



Proposed East Elevation 05 1:100 @A1





Image 60: Visualization of proposed boat house east elevation





Image 61: Example of timber finishes used to interior circulation areas/ entrance of the new extension and outbuildings

#### 6.8 PROPOSED MATERIALS AND CHARACTER

The principal building will retain its original interior character. As for the new extensions and interventions to the outbuildings, priority is given to natural materials sourced from renewable or recycled origins. Public and private areas will showcase warm and tactile surfaces, predominantly utilizing timber for ceilings, wall paneling, and fixtures. Durable, easy-to-clean materials are carefully chosen to minimize future maintenance concerns, while also ensuring excellent acoustics, fire separation, and straightforward construction.

Emphasizing structural elements, Cross-Laminated Timber (CLT) or BauBuche will be used to highlight timber's warm tones throughout all spaces. Stone flooring will be employed in around floor circulation areas and large common rooms, transitioning to timber flooring in upper-level bedrooms and oratory spaces to foster intimacy and warmth.

Each cluster of student rooms will possess its own distinctive and vibrant quality. When feasible, the CLT finish of the roof may be exposed to add visual interest. In areas where timber isn't utilized, Fermacell boards will serve as sustainable and durable linings. Composed primarily of recycled paper, gypsum, and water without additional glues, these boards are emission-free and free of hazardous substances. Offering comparable fire and acoustic performance to double plasterboard layers, they also allow for painting with VOC-free, nontoxic natural paints.

In summary, the selection of natural finishes is geared towards promoting user well-being and harmonizing with the existing masonry structures. The outcome is a balanced and inviting architectural environment with environmentally conscious design compositions.

All proposed external materials will be of traditional nature in keeping with setting and character of the listed building.



Image 62: Example of timber structure and glazed infill extension



Image 63: Example of exposed masonry walls, stone floors, timber fixtures and exposed timber structure to ceilings in circulation areas and larger common rooms.





Image 64: Internal timber windows detail

Image 65: Detail of timber windows





Image 67: Example of dark zinc roofing to entrance building



Image 70: Example of lead and slates roof coverings to outbuildings



Image 68: Example of masonry facades re adaptation north river wall servants cottage



Image 71: Example of green roof to boat house



Image 69: Example of metal windows to north river wall



Image 72: Example of structural timber facade with glazing for new extensions



## 6.9 FLOOD RISK

The proposed site primarily lies within Flood Zone 2, situated north of the watercourse crossing of the site, and is shielded from flooding by surrounding high land and structures.

Although the designated flood risk level is slightly higher than the existing building's ground level, the proposed development maintains the current levels determined by the west wing and does not entail any alterations that would adversely affect its surrounding structures or high land.

While the floor level of the stables and coach house will be lowered to establish a unified floor level accessible from the principal house, it will still remain slightly above the existing floor level of the west wing.

The development itself does not pose a risk of flooding. However, as recommended by the Flood Risk Assessment by Water Environment, submitted alongside this application, the ground floor of the proposed development will be safeguarded by flood-resilient finishes and flood-proof doors and windows.

#### 6.10 ARCHEOLOGY

The design proposals have been developed in collaboration with Oxford Archaeology to assess their impact on the archaeology of the site. Their report has been submitted alongside this application. Additionally, due to the proposed main sewer connection to serve the boat house sanitary facilities, Scheduled Monument Consent is included as part of this application.

To minimize disruption, the proposals endeavor to avoid works to the west boundary wall along Abingdon Road, which is part of the Grandpont Causeway. Excavations within the site have been limited to the minimum necessary and localized within the stables and coach house to establish a consolidated floor level accessible from the west wing of the principal house. Despite their minimal extent, excavations will be set away from the scheduled monument by one meter, and all new ground structures will be supported by lightweight screw pile foundations.

A new soil waste connection to the main sewer is essential to serve the sanitary facilities within the proposed boat house. The most feasible route is a direct connection to the mains, necessitating local excavations on both sides of the boundary wall to Abingdon Road.

