



MARTIN ASHLEY
ARCHITECTS



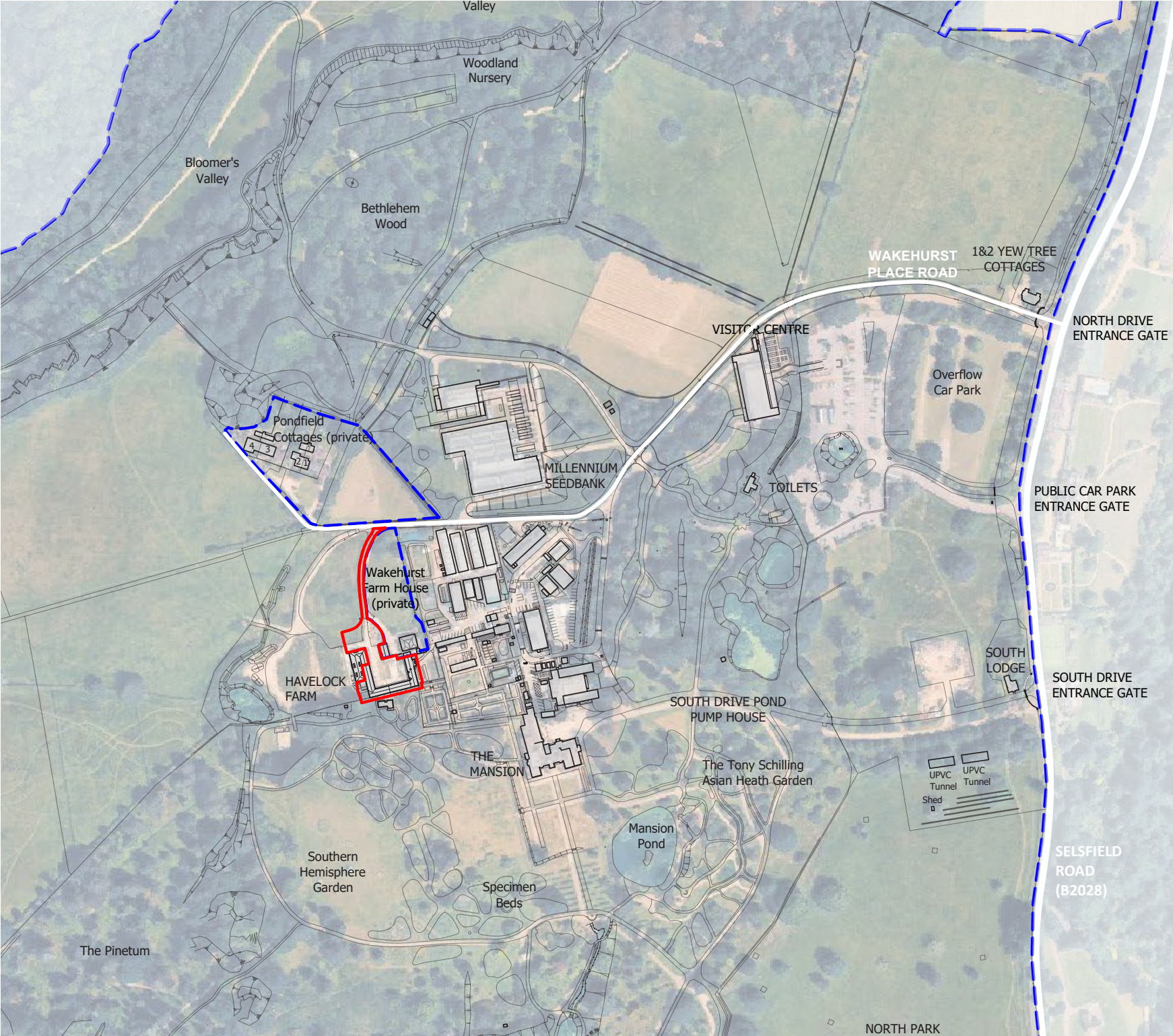
HAVELOCK FARM

DESIGN, ACCESS AND
SUSTAINABILITY
STATEMENT

March 2026

Project ref: 2280-2

Contents



Site Location Plan N.T.S
Site development boundary outlined in red. Wakehurst boundary with private ownership outlined in blue.

1.0 Project Overview	4.0 Access
Introduction	
Purpose of Document	5.0 Sustainability
Project Background	Drainage
Project Brief	
Outline Scope	6.0 Appendices
	Drawing Register
2.0 Context	
Site Location	
Ownership	
Development Context	
Development Site	
Existing Building Uses	
Historical Context	
Existing Site Images	
Structural Condition Survey	
Constraints Analysis	
3.0 Design	
Principles	
Scheme Evolution	
Proposals	
Views from Gardens	

1.0 Project Overview

1.0 Project Overview



Existing view of the main entrance approach to the Bothy looking west



Aerial view looking south east over farmyard (extent of scheme outlined in yellow)

1.1 Introduction

Martin Ashley Architects have been appointed by Royal Botanic Gardens, Kew to prepare a planning application document for submission to Mid-Sussex District Council in relation to the proposed refurbishment and conversion of Havelock Farm- situated at Wakehurst, Selsfield Road, Haywards Heath, West Sussex RH17 6TN.

The project consolidates ancillary offices across Wakehurst within the site. This will require the change of use of the existing buildings at Havelock Farm and some physical alterations to accommodate the proposals.

The existing farmstead site, dated from 1871, sits adjacent to the north boundary of the Registered Grade II* Wakehurst Park and Gardens. Although the farm buildings are unlisted, they are considered as non-designated heritage assets (NDHA).

The current uses of the buildings are a mix of workshops/stores, interim staff offices, and dilapidated stables. Kew acquired the majority of Havelock Farm during 2012 with parts of the buildings leased from the National Trust.

1.2 Purpose of Document

This document aims to set out the context of the development proposals, in relation to both the site and to the wider vision for Wakehurst.

The document will outline how the development respects and maintains the heritage of the existing site with the proposed adaptive reuse of the buildings and how the project supports the site-wide strategy.

Pre-application advice was sought from MSDC who considered the previous proposals were acceptable in principle. The document sets out changes made to the scheme since the pre-app engagement including a revised

site boundary, omission of the proposed educational use and further retention of existing heritage features ensuring the significance of the Havelock farmstead as an NDHA is preserved.

1.3 Project Background

Apart from the Millennium Seed Bank, desk-based staff and teaching facilities at Wakehurst are currently spread between: The Mansion (first floor), The Orchards Building, the Bothy at Havelock Farm, and a block of temporary portacabins.

The decant into the temporary portacabins during the Mansion roof conservation works, has been received positively by RBG Kew as it has facilitated open plan working, allowing more departmental mixing.

Havelock Farm was previously scheduled for demolition in its entirety, but has since been seen as a viable prospect for re-utilisation and preservation. The extant buildings have been identified by RBG Kew as a site to maintain the changes to working arrangements and permanently consolidate the offices facilities at Wakehurst- with the aim of creating modern, flexible working spaces for staff.

This proposed strategy will free up the historic Mansion to be used to support and enrich the wider visitor experience and allow the removal of the temporary portacabins from the gardens.

Alongside this project will be the construction of a new Conservation Research Nursery facility on the now vacant site to the west of the Havelock Farm buildings. The CRN project obtained planning permission in 2023.

1.4 Project Brief

1.4.1 Project Objectives

- Refurbish and convert the farmstead into habitable offices, with the aim of limiting the buildings energy consumption within

the confines of the budget and without significantly reducing floor space.

- Conserve the character of the spaces by minimising fabric alterations whilst supporting the occupancy needs of the estate with the briefing to provide open plan, modern, flexible workspaces.

1.4.2 Occupancy and Use

- A capacity study shows 47 deskspaces are to be provided for office staff.
- A communal space with open kitchen is to be provided for staff with supporting meeting and print rooms.

1.5 Outline Scope

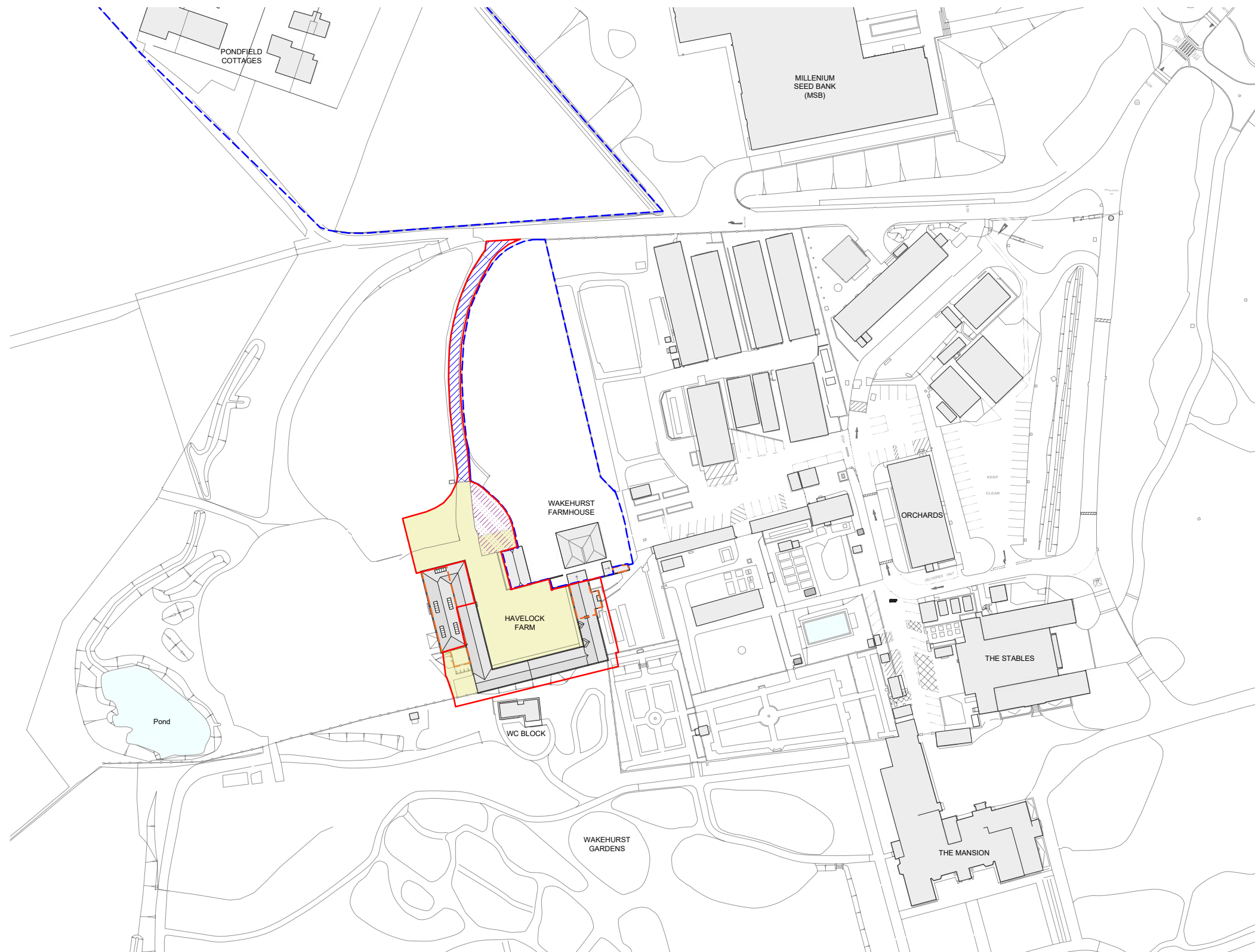
External works include:

- Existing plain roof tiles stripped and salvaged for % re-use on the bothy/east range, with new plain tiles proposed on the south range
- Roofline raised by 85mm to account for insulation and battens above rafters
- New rainwater goods throughout
- New PV panels to south facing roof
- New double glazed windows and doors throughout with the of the existing bothy and south-west range timber windows to be retrofitted with double glazing
- Raised external door heads / thresholds
- Existing bricked up openings reopened
- Existing openings bricked-up in south-west range courtyard and gable end
- New raised timber deck, ramps and steps to access raised internal floor levels
- Raised entrance level and eaves to lobby
- New external plant area.

