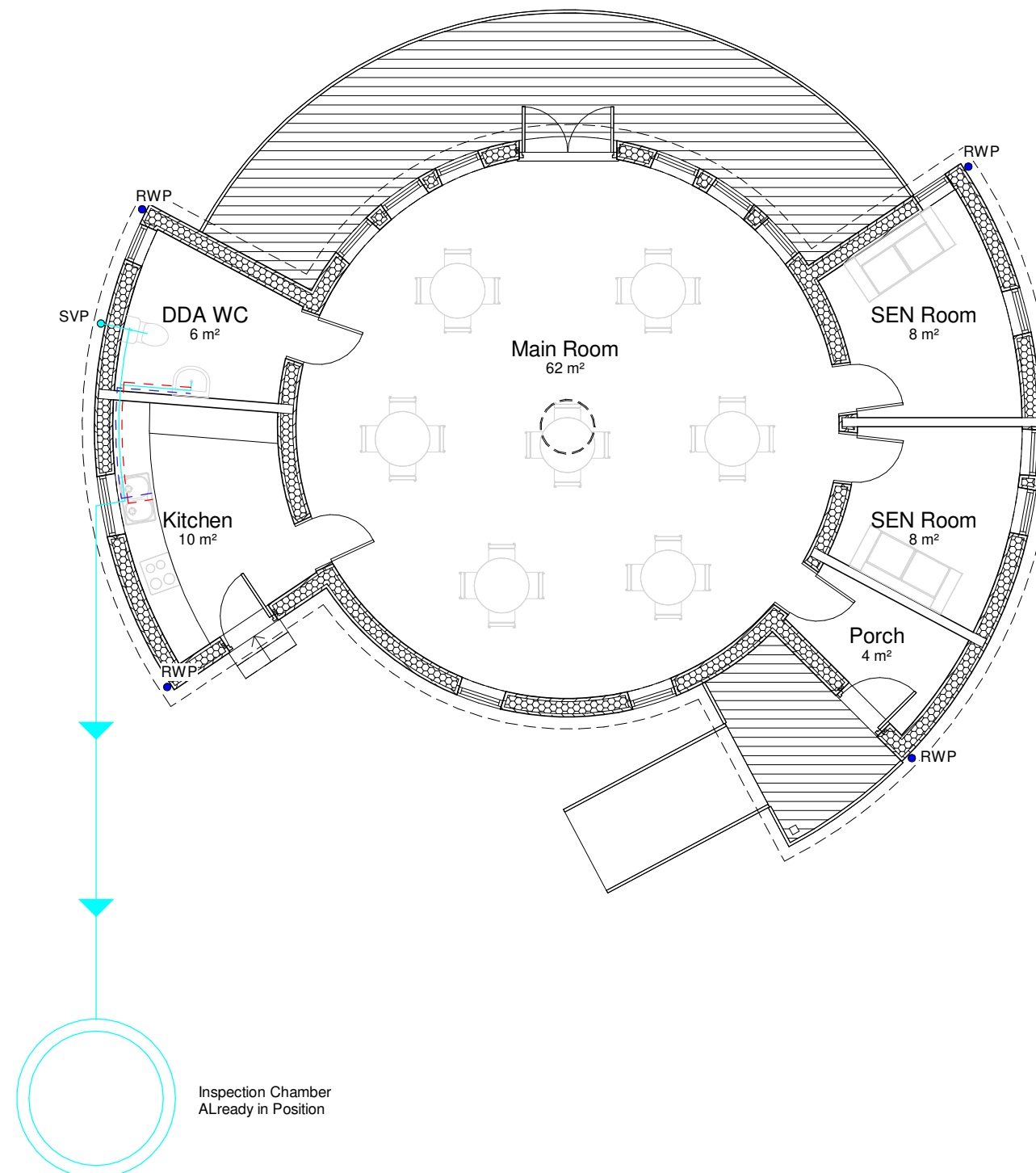
Waste pipe gradients shall meet with the requirements of Approval Document, Part H. All to comply with BS 5572:1978.