# 6.11 UPGRADED SERVICING

The services strategies adopt a minimalist approach to the site, maintaining the same level of servicing while incorporating better-performing equipment and passive strategies, such as natural ventilation, improved thermal fabric, and passive cooling through air extract.

Hot water and heating necessary to support the building are provided by an external air source heat pump located in the carriage yard adjacent to Abingdon Road. The majority of the services equipment is housed within the ground floor of the stable block and servants' cottage outbuildings. All associated pipework is horizontally distributed within the roof voids of the stable block and at ground floor level below the new slab within a service trench serving the full extent of the readapted outbuildings and service yard.

A minor connection is made to the ground floor of the west wing to a new service cupboard located in the area of the former west wing boiler room. Vertical distribution occurs through a micro riser adjacent to the central chimney breast in the location of the new shower rooms and is horizontally distributed to the west wing within the voids between the floors and roof joists. This strategy minimizes any impact on the historic fabric of the house by maintaining similar service distribution to its existing layout.

The upper timber floors of the main house will continue to be heated by radiators, retaining their existing locations but replaced with new cast iron radiators in keeping with the period and character of the house. Underfloor heating will be used in the outbuildings and ground floor of the main house, being more suitable for solid floor constructions.

Sanitary facilities and high occupancy rooms will be assisted by air changes using air extract. In the principal building, this will be achieved through existing fireplaces to draw out air via fans located in the roof voids, ducted using the existing chimney flues. This strategy will be implemented independently in the west and east wings, respectively using their existing roof voids and chimney flues for air extract ventilation. Within the new outbuildings, ventilation extract will be assisted using a heat recovery system located in the western end of the stables block, adapting an existing grilled opening in the entrance yard masonry facade for air intake and a new grilled opening through the north river wall for air extract. The ventilation ducts will be minimal in size and horizontally distributed through the new roof void created by the central lead covering of the mansard roof.

A Services strategy plans for the proposals is included in Appendix A.

# 6.12 NEW SANITARY FACILITIES

To address the inadequate standards of sanitary accommodation, the proposals aim to increase the number of sanitary facilities within the property while minimizing any impact on the principal building. Where possible, these facilities will remain in their current locations. However, additional sanitary facilities on the second floor level of the east wing will be necessary and positioned as close as possible to the soil vent pipe stack on the west facade. The proposed shower rooms, located on the northern portion of the east wing, will be connected to the vertical soil vent pipe by routing their waste pipes between the timber floor joists and into the roof void of the west wing.

For the proposed shower rooms on the southern portion of the east wing, the waste pipes will be routed above floor level and concealed within a timber boxing to avoid disrupting the existing floor structure.

The remaining proposed sanitary facilities are situated within the adapted stables block and servant's cottage, ensuring they do not compromise the integrity of the listed structure.

All new bathrooms and WC facilities will be designed to be in keeping with the period of the house. Those introduced within the room volumes on the first and second floors of the principal building will be carefully integrated and treated with timber paneling to resemble later additions and elements of furniture.



## 6.13 ACCESS STATEMENT

All access arrangements onto the site will be retained as existing. The main entrances off Abingdon Road will continue provide vehicular and access to the property including waste collection and deliveries. The entrance through historic pedestrian walkaway will be retained to provide pedestrian access to the residential units and facilities.

The proposed scheme will have 5 car parking space including a disabled parking bay, along with bicycle storage for up to 10 bikes within the existing entrance yard.

The proposals seek to enhance accessibility of the building providing a new accessible entrance and consolidated ground floor levels to provide improved access arrangements with regards to compliance with the Equality Act and Approved Document M. The proposal provides an improved step free access to most of the ground floor common rooms. Except where this is prohibited by restrictions imposed by the existing building's listed status.

#### 6.15 REFUSE STORE AND COLLECTIONS

The proposed refuse and recycling store for the whole development has been designed in accordance with the Oxford City Council 'Waster Storage Technical Advice Note 3'. Due to the number of residential units a communal refuse store is required which will be an external purpose-built enclosure located within the building's ownership boundary, against the wall along Abingdon Road.