Internal works include:

- New openings made through diving walls
- Redundant agricultural elements removed that cannot viably be incorporated in the adaptive reuse
- New insulated internal plaster throughout
- New insulated concrete slab throughout
- New steel beams and facade posts
- Repairs to timber trusses where possible.

2.0 Context



Existing Site Plan N.T.S

2.1 Site Location

Development site boundary outlined in red on the existing site plan opposite. This red line boundary includes areas of hoarding around the perimeter of the site to make safe and an area of the existing west range building to be used for contractor temporary offices during construction.

2.2 Ownership Context

RBG Kew acquired the majority of Havelock Farm during 2012. The farm has changed hands many times over the preceding 50 years and was originally considered a single property including the farmhouse and supporting buildings such as the barns, milking parlour and stables. During the 1970s the site was divided and the farming buildings were sold to a separate owner and continued to be used for its agricultural purpose until 2012.

The farmhouse (known as Wakehurst Farmhouse) remains under separate ownership and is still used as a private residence. The National Trust retain ownership of the barn and the Bothy building shown highlighted. Engagement with the NT has taken place with agreement in principle for the proposed scheme.

- SITE DEVELOPMENT BOUNDARY
- - - WAKEHURST BOUNDARY WITH PRIVATE OWNERSHIP
- - - NATIONAL TRUST OWNERSHIP BOUNDARY
- RIGHT OF WAY FOR WAKEHURST FARMHOUSE
- RESTRICTIVE COVENANT ON TITLE DEED NOT TO BUILT OR ERECT STRUCTURES IN LOCATION WITHOUT THE PERMISSION OF THE OWNER OF THE LAND REGISTERED FOR WAKEHURST FARMHOUSE
- RESTRICTIVE COVENANT ON TITLE DEED WITH REGARDS TO MOVING TIMBER AND SEWAGE WITHOUT A PERMISSION OF NATIONAL TRUST (WITHIN SITE DEVELOPMENT BOUNDARY SHOWN ONLY)



WCRN Site Plan, previously consented in 2023 N.T.S

2.3 Development Context

A Vision for Wakehurst

In September 2023 a presentation was made to officers of Mid- Sussex District Council (Judy Holmes, Deputy Chief Executive and Lara Southam, Head of Regeneration and Sustainable Economy) by the Director and other staff of RBG Kew, Wakehurst. The aim was to explain the ideas about the overall development of the Wakehurst for discussion, comment and observations. The presentation, entitled “Transforming Wakehurst” was about aspirations for consolidation, growth and transformation, rather than detailed discussion of specific Planning applications. The Wakehurst Senior Leadership Team presented a number of core topics covering the botanic garden, science and research, education, community and commercial activities. Information was presented on a number of future projects together with an explanation of how they would be prioritised, linked and phased.

RBG Kew's document 'Our Manifesto for Change 2021-2030' committed to the following by 2030:

Transform Wakehurst, our wild botanic garden in West Sussex, to become a national centre of excellence in conservation science and practice, seed research and landscape ecology. Combining innovative horticulture and research, the conservation work of the Millennium Seed Bank and public outreach, we will raise awareness of how plants and fungi could be used to tackle environmental problems, underpin human well-being, and encourage stewardship of the natural world.

The Havelock Farm project is an important component and enabler of RBG Kew's wider strategic vision for Wakehurst.

Areas of the masterplan vision relevant to Havelock Farm are described as follows:

Office Hub

The proposed office hub at Havelock Farm consolidates staff over the site enabling collaborative working and opens up an alternative use of the Mansion to be a welcoming and informative visitor experience. The hub will also allow the temporary portacabin offices to be removed from the gardens.

WCRN

Adjacent to Havelock Farm is the proposed Wakehurst Conservation Research Nursery project (consented in 2023) which will replace existing facilities primarily located within the historic Walled Garden and consolidate a modern and expanded facility. The new facilities will be purpose built to provide a range of environs required for the various research and horticultural projects being undertaken by RBG Kew. This will include a number of large span glasshouses which will have varying levels of compartmentalisation and control for growing conditions.

Pre-application Scheme

The education classrooms which were presented as part of the pre-app scheme in Havelock Farm will now be located elsewhere on the site repurposing spaces within other existing more modern buildings. These educational spaces are central to RBG Kew's priorities of public outreach and inspiring curiosity and fascination about the world, plants and its people through inquiry based learning and active participation.

2.4 Development Site

2.4.1 WCRN Site Plan

Havelock Farm formed part of the previous WCRN planning application within the red line boundary shown opposite.

This scheme received planning permission June 2023 (Ref. No: DM/22/1774).

The extant Havelock farmstead is included within this new planning application as a separate project to the WCRN.



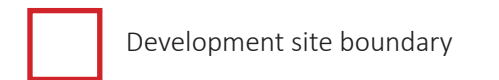
Existing Aerial Image 2024

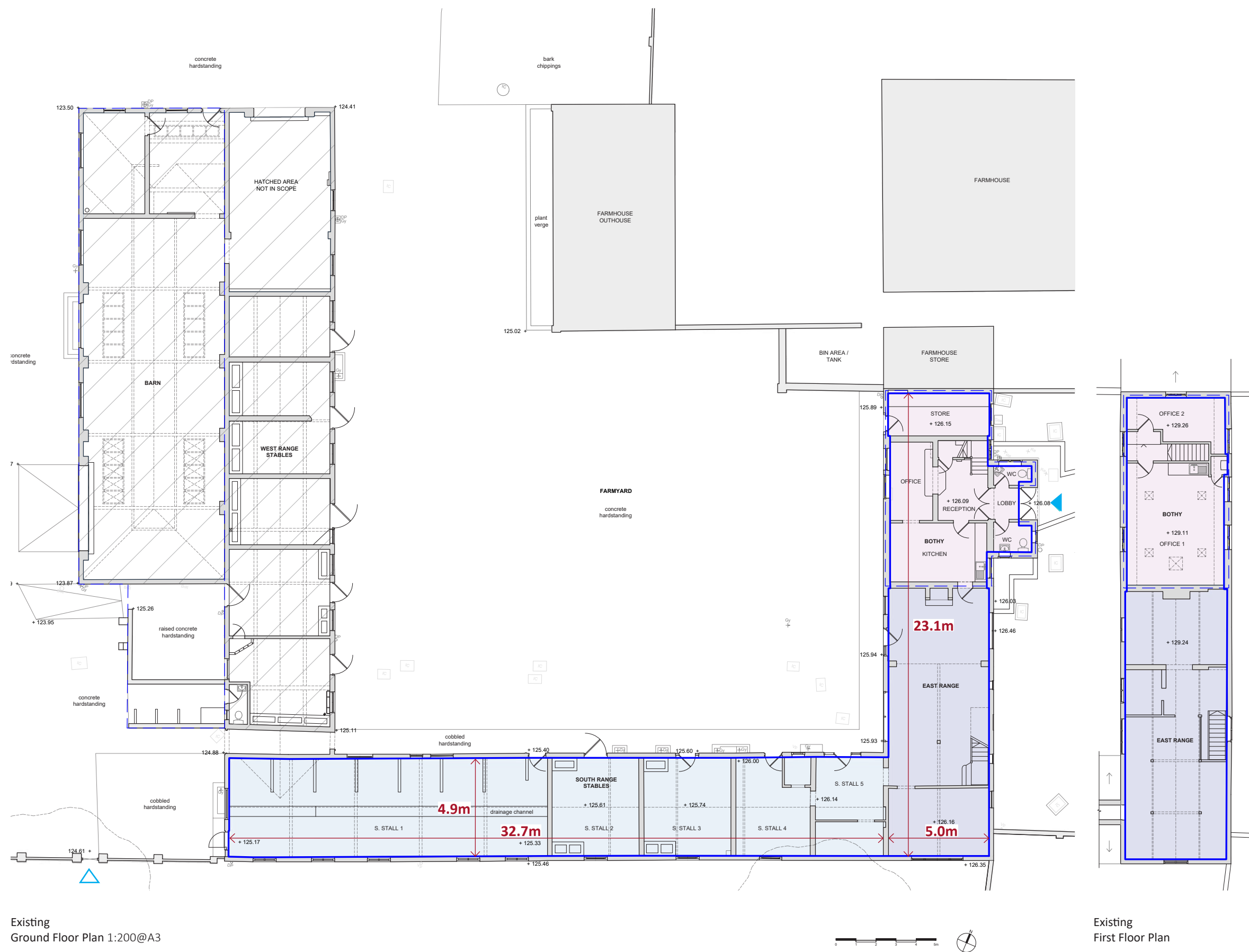
Boundary Gate Entrance

2.4.2 Cleared Site

The aerial image opposite shows the site cleared of the previous dilapidated agricultural buildings in the farmyard and to the west and north-west of the site undertaken in 2023.

Extensive concrete hard standing surfaces the farmyard and around the barn with an internal courtyard perimeter of concrete setts.





2.5 Existing Building Uses

Existing ground floor and first floor plans 1:200@A3.

- Bothy**
(Estate office)
- Vacant Dwelling**
(Restricted to agricultural workers)
- Stalls and Loose Boxes**
(Restricted only for the purposes of workshops and storage of tools/machinery associated with the wider botanical gardens)
- Gross Internal Floor Area (GIFA)
399m²
- National Trust Ownership Boundary

Existing
Ground Floor Plan 1:200@A3

Existing
First Floor Plan



Aerial image dated 1949

2.6 Historical Context

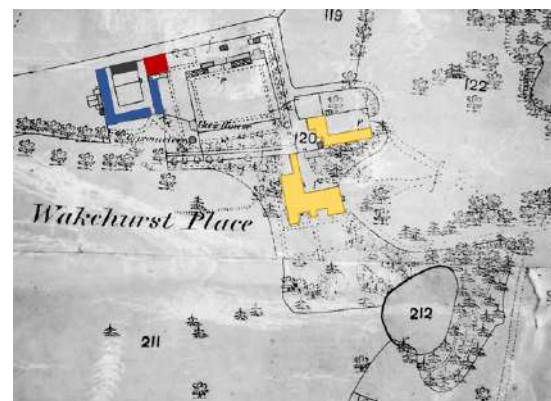
Wakehurst Place originated as an Elizabethan gentry house built between 1571 and 1590. The estate was solid in 1678. It was its later owners who created the protected landscapes seen today. These included the Peyton family, who created fashionable parkland to the south and east of the house in the late 18th and early 19th centuries (shown in the 1869 map opposite).