Easte pipe size shall be:

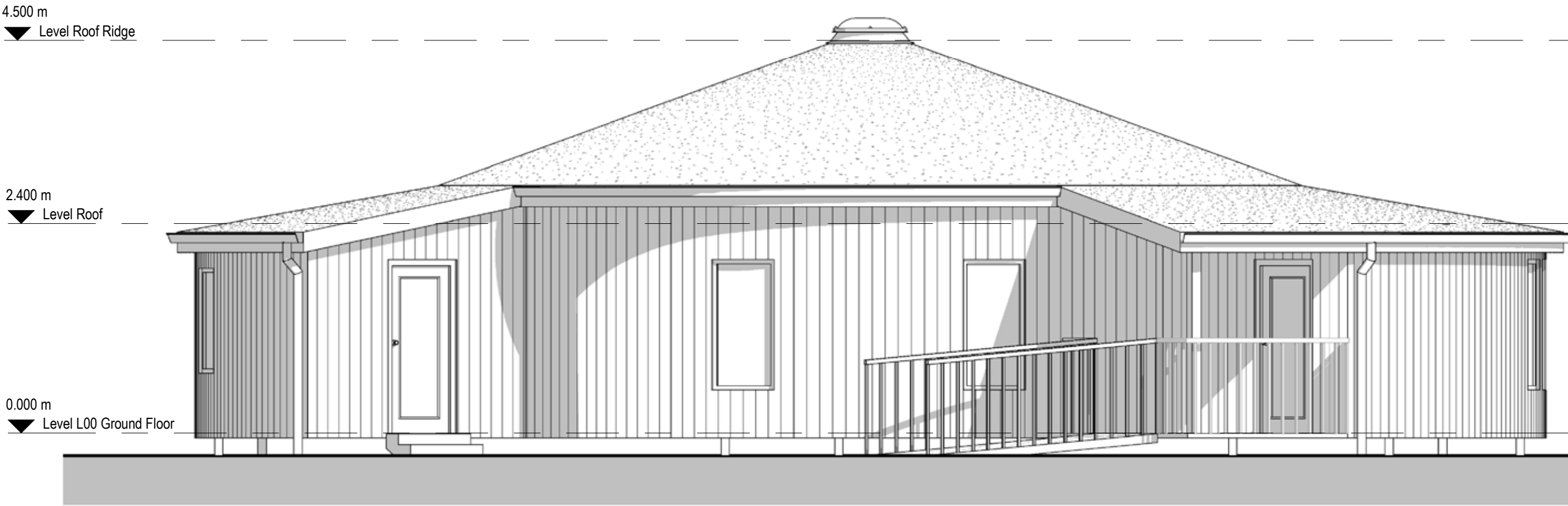
washbasin - 32mm diameter waste pipe with 75mm deep seal trap.

sink - 40mm diameter waste pipe with 75mm deep seal trap.

wc pan (outlet>80mm): 100mm diameter soil pipe and 50mm deep seal trap.

