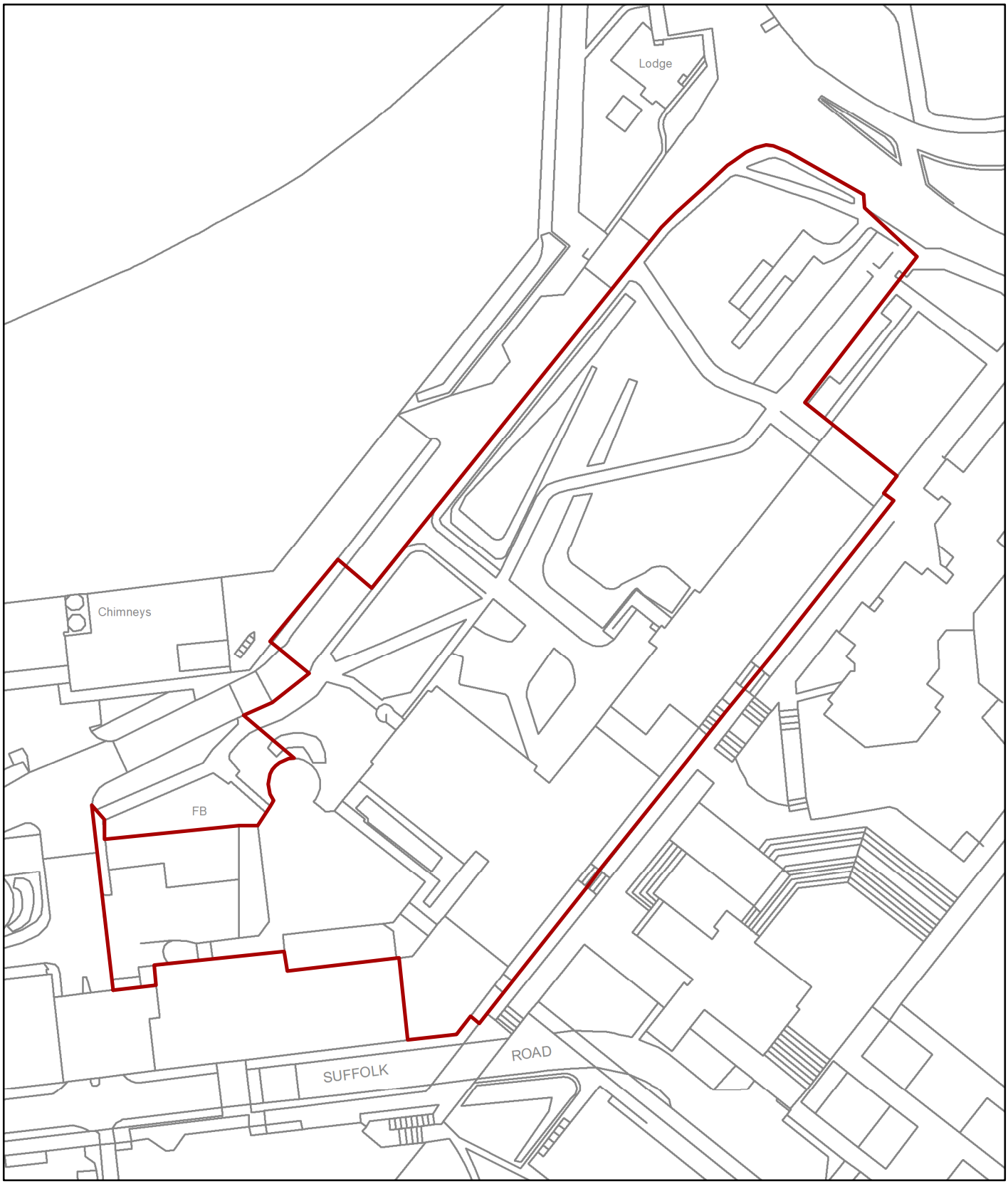
Report to	Planning applications committee 29 September 2022	**Item** 3a
Report of	Head of Planning and Regulatory Services	
Subject	Application nos 22/00570/F and 22/00571/L – (Lasdun) Teaching Wall Building 3, Norfolk Road, University of East Anglia, Norwich	
Reason for referral	Objections from consultees and raises issues of wider significance (at the discretion of the Head of Planning and Regulatory Services)	