The historical maps at the bottom of the page show that farm buildings were associated with Wakehurst from 1871. Although these are unlisted these are considered as ‘non designated heritage assets’.

A large barn with flat roofed side wing once occupied the farmyard shown in the 1949 aerial image. The side wing remained until 2023 when a series of dilapidated agricultural structures were removed to enable development. These removal works formed part of the consented Wakehurst Conservation Research Nursery project.



1869
Wakehurst Place with listed Mansion (yellow) in original configuration.



1871
First evidence of Farmstead at Wakehurst Place. Illustration shows the Farmhouse (red), and supporting courtyard buildings (blue)



1910
Farm stead extends to West with additional building and new barn within farmyard. Buildings in grey now demolished.



2010
Aerial image looking south. Buildings within farmyard now removed (outlined grey).

2.7 Existing Site Images

2.7.1 Entrances

The entrance lobby to the Bothy is a relatively modern addition. The concrete entrance path slopes down to the double entrance doors.

The passageway entrance into the courtyard, paved with concrete setts, slopes up with open rafters below the roof of the west range.

The north gravel approach road has shared access with the private farmhouse.



Main east entrance to the Bothy



West passageway entrance into courtyard



North approach along farmhouse access road

2.7.2 Botanic Garden Connection

Existing picture windows within the south range stables frame green views towards the botanic gardens.

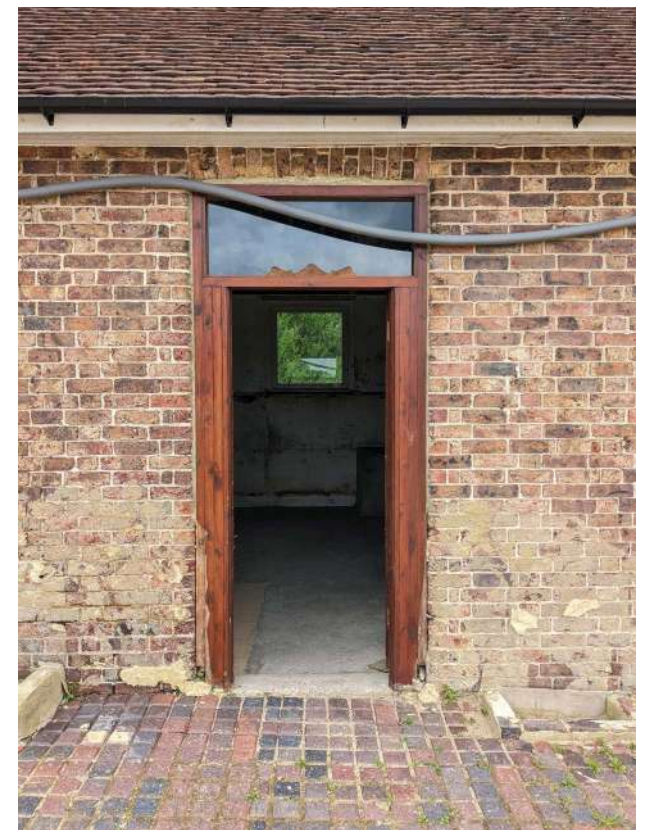
The south-east range has uPVC windows within timber frames, whereas the south-west range has existing timber windows. No stable doors remain on the south range.



View looking north of the south range from Wakehurst gardens



View within south range stall looking into garden, concrete trough within corner



View of south range door entrance with garden viewed beyond, concrete setts border the perimeter of the courtyard

2.7.3 Internal Courtyard Aspect

Views from the range buildings orientated over the courtyard and hard-standing.

There is a level difference of 800mm between the east and west ends of the courtyard.



View of south range from farmyard



View from south range stable over farmyard



View from east range stable over farmyard



View from west range stable over farmyard (no works proposed to this building)

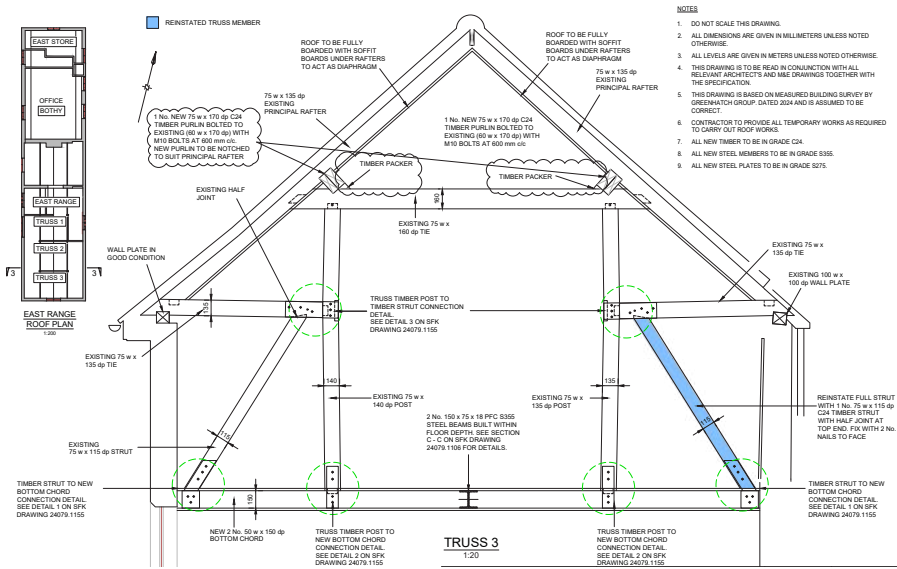
2.8 Structural Condition Survey

Refer to Structural Report for detailed information.

2.8.1 Existing East Range

Existing timber trusses to be reinstated to their original form where elements have been removed or have been altered- this will retain the character of the spaces in the proposed conversion.

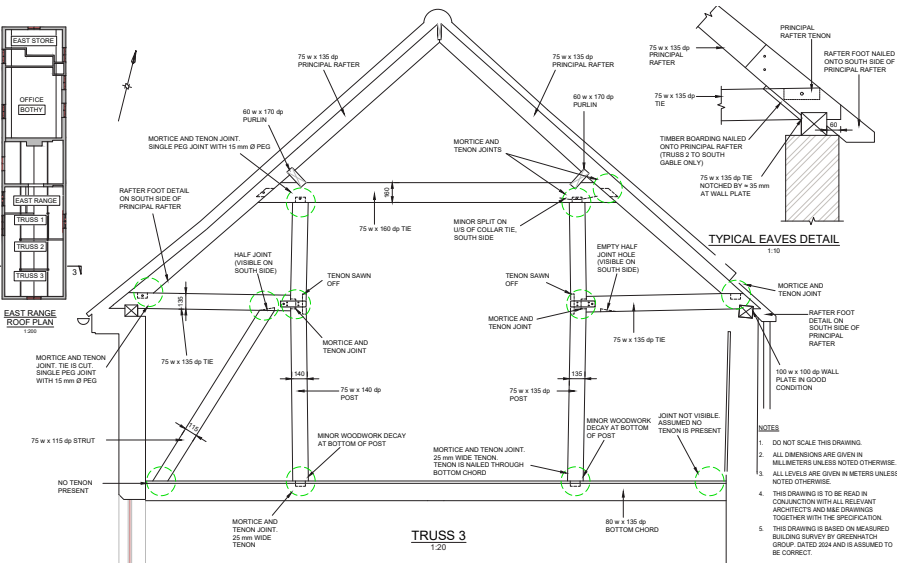
Repair work will adopt a conservative approach, retaining and repairing, rather than replacing historic fabric wherever possible. This is shown on the truss reinstatement elevation opposite.



Structural Reinstatement Truss Elevation - East Range N.T.S.



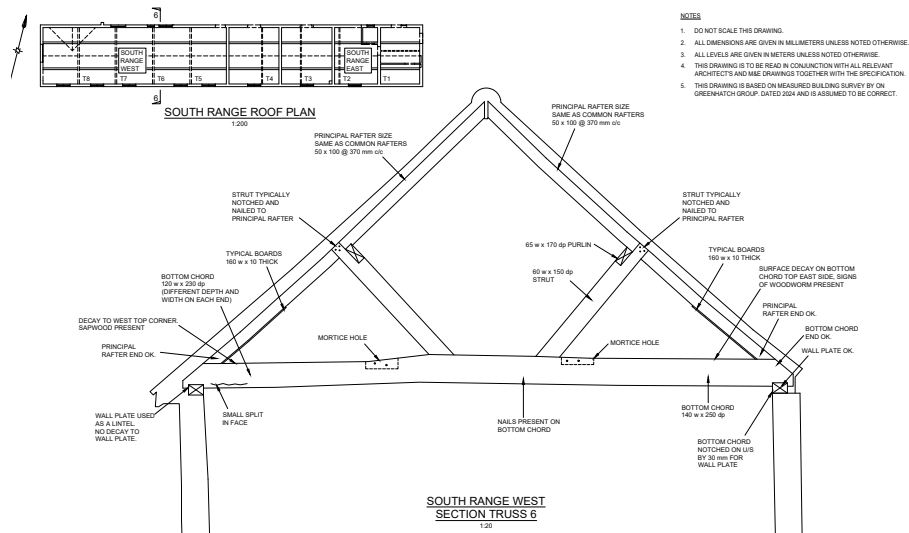
First floor view looking south



Structural Condition Survey Truss Elevation - East Range N.T.S.



First floor view looking north



Structural Condition Survey Truss Section- South-West Range N.T.S.



Existing view looking east of south-west range, note sloped floor.

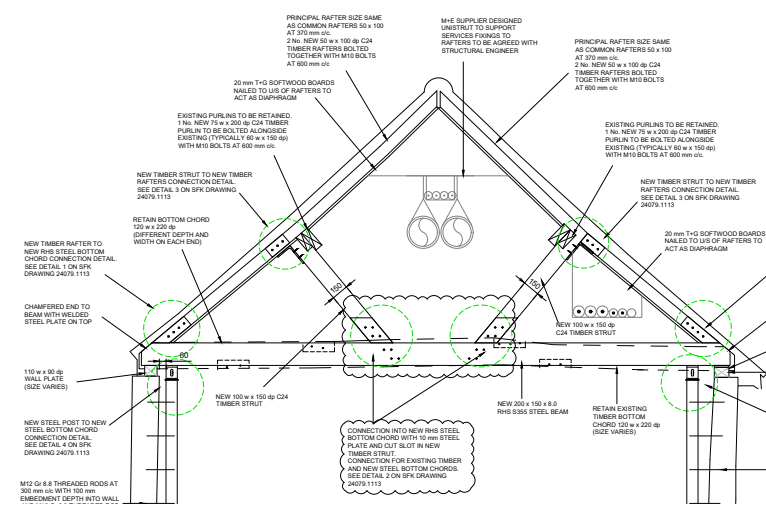
2.8.2 Existing South-West Range

Existing timber trusses to be retained and repaired where required. Additional steel beams will be required adjacent to the retained timber bottom chords for the required roof loads.

The sloped floor has a 160mm level difference between both ends. Masonry stall dividers with steel pole edgings are positioned along the north side of the space.

2.8.3 Existing South-East Range

The existing 75mm thick bottom chords in the south-east range are undersized for the required loads. They are less characterful than the timber chords in the south-west range. These will be replaced in the proposed scheme.