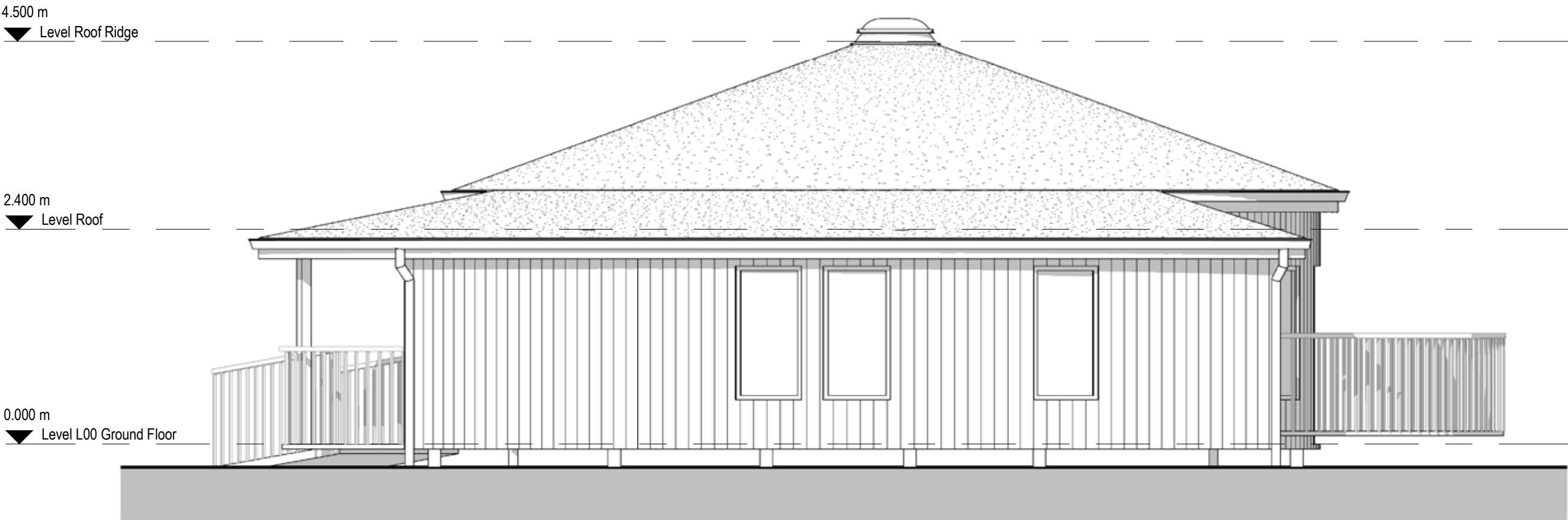


PROPOSED ELEVATIONS
1:50



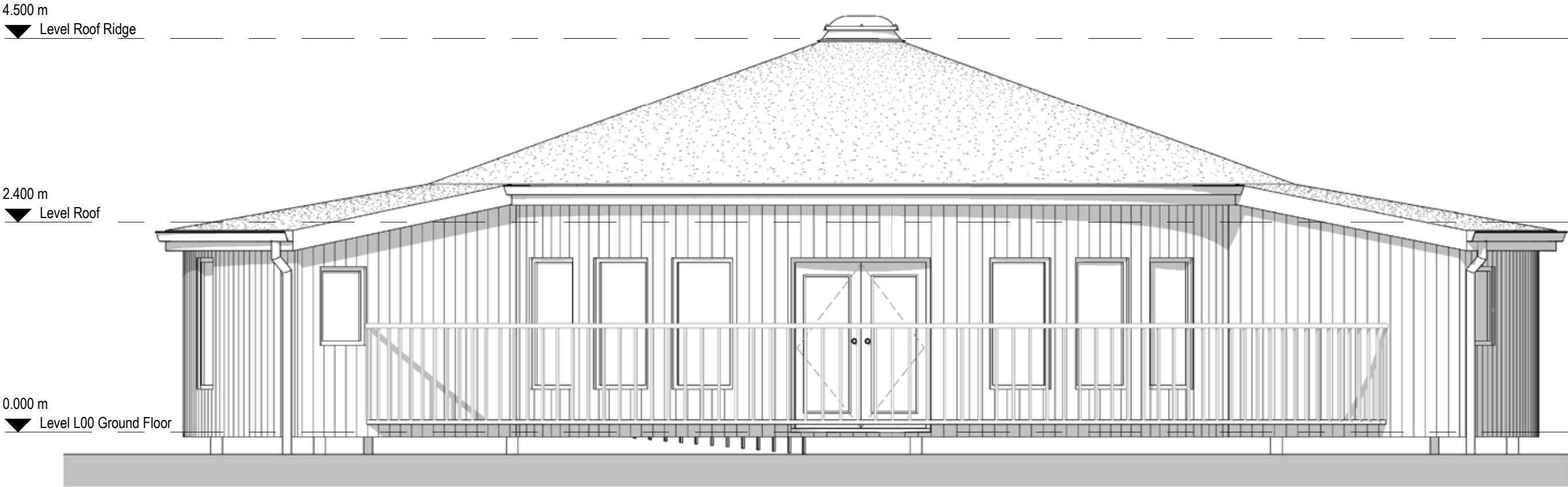
1 Proposed Elevation01
1:50

PROPOSED ELEVATIONS
1:50



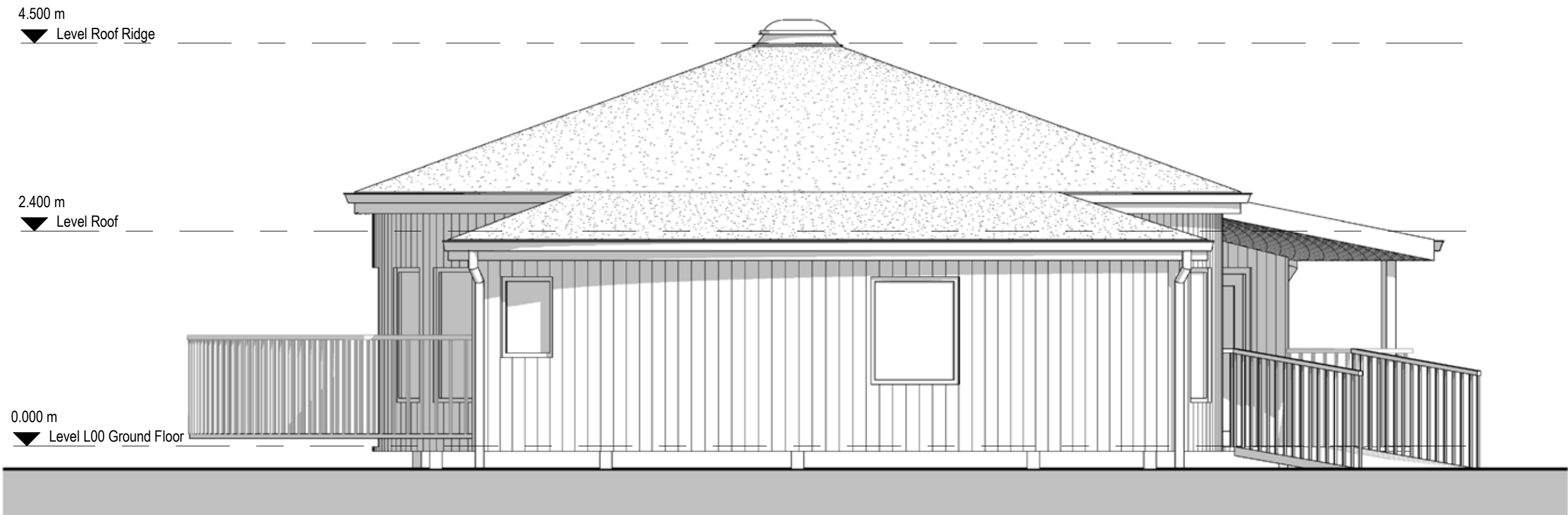
2 Proposed Elevation02
1 : 50