The refuse store is located to provide easy access and servicing on collection day, being less than 25m from Abingdon Road, whilst also being separate from the historic building to minimise visual impact. This will be further aided by the store's position against the existing boundary wall and use of oak board cladding to be in keeping with the proposed development. The store will be sized to provide sufficient space for the bins with large lockable oak board door front to provide easy access to the bins for collection.

This enclosure will also provide housing for the utility connections and meters. As well as housing the projects external air-source heat pump fan units.

The following provision is proposed to be made for the refuse requirements:

For each of the 17nr. 1-bed units 40 litres of dry recycling, 20 litres of residual waste, and 5 litres of food waste have been allowed. Derived from Oxford City Council guidelines of 175 litres per household, conservatively taken at 3 bedrooms per household and with the addition of food waste. The refuse strategy has been discussed with ODS to be acceptable prior to submission and is well in excess of Oxford Council guidance.

Total Refuse Volume: (17 x 1-bed units)

680 litres dry recycling, 340 litres residual waste, and 85 litres food waste The following provision is proposed for the total proposal at Grand Pont House:
Total waste and recycling storage capacity of 2.3 cubic meters, stored within a total of 2300 litre bins using: 1 x 1100 litre mixed recycling ODS 'Blue' Eurobin, 1 x 1100 litre general waste ODS 'Green' Eurobin, and 1 x 100 litre food waste ODS 'Red' bin.

## 6.15 SURVEYS AND INVESTIGATIONS

To assist in the design proposals for repairing and thermally upgrading the building's existing historic fabric, a conservation specialist has been enlisted. Hutton and Rostron have begun surveying the property and working closely with the design team to develop recommendations and detailed design proposals, all of which are submitted as part of this planning application. These proposals and investigations prioritize non-intrusive methods and focus on addressing the root cause of issues rather than merely treating the symptoms. The initial investigations have been included as part of this application - Refer to Hutton and Rostron investigations site notes 1, 2, 3, 4, and 10.



# 7. SUSTAINABILITY STATEMENT

The proposed design aims to mitigate carbon emissions and reduce energy and resource consumption to achieve sustainable design objectives. Both the client and the design team acknowledge the importance of addressing climate change and practicing responsible resource management. The development endeavors to incorporate sustainable and energy-efficient design features to the fullest extent possible. However, there are constraints imposed by the historic nature and listed status of the property. Therefore, a careful balance will be struck between environmental sustainability and historical conservation to ensure the preservation of the property's fabric and character.

The design proposal will not only comply with but also strive to exceed current Part L Building Regulations for Grandpont House.

Key measures to minimize carbon emissions in the retrofitting of existing buildings include improving the thermal performance of the building, utilizing low-energy lighting and appliances, upgrading to more efficient services equipment, improving natural and assisted ventilation for cooling and fresh air and maximizing the reuse of existing materials.

# **ENERGY EFFICIENCY**

To enhance the thermal efficiency of the building envelope, the following measures will be implemented:

- Fitting all existing windows in the principal house with secondary glazing and installing double glazing for the windows in the outbuildings and new extensions.
- Internally insulating all existing walls in the outbuildings, west wing, and timber-studded walls of the east wing with breathable insulation to prevent interstitial condensation.
- Insulating the solid floor of the west wing and the northern addition butler's room by replacing the existing floor screed with a new floor buildup incorporating minimal insulation.
- Carefully removing and insulating the timber floor of the west wing ground floor, ensuring breathable insulation is installed between the joists before re-laying the timber boards.

- Constructing new floors in the outbuildings with a high-performing insulated void former beneath a floating slab.
- Treating the principal building's roof with higher-performing roof insulation, maintaining a well-ventilated roof void. The roofs of the new outbuildings will also be insulated with high-performing materials and fitted with a ventilated cavity.

The insulation specifications and details will be developed in accordance with recommendations from Hutton and Rostron, who have already conducted a condensation risk assessment to inform these proposals.