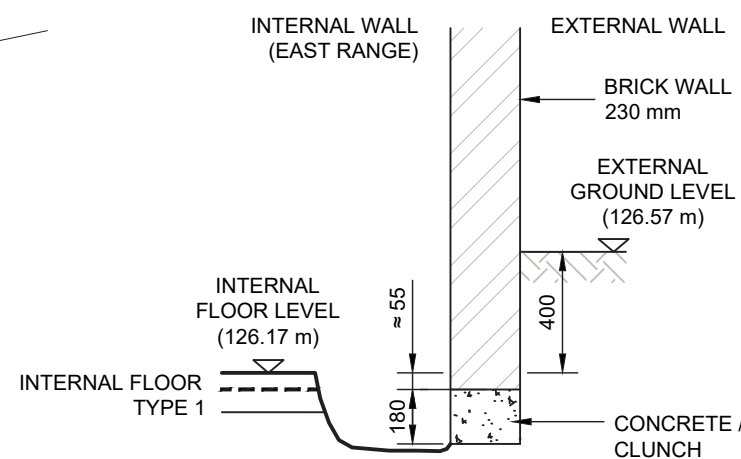
Retained Truss Section With Proposed Steel Strengthening - South-West Range N.T.S.



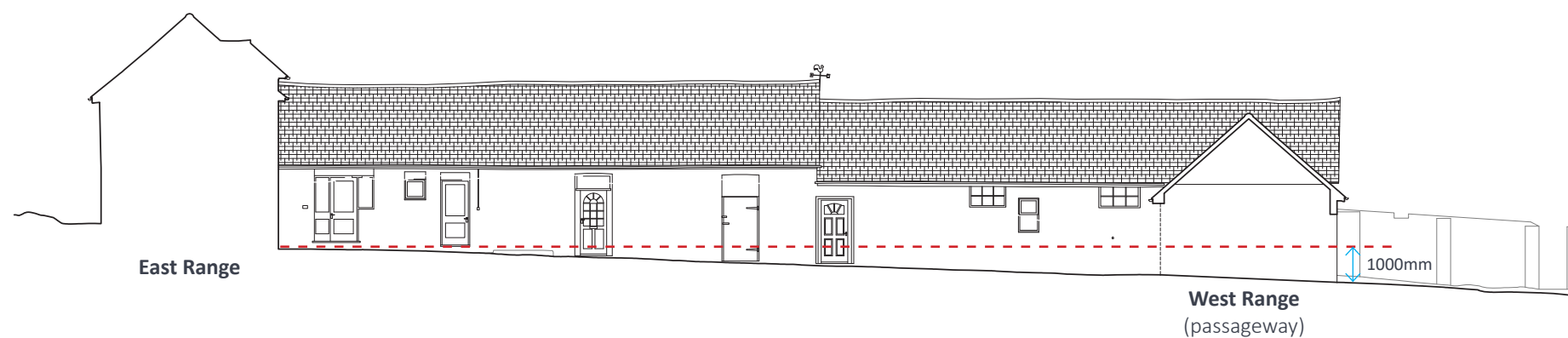
Existing view looking west of south-west range, note sloped floor.



Example of slim bottom chord in south-east range



Trial Pit Section- showing shallow footings in relation to internal floor levels East Range
1:25@A3



Existing Site Section (looking south)
1:200@A3

2.9 Constraints Analysis

Levels

The site slopes 1 metre from east to west between the east range external floor level and the west end of the south range (see elevation mark-up below). Existing internal floor levels step between the south range stables. The proposals will need to design out the level changes to maximise accessible office areas whilst still allowing accessible access into the courtyard via new steps and ramps.

Shallow existing foundations to the masonry facades limit the extent of excavation possible, for the installation of the new insulated floor slab, without undermining the wall and needing to underpin. The briefing is to avoid underpinning to limit the costs and carbon intensive nature of the concrete works. The proposals are to raise floor levels by building above the existing levels wherever possible.

Existing Fabric Adaptations

Any new openings made in the existing fabric are to utilise existing bricked-up openings wherever possible, and any limited new openings are to be carefully considered to not impact on the setting of the adjacent registered park and garden and on the curtilage of the listed buildings within the vicinity of the site.

The proposals are to strike a balance between preserving the features of the NDHA whilst ensuring the office spaces created are not constrained by the redundant features, e.g. the concrete troughs in the south-range, which would undermine the effective reuse of the building.

Noise

The private Wakehurst Farmhouse sits in close proximity to the site. Communal staff areas are to be located away from the north end of the building. Similarly, noise emitting external plant systems are also to be located away from the neighbouring property.

Access

Everyday vehicle deliveries to be managed away from the north access road at a main logistics hub elsewhere on the Wakehurst site. Deliveries will then be walked or trolleyed to Havelock Farm as required via the main entrance.

Biodiversity and Ecology

The Wakehurst estate sits in the heart of the south downs within the High Weald Area of Outstanding Natural Beauty (AONB) and is also a Site of Special Scientific Interest (SSSI). As a registered park and botanic garden, it is home to a significant collection of trees and plants, which require the highest levels of protection against damage and disease. The wider site is also known to have nesting birds and bats. All factors that will influence the design, procurement and construction activities associated with this project.

An updated ecological survey has been carried out of the revised scheme- refer to the associated report which sets out various mitigation measures. The proposals are considered to be exempt from mandatory Biodiversity Net Gain as confirmed in the report.

3.0 Design

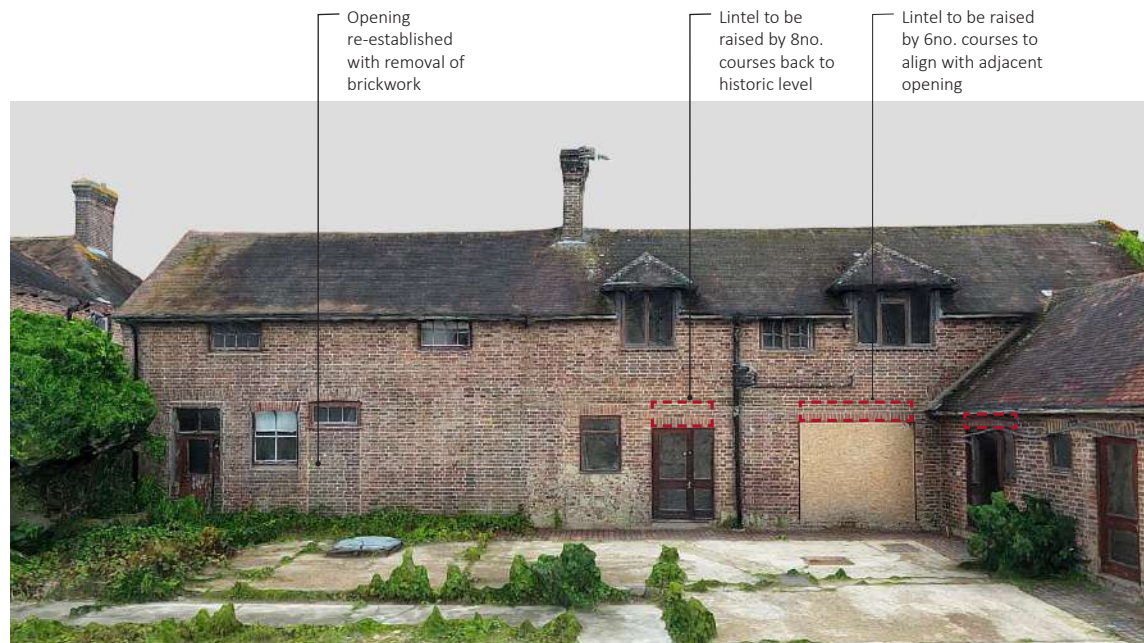


Image of Bothy and East Range courtyard facade- proposed adaptations to openings

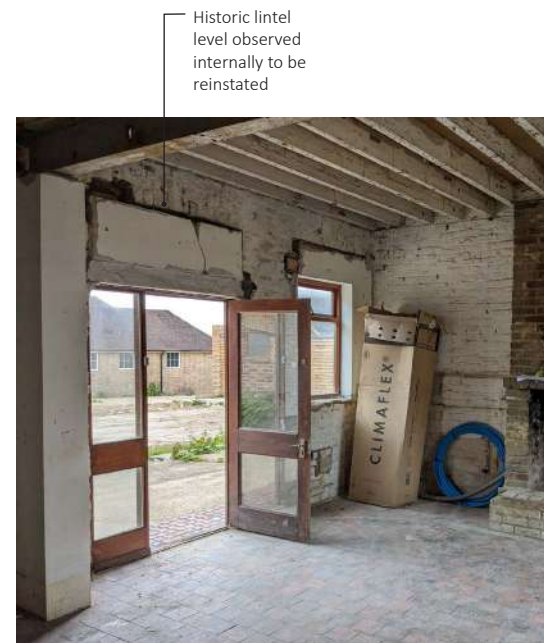


Image from within East Range showing historic arched lintel to be re-established (not currently evident externally)



Image of East Range and Bothy east elevation- proposed openings

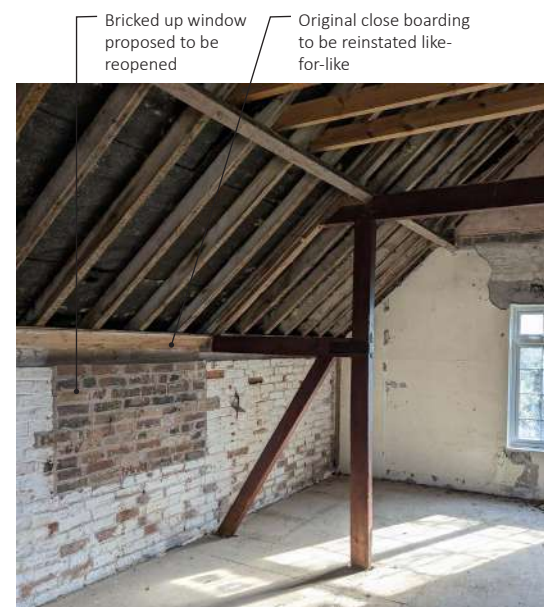


Image of East Range internal east facade showing bricked up existing opening

3.1 Design Principles

The following design development principles have been established in response to the brief, the constraints, the site heritage and its surrounding context:

Sustainable conversion

Converting the mostly redundant existing buildings into open plan, modern, flexible workspaces enables the buildings to be reused whilst avoiding the waste and embodied carbon that would be associated with a more extensive redevelopment. Internal rather than external wall insulation to be installed to preserve the external setting of the farmstead. A lime and cork insulated plaster will be used allowing the irregularity of the existing walls- bowed in places- to remain part of the character of the internal spaces.

Raised internal ground floor levels with overlaid insulation and floor slab above existing brick pavers required for new office loading to limit the extent of excavation and concrete underpinning required.