PROPOSED ELEVATIONS
1:50



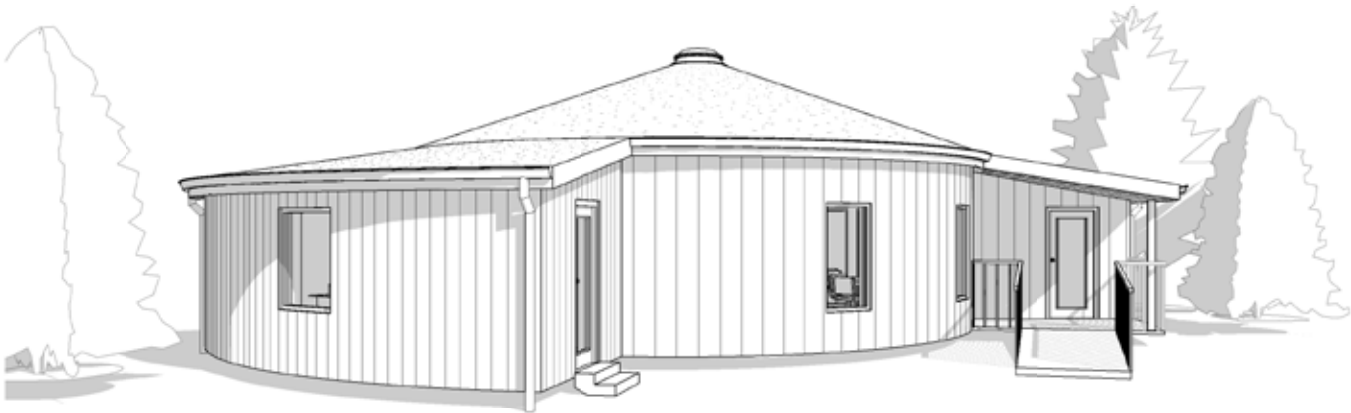
3 Proposed Elevation03
1 : 50

PROPOSED ELEVATIONS
1:50

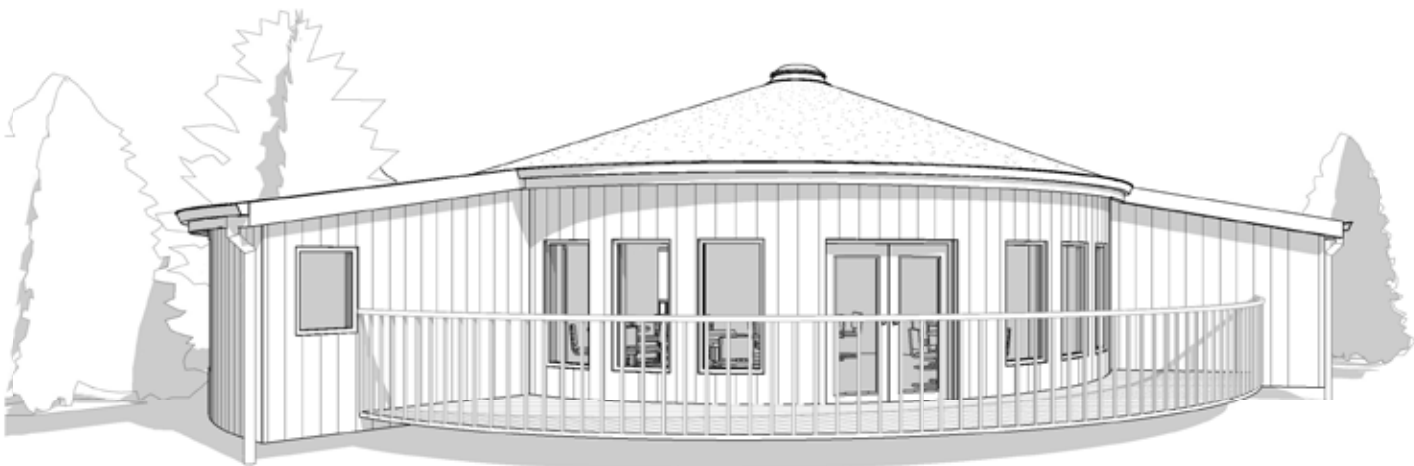


4 Proposed Elevation04
1 : 50

3D VIEWS

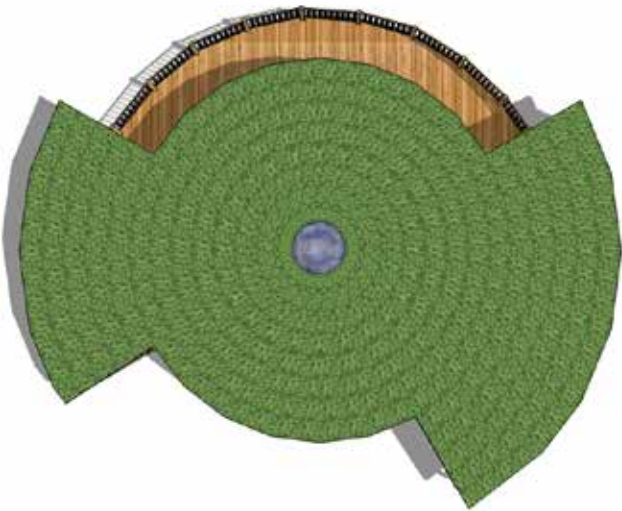


5 View01



6 View02

3D VIEWS



Architecture | Planning | Visualisation



Graphics | Branding | Websites

Author	Checked	Revision	Date
SA	SH	-	07.06.2021
SA	SH	A	10.06.2021

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