High-efficiency air-source heat pumps with weather compensation controls will be utilized as a heat source, minimizing energy consumption by adjusting efficiency based on external air temperature. All pipework will be thermally insulated to reduce heat loss and prevent heat buildup. Wet under-floor heating will be installed in the lower ground floor of the west wing and outbuildings for energy-efficient heating. A low-storage-volume, high-recovery heat system will be implemented to minimize heat loss in the hot water system.

Energy-efficient LED lighting will be employed throughout the project wherever feasible, while maximizing natural ventilation and light through strategies such as increasing south-facing and dual-aspect window openings, providing openable windows throughout, and incorporating skylights in central areas of the stables block and servant's cottage. These strategies aim to reduce lighting and ventilation loads and enhance the quality of interior spaces, promoting the well-being of the house occupants

# MATERIAL CONSERVATION

Existing brick stock reclaimed during the demolition of part of the outbuildings and the north boundary wall will be repurposed in the reconstruction of the boundary wall adjacent to the proposed servant's cottage and new oratory building. Reclaimed stock will also be utilized to reinstate the lost gable to the stables block and to extend the wall of the servant's cottage facing the entrance yard.

Additions and alterations to the building's fabric will be minimized to reduce the amount of new material used, thereby decreasing the carbon footprint of the

construction program. Whenever possible and feasible, environmentally-friendly and energy-efficient products will be specified. Additionally, reclaimed timber and stone flooring will be utilized where possible to further enhance sustainability efforts

#### CONSTRUCTION PROGRAMME - CONSTRUCTION WASTE AND ENERGY USE

Construction will be managed in such a way as to minimise the waste and pollution caused during the construction process. Waste can be reduced by careful consideration and planning of how construction material is sized, packaged, ordered and delivered. All materials suitable for re-use or recycling will be separated and dealt with accordingly, wherever practicable. To this end the contractor will develop a site waste management plan. For further detail refer to the construction management plan by TZG Partnership.





# 8. CONCLUSION

The Design and Access Statement outlines a comprehensive approach to the alteration and extension of the Grade II \* listed property at Grandpont House in Oxford. Through collaboration with various stakeholders including the Oxford City Council Planning Department and Historic England. The proposed design focuses on conservation-led strategies to preserve the historical significance of the property while responding to key brief requirements.

The key benefits of the proposals include safeguarding the long-term viable use of the property, improving accessibility, reusing and adapting existing structures, enhancing the setting of the building, and restoring lost architectural features. Furthermore, the design incorporates sustainable practices such as energy efficiency improvements and biodiversity enhancements.

Adjustments made to the initial proposals, based on feedback from stakeholders and pre-planning consultations, demonstrate a commitment to mitigating potential negative impacts and respecting the character of the surrounding area and the listed building. Additionally, measures have been taken to address concerns related to flood risk, archeology, ecology and ensuring the resilience of the development against potential environmental challenges.

Overall, the proposed design balances the preservation of heritage with the requirements for the redevelopment of the site.

# 9. AREA SCHEDULE

	EXISTING GEA	PROPOSED GEA
	Sqm	Sqm
Main House GF	212,7	187,4
Main House Mezz.	77,8	77,8
Main House 1F	1 <b>69,7</b>	169,7
Main House 2F	106,8	106,8
Outbuildings GF	1 <b>98,</b> 1	282
Outbuildings 1F		172
Boathouse GF		55,4
Total	765,4	1051,1

	EXISTING GIA	PROPOSED GIA
	Sqm	Sqm
Main House GF	191	168,1
Main House Mezz.	63,8	63,8
Main House 1F	147,6	147,6
Main House 2F	89,8	89,8
Outbuildings GF	165,4	<b>249</b> ,1
Outbuildings 1F		152
Boathouse GF		48,5
Total	657.6	918,9

	EXISTING	PROPOSED
	Sqm	Sqm
External Area	5756	5562
Site Area	6700	6700





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# APPENDIX A SERVICES STRATEGY DRAWINGS



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## NOTES

Fire places to be used for air exstract throught bespoke cast iron grille



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March 2024

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