Retention of existing character

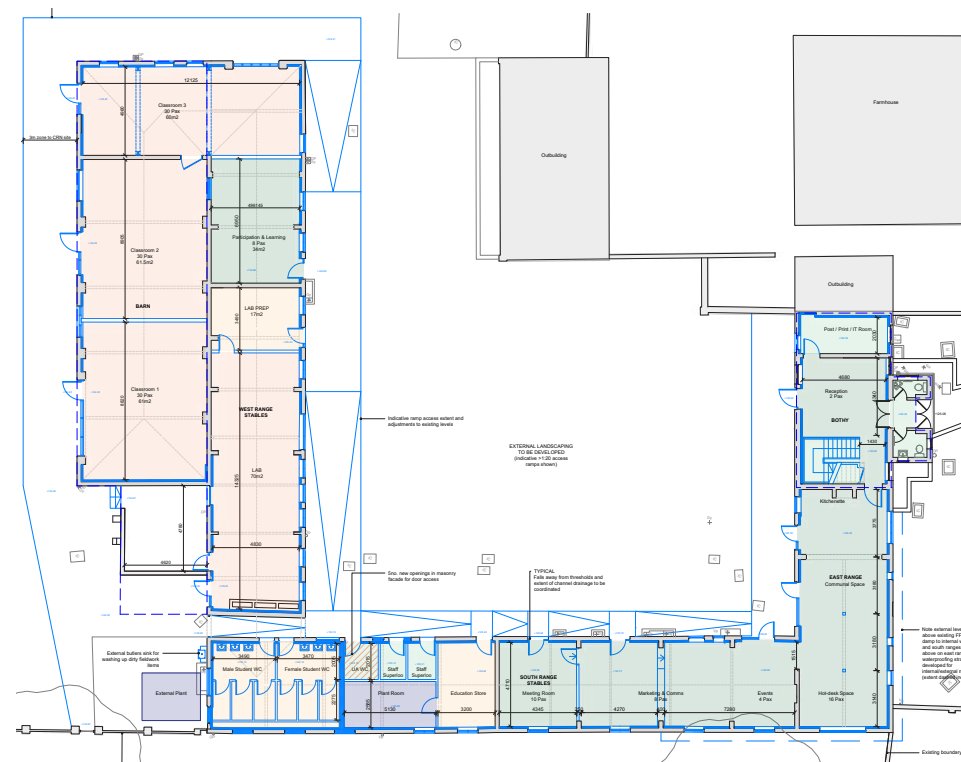
Minimum changes proposed to the existing fabric required to support the new uses. The previous scale and footprint of the stalls will be read through the retention of nibs to the dividing stable walls. The sense of volume of the agricultural spaces will be retained though exposed roof voids with exposed services installed. Timber trusses will be repaired and reinstated where possible. Timber close boarding will be reinstated below existing rafters.

Minimum impact on surroundings

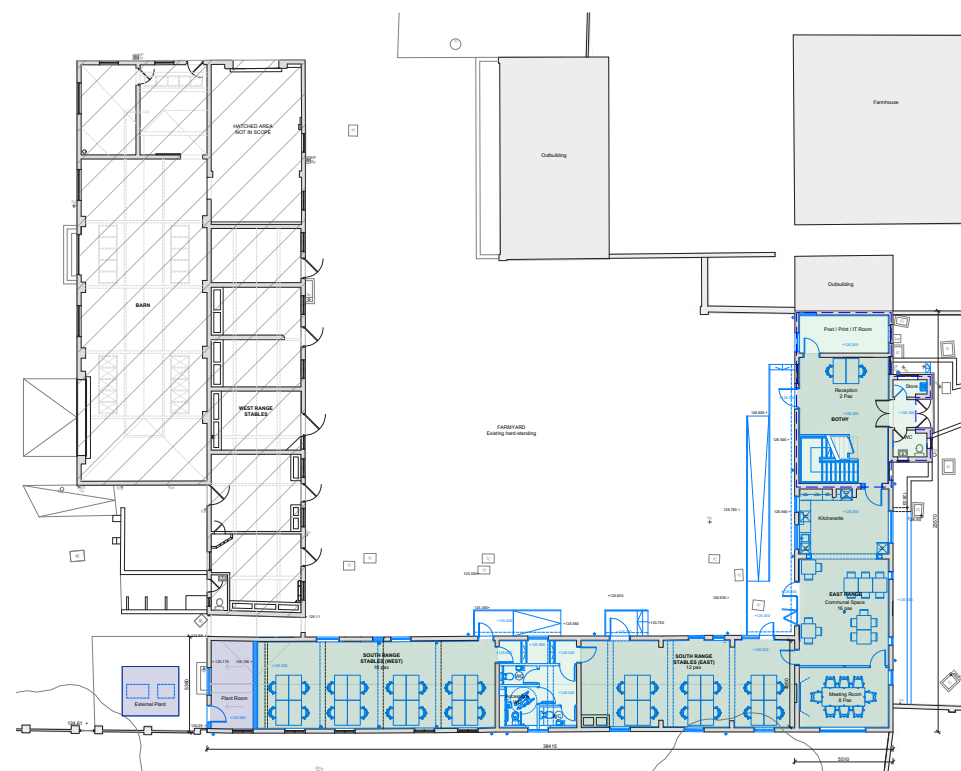
Traffic along the north access road will be restricted day to day to waste vehicles and fire truck access. External plant located at the furthest point on the site away from the neighbouring private farmhouse- some 30 metres away from the private boundary wall.

Maximise accessibility

Level access at the ground floor maintained to the south-east range and WC block maximising the extent of accessible office areas for staff whilst working within the confines of the sloped levels and restricted head heights where floor levels have been raised.



Pre-app Scheme- Ground Floor Plan NTS



Planning Scheme- Ground Floor Plan NTS

3.2 Scheme Evolution

Pre-app Engagement Timeline

- Pre-application proposals were issued to Mid-Sussex District Council on 3rd March 2025.
- A pre-app meeting was held on site on 1st April 2025 with the Planning and Conservation Officers.
- Formal comments were received on 28 May 2025.

Pre-app Written Feedback Summary

- The pre-app proposals were considered by the Planning Officer as being acceptable in principle.
- The Conservation Officer welcomed the beneficial long-term use of the buildings, recognised that the original agricultural use on the site is no longer viable and outlined that there would be no objection to the proposed uses on the site.
- The Conservation Officer outlined that elements of the proposed works required reconsideration to ensure that the significance of the Havelock farmstead as an NDHA and the positive contribution which it makes to the settings of the adjacent designated assets are preserved.

Key Changes Between Pre-app and Planning

- The educational use is no longer proposed, with office use only.
- The Barn and West Range are no longer part of the development site.
- Proposed internal partitions, new openings, and blocked-up openings in south-west range have generally been omitted allowing the existing space to be appreciated.

Specific Pre-app Comments and Response

The following summary items outline firstly, the Conservation Officer's comments on the physical works that required reconsideration and secondly, explain how the proposed scheme responds to each point ensuring the

significance of the NDHA is preserved whilst supporting the reuse and conversion of the building.

01a Pre-app comment:

- *The adjustments to the roofline to allow for the installation of insulation are not considered contentious in themselves, subject to detail of any necessary alterations to the eaves, and of the detail of the relationship of the insulation to the structure of the roof, where this is currently exposed internally. Ideally, where the framing to the roof is currently visible internally and is of character, insulation would be set between and/or above the rafters, rather than covering them, to allow the framing to remain visible. However where the underside of the roof was previously boarded, as appears to have been the case for example within the southern stable range, insulation could be installed above reinstated timber boarding.*

01b Design Response:

- Insulation proposed between and above the rafters to limit changes to the roof profile and alterations to the eaves. This raises the roofline by 85mm (60mm insulation, 25mm counter batten). Underside of the rafters to be lined with timber close boarding matching the original which is visible at the base of the rafters in both south and east ranges. The close boarding fixed below the shallow rafters acts as a structural diaphragm.

02a Pre-app comment:

- *New rainwater goods are unlikely to be considered contentious- these should be of painted metal rather than uPVC, to reflect the age and traditional style of the buildings.*

02b Design Response:

- The existing rainwater goods are black

uPVC. The proposal is to replace these like-for-like.

03a Pre-app comment:

- *The proposed roof plan shows possible locations for new solar or thermal panels. We have no details of this aspect of the proposal at the moment, but the locations for these installations should be carefully chosen to minimise their visual impact, including on glimpsed views of the farmstead from within the adjacent RPG.*

03b Design Response:

- Photovoltaic panels are located on the south facing roof of the south range (the pre-app scheme extended these on the west range roof now omitted). Existing PVs to be replaced. Extent of the proposed PVs will be partially concealed from within the RPG by the existing WC block and vegetation at the boundary of the gardens. The sustainability benefit of incorporating the PVs is balanced with the small impact on glimpsed views from the gardens- refer to images in this section and Heritage Impact Statement.

04a Pre-app comment:

- *The installation of replacement double glazed windows and doors is unlikely to be regarded as contentious subject to details of frame proportions and profile, and of materials, which should be to match the original wherever possible. Where glazed doors are proposed to existing stable door openings, it would be preferable for the existing timber doors to be retained and fixed open, to preserve this key aspect of the character of the stable buildings. Retrofitting of double glazing to the Bothy windows is likewise unlikely to be considered contentious, subject to detail.*

04b Design Response:

- The existing timber stable doors only exist on the west range which has been omitted from the scheme. No timber stable doors exist on the south or east range. PPC aluminium windows and doors are proposed throughout with the exception of the bothy and south facade of the south-west range where the existing original timber windows will be repaired and retro-fitted with double glazing and replaced with matching frame profiles where required.

05a Pre-app comment:

- Limited new openings to the external walls of the buildings including to the south range stables facades may be acceptable, however the extent of the work as shown may be contentious- in general it will be good practice to work wherever possible with the existing openings. The re-opening of a previously existing, now bricked up, opening to the Bothy façade is unlikely to prove contentious.*

05b Design Response:

- The majority of the new openings shown on the pre-app drawings have been omitted. 1no. new window opening proposed on the south facade of the south-east range to match adjacent window as per pre-app scheme.

06a Pre-app comment:

- The infilling of openings to the south range stables façade is mentioned but no details appear to have been provided- as noted above, working with existing openings will usually be preferable to their loss, or to the creation of new openings, where these are original or early and contribute to the narrative and character of the building.*

06b Design Response:

- The infilling of openings to the south

facade of the south range have been omitted. 1no. small high-level non-original opening on north facade to south-west range bricked-up to conceal new steel post required behind, with 1no. non-original opening on west gable bricked-up for structural stability purposes into the plant room.

07a Pre-app comment:

- The regarding of external landscaping levels to provide level access is unlikely to be problematic- the detailed design and materials should be carefully considered to preserve any original surfacing that survives (e.g. concrete setts) and to be respectful to the agricultural character of the farmstead.*

07b Design Response:

- The regrading of the courtyard external levels is no longer proposed. Access into the raised internal floor levels to be via raised timber access decks, ramps and steps. Concrete setts retained. Every effort will be to reuse the existing setts where any new drainage runs are required, refer to drainage drawing. The regraded external levels into the Bothy will be via adjusted concrete screed surfacing as per existing.

08a Pre-app comment:

- The proposed new turning space and bin area to the north of the barn does not appear to be detailed in the pre-application submission. This may not be contentious, depending on the impact on the setting of the farmstead, in the context of the cumulative impact with the approved new build scheme.*

08b Design Response:

- Turning space to use existing hard-standing. Bin area shown on the GA item 3.3.1.

09a Pre-app comment:

- The new external plant area is shown to the western end of the southern stable range. This may be acceptable in principle but the impact on views from the RPG will need to be carefully considered, and appropriate screening introduced.*

09b Design Response:

- A 1.7m high plant hoarding will screen the external plant area. The top of the hoarding will be below the height of the boundary wall and therefore not visible from the RPG.

10a Pre-app comment:

- The proposal also includes extensive internal works to the buildings, to alter the layout to suit the proposed new uses. The wholesale removal of plan form and features which speak of the past agricultural use of the buildings, such as stall dividers and feeding troughs, would be extremely regrettable and should be avoided.*
- As with the installation of insulation to the roofs, the introduction of insulation to walls and alterations to floors to install a new waterproofed and insulated floor system should be carefully considered in order to preserve the internal character of the buildings concerned, and to retain fabric and features of interest wherever possible.*

10b Design Response:

- The proposed scheme retains 1no. concrete trough in the south-east range to be used as a low-level planter. The other 3no. concrete troughs in the south range require removal to facilitate an efficient layout for the proposed office use, new WCs and circulation. There are 6no. concrete troughs in the west range which will remain.
- The stall dividers in the south-west require removal to facilitate the required

desk occupancy of the space, new plant room and installation of new RC floor slab. The proposed scheme now retains the south-west range as one space.

- Internal wall insulation to be an insulated lime and cork plaster which will follow any bows in the existing walls and retain the character of the spaces.

11a Pre-app comment:

- The pre-application document also notes repairs to the roof structure. Subject to justification (in the form of an appropriately detailed structural report) and details of the work, this is unlikely to be considered contentious. We would expect any repair work to adopt a conservative approach, retaining and repairing, rather than replacing historic fabric wherever possible.*

11b Design Response:

- Refer to Structural Report. Existing timber trusses reinstated with timbers repairs in the east range. Trusses in the south-east range require replacement as these are undersized for the required loading. Timber trusses in the south-west range are also undersized, but being more characterful and substantial than the south-east range these have been retained and supplemented with new steels.

12a Pre-app comment:

- The plans show the partial removal of walls to the western side of the southern end of the western stables range, around what appears to be a former bull pen, or similar enclosure. As discussed on site, the reasoning behind this seems be to reduce very slightly the walking distance between the proposed new lab within the western stables and WCs within the southern range. This does not seem to be sufficient justification for this loss of historic fabric and plan form, and should*

be reconsidered.

12b Design Response:

- Area retained in proposed scheme.

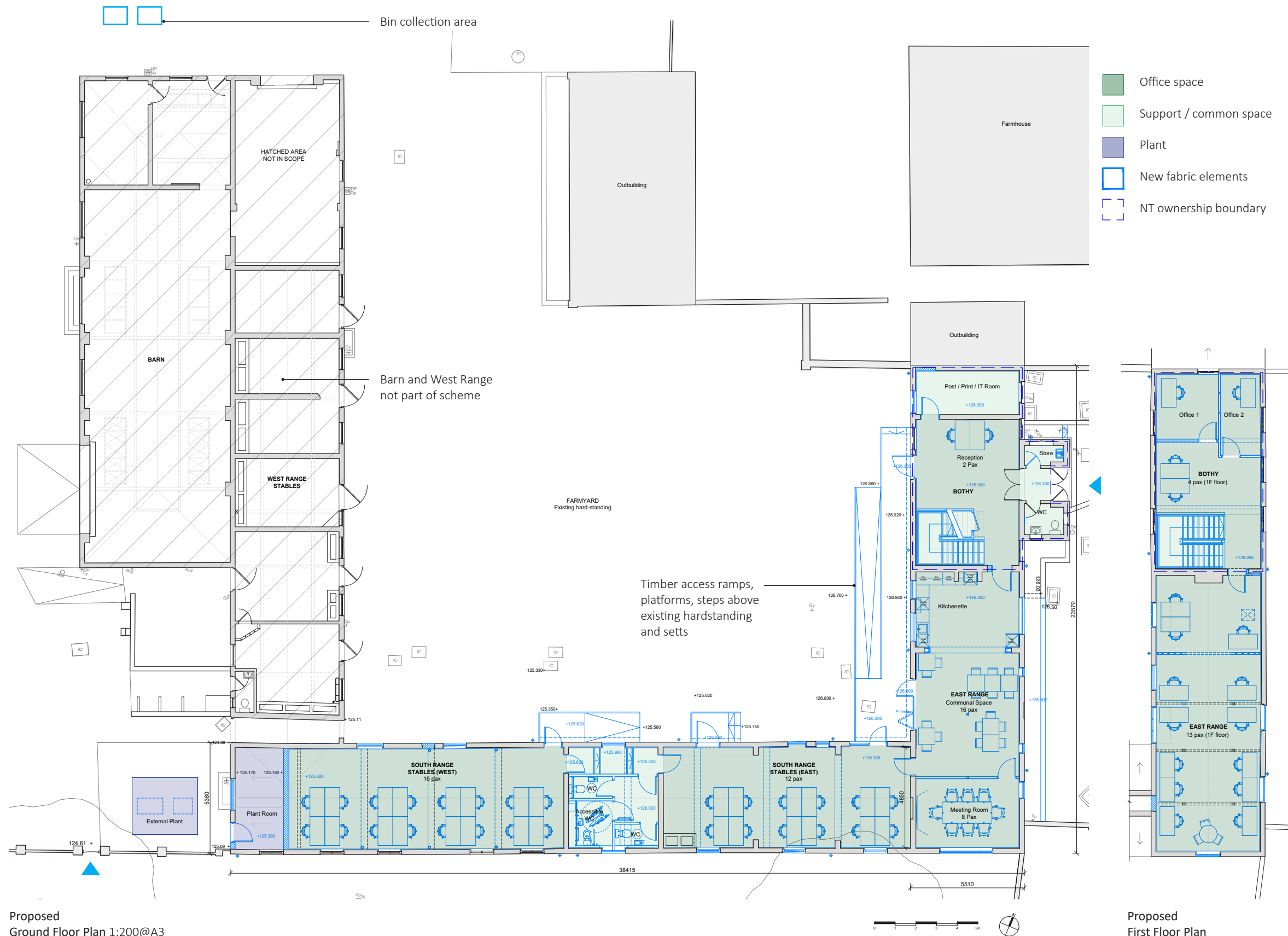
13a Pre-app comment:

- Noise sensitive development, such as residential, will not be permitted in close proximity to existing or proposed development generating high levels of noise unless adequate sound insulation measures, as supported by a noise assessment are incorporated within the development. The Bothy is already used in association with Wakehurst, with employees using the building. Due to this existing use it is not anticipated that the proposed office use of the buildings would cause significant harm to the amenities of this neighbour. The proposed educational use would consist of school children using the barn during school trips. The children would access the building through the garden of the Wakehurst away from the neighbour and therefore reducing the potential impact. The impact on this neighbour will need to be assessed in full during the course of an application and will need to be supported by a noise assessment to ensure that this use would not cause significant harm.*

13b Design Response:

- Educational use no longer proposed. External plant has been located >30m away from the boundary of the private Farmhouse dwelling and behind the existing walls of the range buildings. Furthermore, a plant hoarding will contain the ASHPs.

Refer to the planning consultant, The Planning Lab's Planning Statement for further outline of planning matters.



3.3 Proposed Scheme

3.3.1 Proposed Floor Plans

General principles:

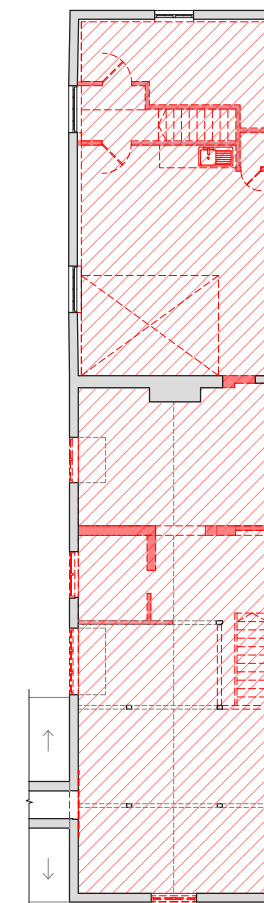
- Minimal fabric changes to retain the character and form of the existing spaces, whilst providing open plan office spaces
- Minimal underpinning, necessitating raised ground floor levels whilst maximising accessible internal areas.

Proposals include:

- Repairs to existing fabric including timber trusses, masonry walls
- New steel posts and beams in S-E range and Bothy, and new timber trusses in S-E range to support increased office loads
- Raised existing facade lintels to doors/windows within courtyard
- Raised door threshold levels to external doors off the courtyard
- Openings through dividing walls, masonry nibs retained to restrain walls
- Internal insulated plaster to façades
- New reinforced and insulated concrete slabs with raised levels above existing floor finishes partially removed
- Low level internal waterproofing to address damp issues to S-E corner with lowering of ground levels along east facade with existing ground stepped back, new channel drain
- New insulated roof build-up with roofline raised by 85mm, % of existing plain tiles reused
- Exposed internal roof soffits and exposed services, soffits close boarded
- Reuse of 1no. WC in entrance lobby and new 3no. WCs within south range
- New single stair in east range bothy
- Existing timber windows in Bothy and S-E range south facade reglazed with double glazing, new thermal aluminium windows and doors elsewhere
- New rainwater goods
- New timber access ramps, platforms, steps above existing hardstanding and setts.



Proposed Demolition
Ground Floor Plan 1:200@A3



Proposed Demolition
First Floor Plan

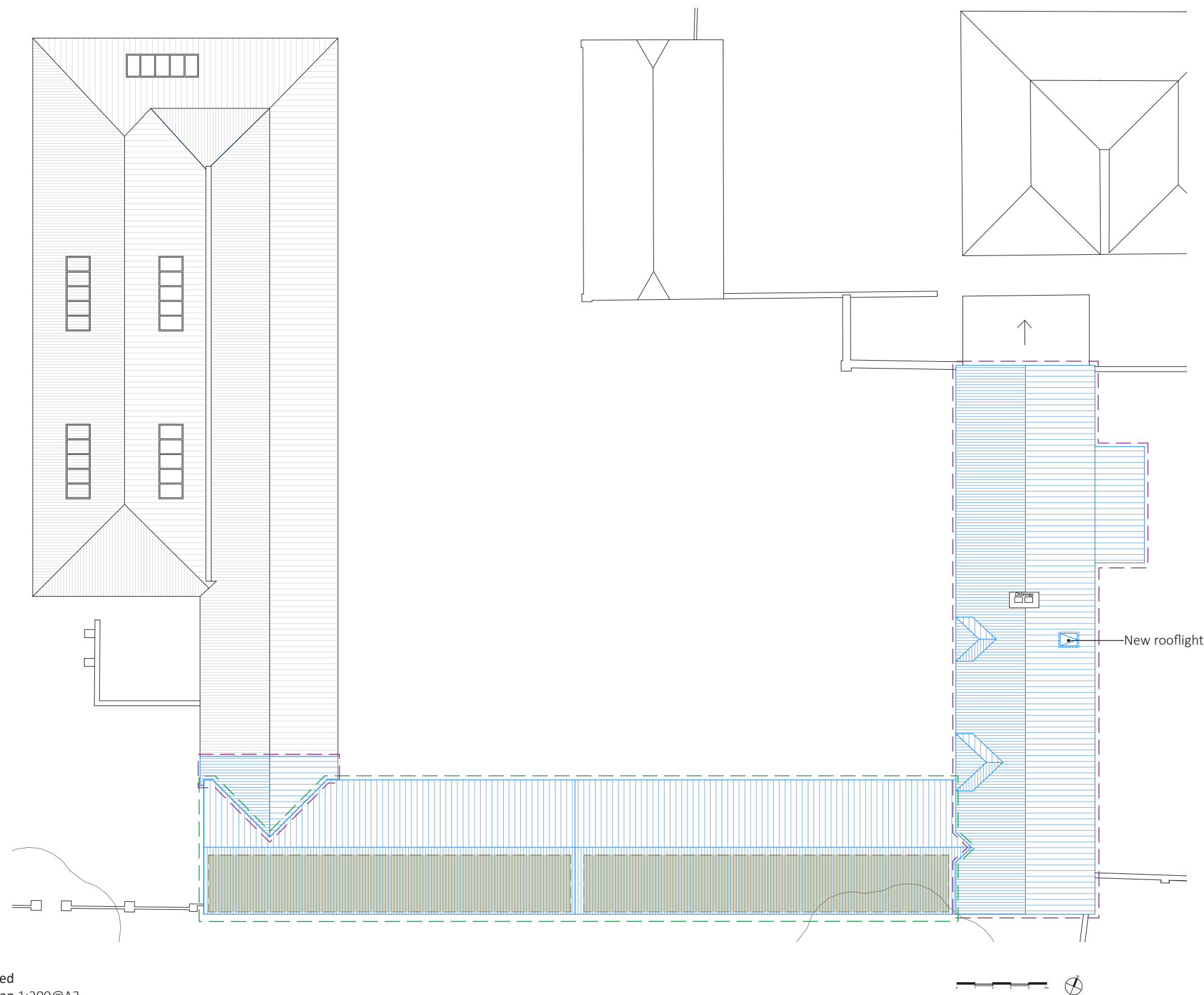
3.3.2 Proposed Demolition Scope

Demolition scope includes:

- Removal of all windows and doors, with the exception of the Bothy timber windows and S-E range timber windows which are to be reglazed subject to condition survey
- Removal of roof coverings including battens with % of plain tiles salvaged for reuse
- Adjustment of Bothy entrance timber roof profile (eaves raised by 3no. brick courses)
- Removal of internal blockwork partitions
- New openings formed in spine walls
- Removal of stable troughs, retaining 1no.
- Removal of 2no. existing stairs
- Removal of stall dividers to facilitate new concrete slab required for office loads
- Removal of S-E range timber trusses due to being undersized for new loads
- 1F timber joists to be replaced due to extent of holes
- Removal of existing quarry tiles and screed topping in east range with care taken to not damage the existing brick pavers.
- Sloped floor in north room of Bothy to be scabbled down
- Existing facade lintels raised to suit new levels.

KEY

- CAREFUL DEMOLITION OF WALLS
- CAREFUL DEMOLITION OF FABRIC INC. WINDOWS, DOORS, STAIRS
- CAREFUL REMOVAL OF SCREED, BRICK PAVERS UNDER TO BE RETAINED
- CAREFUL REMOVAL OF QUARRY TILES/SCREED FLOOR TOPPING, BRICK PAVERS UNDER TO BE RETAINED
- CAREFUL REMOVAL OF EXISTING QUARRY TILES/SCREED FLOOR TOPPING AND BRICK PAVERS UNDER
- CAREFUL REMOVAL OF FLOOR JOISTS AND BOARDS



Proposed
Roof Plan 1:200@A3

3.3.3 Proposed Roof Plan

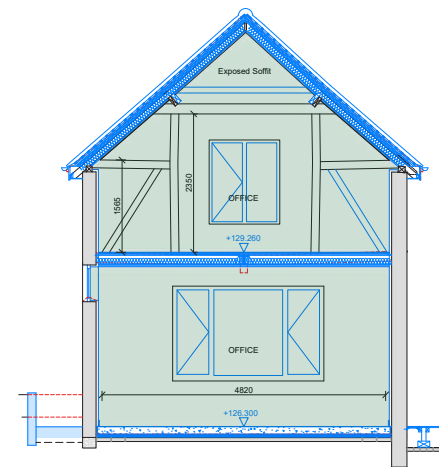
The proposed scope for the roofs include:

- New clay tile roof coverings, battens and insulation between and above rafters to Bothy, East and South range roofs, with % of existing plain tiles salvaged and reused.
- New Neo Conservation rooflight in East Range (797 x 1108mm structural opening)
- New photovoltaic panels on south facade of South Range.

-  Proposed extent of warm roof insulation and replacement clay tile coverings
-  Roof to be tiled with salvaged tiles stripped from existing roofs
-  New handmade peg tiles
-  New photovoltaic (PV) panels



Image of proposed Spicer handmade peg tiles (Hanbury range). Sample panel laid in even mix of the following colours: Antique Dark, Antique Medium and Antique Red. Note sample panel previously proposed on The Mansion roofing project.



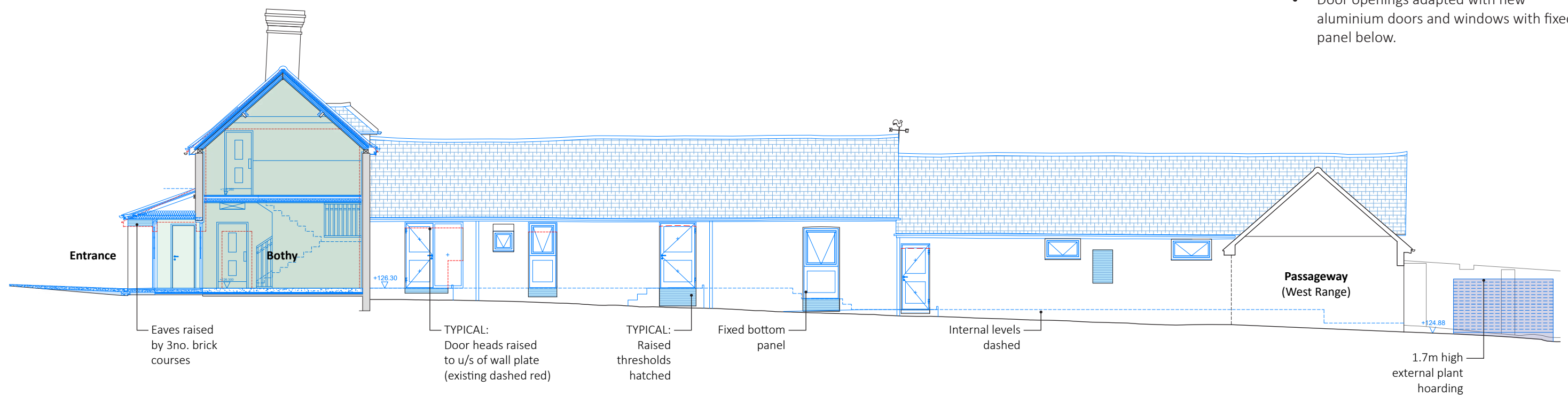
Proposed
East Range Cross Section N.T.S.

- Office space
- Support / common space
- Plant
- New fabric elements

3.3.4 Proposed Site Section

Proposed raised floor levels require following works:

- New insulated concrete slab in Bothy for required office structural loads installed above existing floor with levels built up between 140-210mm (omitting requirement to underpin existing walls)
- Level access from Bothy/East Range to South-East Range requiring raised external door thresholds and door head heights
- Timber access deck installed above existing external hardstanding and concrete setts
- Bothy entrance roof profile adapted to raise eaves by 3no. brick courses.
- Bothy inner entrance lintel and doors to be raised
- Sloped entrance path to be raised by 210mm at threshold with adjusted existing channel drain level
- Door openings adapted with new aluminium doors and windows with fixed panel below.



Proposed
Long Cranked East to West Site Section N.T.S.



01



02



03

Glimpsed views of South Range roof outlined in red - see key plan



04



05



06

3.4 Views from Gardens

The images opposite show a series of glimpsed views from Wakehurst Gardens towards the South Range building roof with new PVs.

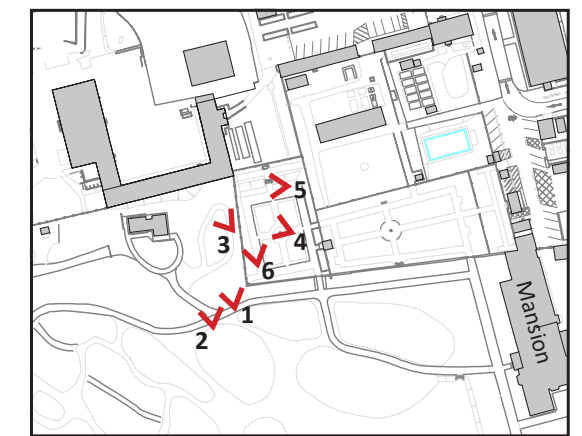
These images were captured in the Winter months with deciduous vegetation opening glimpsed views of the south roof. In the summer months the PVs would be largely concealed from afar by the leaves.

The area of the Registered Park and Garden near the boundary of the South Range in image 03 is very much away from the main visited public areas.

It is considered that the slight visibility of the PVs from the gardens from afar is justified when balanced with the sustainability benefits of installing a renewable energy source for the building.

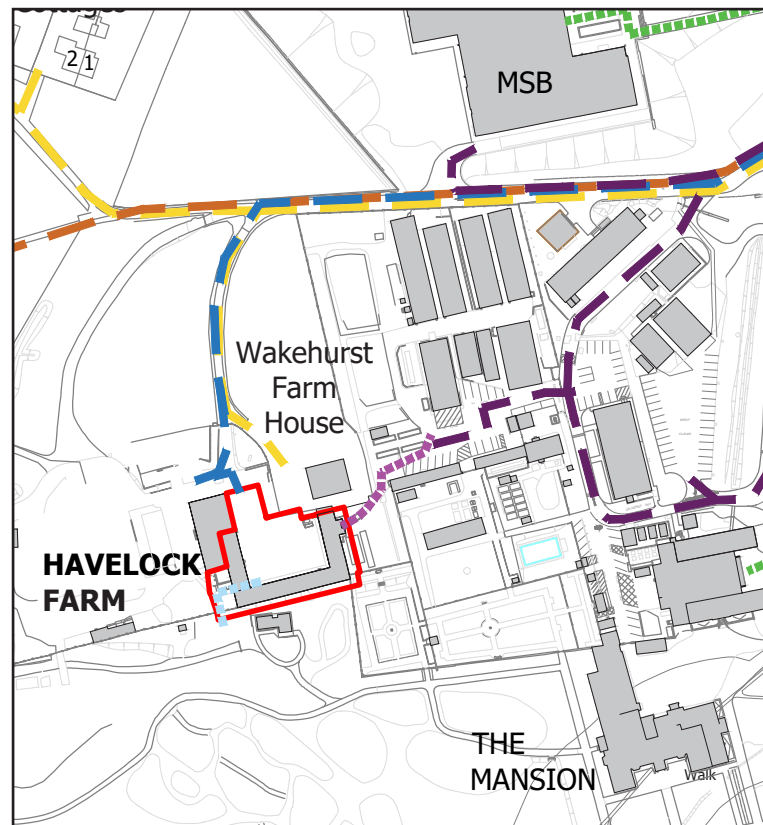
3.5 Appearance

The colour of the window and door frames will be subject to samples with the colour choice based on the principles set out in the High Weald AONB document 'Guidance on the selection of and use of colour in development'. The colour will compliment the existing brickwork to not stand out.

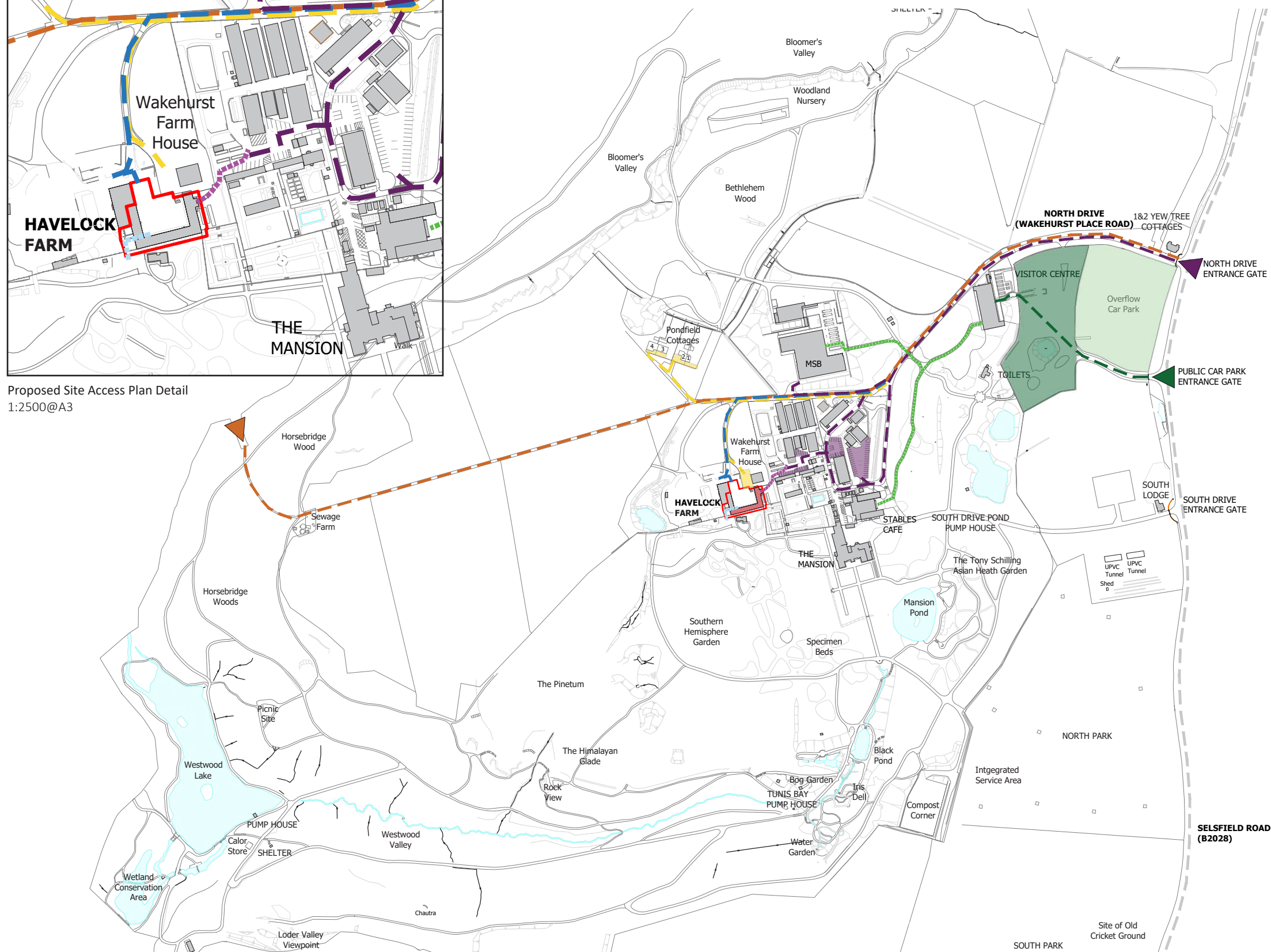


Key Plan of Views Towards South Range Roof

4.0 Access



Proposed Site Access Plan Detail
1:2500@A3



Proposed Site Access Plan 1:5000@A3

4.1 Access

4.1.1 Proposed Access and Logistics

Havelock Farm is accessed on foot from the east via the Bothy entrance. This will continue to operate as the main entrance into the site. Managed staff access direct from Wakehurst Gardens into Havelock Farm is via the south boundary gate.

Refuse vehicles and fire truck access is proposed from the north of the site along the service road and public right of way, and then turning into the private access road shared with the neighbouring Farmhouse property.

The frequency of waste and recycling collections is expected to be limited to 1-2 days per week as the amount of waste created from the offices will be low. The main logistic deliveries will not arrive at Havelock Farm as these will be received at the Millennium Seed Bank.

1no. 1100litre waste bin and 1no. 1100litre recycling bin for office waste are to be located to the north of the barn indicated in item 3.3.1.

- SITE DEVELOPMENT BOUNDARY
- PROPOSED OFFICES
- ▶ VISITOR ENTRANCE
- ▶ MAIN SERVICE ENTRANCE & ACCESS TO PRIVATE PROPERTIES
- ▶ PUBLIC RIGHT OF WAY
- SERVICE/ STAFF VEHICLE ACCESS
- PROPOSED WASTE VEHICLE AND FIRE TRUCK ACCESS
- PRIVATE VEHICLE ACCESS
- PUBLIC VEHICLE ACCESS
- PUBLIC PEDESTRIAN ACCESS (Main Route)
- PRIMARY STAFF ACCESS
- MANAGED STAFF ACCESS
- PUBLIC RIGHT OF WAY
- SELSFIELD ROAD
- PUBLIC PARKING (Designated contractor parking area)
- STAFF/ SERVICE PARKING
- PRIVATE PARKING

5.1 Sustainability Statement

Please read this section in conjunction with the separate Building Services and Energy statement by the Services Engineer MTA.

5.1.1 Sustainability Aspirations

The proposed refurbishment and adaptive reuse of Havelock Farm forms part of the Royal Botanic Gardens, Kew's wider commitment to environmental responsibility with its ambition to become Climate Positive by 2030.

The works are within the envelope of existing buildings and seek to maximise the potential of previously developed land, in line with national and local sustainability and heritage policies.

5.1.2 Sustainability Principles

The following principles are embedded in the proposals:

Reducing embodied carbon

- Adaptive reuse over demolition and rebuild; this forms the basis of the scheme.
- Minimising the use of concrete, which is carbon intensive, by limiting underpinning to localised areas through the careful design of new floor levels

Reducing waste

- Prioritising fabric repair.
- A conservation-led approach will minimise waste and retain embodied carbon through the repair and reuse of existing materials where possible, including repair of structural timber, retrofitting timber windows, minimising excavation and demolition of existing floors, salvage and reuse of roofing tiles.

Fabric first approach

- Improved thermal performance of the building envelope to first reduce energy demand before introducing new technologies into the design.
- Improved measures include adding a lime and cork plaster system to the walls, adding insulation to the roofs and below floors, retrofitting double glazing and introducing high-performance double glazed windows and doors, minimising thermal bridging at the detail interfaces, and enhancing airtightness, while ensuring that the significance of the historic fabric has been preserved and protected.

Energy efficiency & low-carbon technologies

- Air source heat pumps proposed for on-site heating and cooling systems.
- The Variable Refrigerant Volume (VRV) system does not produce on-site pollution unlike traditional fossil fuel boilers.
- Connected to the proposed two external heat pumps, the VRV system offers heating and cooling efficiencies that are approximately three times greater than standard direct electric heating systems.
- Clean energy generation; solar photovoltaic panels have been proposed to replace existing panels that are no longer functional and to provide a local means of energy generation in alignment with Kew's net-zero goal.
- LED low-energy fixtures have been specified with the lighting to incorporate automatic occupancy sensors and time control programming.

Promoting health and well-being

- The spaces are generally double aspect with good access to natural daylight and good connections to outdoor amenity spaces.
- New windows are openable providing opportunities for purge ventilation. This supplements the Mechanical Heat Recovery Ventilation (MHVR) systems that are used to provide adequate air supply for occupant comfort while recovering some of the spent heat, further reducing energy consumption
- The services systems also include monitoring and control of CO₂, which can provide optimal conditions for a healthy working environment and boost productivity.

Water efficiency

- Low-flow restrictors and aerator taps specified to reduce water usage.
- All WCs are to be fitted with dual flush cisterns.

Climate Resilience

- Mechanical and electrical systems have been designed with flexibility and future-proofing in mind, allowing for adaptation to changing climate and operational needs.
- An overheating analysis has been undertaken to evaluate potential overheating conditions in the building, accounting for future climate resilience, with the results informing the services design and limiting the extent of additional glazing.

5.2 Drainage

Refer to the Civil Engineer's drainage strategy statement. This summarises the following:

- The existing Havelock Farm is served by foul and surface water drainage, which discharge to the wider private Wakehurst network. There are some locations where the surface water currently discharges into the foul network which will be rectified during these works to separate the networks, in accordance with best practice.
- The proposals for Havelock Farm do not increase the impermeable areas.
- The existing drainage network will be repaired where necessary with additional connections to suit the revised layout.
- The proposals will provide betterment to the existing situation by separating the surface water from the foul network.

6.0 Appendices

6.1 Appendices

Refer to other submitted reports and information including:

- Planning drawings listed below
- Planning Statement by TPL
- Heritage and Impact Statement
- Structural Report
- Drainage Report
- Building Services and Energy Statement

6.1.1 Drawing Register

Size	Scale	Drawing Number	Drawing Title
A1	1:2500	2280-2/00/01	Existing Site Location Plan
A1	1:500	2280-2/00/02	Existing Site Plan
A1	1:100	2280-2/00/03	Existing GA Plan- Ground and First Floor
A1	1:100	2280-2/00/04	Existing GA Plan- Roof
A1	1:50	2280-2/00/10	Existing Elevations- Bothy / East Range
A1	1:50	2280-2/00/11	Existing Elevations- South Range North Elevation
A1	1:50	2280-2/00/12	Existing Elevations- South Range South Elevation
A1	1:50	2280-2/00/13	Existing Elevations- Bothy and South Range Gables
A1	1:100	2280-2/01/03	Proposed GA Plan- Ground and First Floor
A1	1:100	2280-2/01/04	Proposed GA Plan- Roof
A1	1:50	2280-2/01/07	Proposed Sections- South Range
A1	1:50	2280-2/01/08	Proposed Sections- Bothy and East Range
A1	1:50	2280-2/01/10	Proposed Elevations- Bothy / East Range
A1	1:50	2280-2/01/11	Proposed Elevations- South Range North Elevation
A1	1:50	2280-2/01/12	Proposed Elevations- South Range South Elevation
A1	1:50	2280-2/01/13	Proposed Elevations- Bothy and South Range Gables
A1	1:50	2280-2/02/06	Condition Survey Elevations- Bothy / East Range
A1	1:50	2280-2/02/07	Condition Survey Elevations- South Range
A1	1:50	2280-2/02/08	Condition Survey Elevations- Gable Ends
A1	1:100	2280-2/03/01	Proposed Demolition Plan- Ground and First Floor
A1	1:100	2280-2/03/02	Proposed Demolition Plan- Roof
A1	1:100	2280-2/03/04	Proposed Demolition GA Elevations





MARTIN ASHLEY
ARCHITECTS

Regal House,
70 London Road, Twickenham,
TW1 3QS
www.ma-arch.co.uk