Ward:	University
Case officer	Lee Cook - 07917 175648 - leecook@norwich.gov.uk

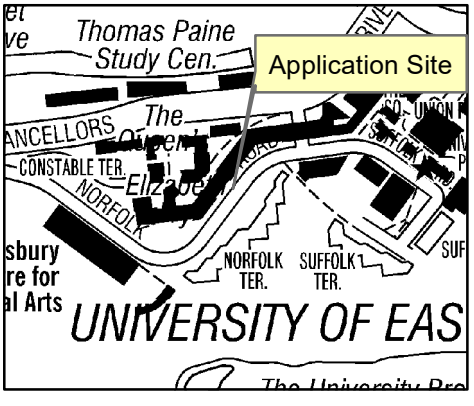
Development proposal		
Refurbishment and repair of Building 3 for highly specialised scientific research, engineering and general teaching facilities (Class F1(a)) comprising installation of thermally efficient double glazed window system, internal alterations, construction of two full height extensions to the north facade of Building 3 connected by bridging links, extension to the arts spur, including compliant stair case and goods lift, covered walkway for goods lift, and associated infrastructure, including accessible entrance, servicing, accessible car parking, saline tank storage, installation/diversion of enabling infrastructure, reconfiguration of existing pedestrian routes, double stacked cycle storage and landscaping, incorporating sustainable urban drainage systems and any other enabling and temporary works on land to the north of the Lasdun Wall.		
Representations		
Object	Comment	Support
0	0	0

Main issues	**Key considerations**
1 Principle	Policy framework, Campus allocation site / area. Evidence to substantiate adverse heritage impact arising from works
2 Heritage	Listed buildings, conservation area, designated & non-designated heritage assets, architectural character, historic landscape features. Extent of impact of joint works.
3 Design	Scale, layout, grid form, massing/stepping, materials, landscaping. Character of area. Relationship to host listed building.
4 Landscape	Existing character, landscape setting, Colvin principles for design, protecting and enhancing established features, planting mitigation and appropriate screening, green links through campus, public accessibility.

Main issues	Key considerations
5 Trees	Tree protection and removal, arboricultural methods, construction access, replacement planting.
6 Biodiversity	Species protection and enhancement of site and Campus habitat. Assessment of local situation and mitigation for development impacts. Green Infrastructure Strategy. Nearby Yare Valley character area and protected woodland links.
7 Transportation	Travel planning, encouragement of forms of modal shift, cycle parking, accessible routes/design. Movement strategy - Pedestrian and cycle access through site and links to wider area. Provision of parking, suitable access and servicing. Electric Vehicle charging.
8 Nutrient neutrality	Existing situation. Site survey for assessing impact and any remedial strategy. Drainage relationship to protection zones.
Expiry date	20 September 2022
Recommendation	Approve planning permission Grant listed building consent



Planning Application No	22/00570/F & 22/00571/L
Site Address	Teaching Wall, Norfolk Road University of East Anglia
Scale	1:1,000



NORWICH City Council

PLANNING SERVICES

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The site and surroundings

1. The site is within the University of East Anglia (UEA) campus close to the junction of University Drive and Chancellors Drive. The extension site is on the north side of building 3 of the Lasdun Wall close to Founders Green and south of Chancellors Drive.

2. University Drive connects between Earlham Road (B1108) and Bluebell Road and these provide the two main vehicle entrance points onto the campus. University Drive also provides for bus stops servicing the campus and access points into the main surface car park. Further bus access is taken along Chancellors Drive. To the east of the site and south of Cow Drive is the main UEA surface car park. Other parking areas are located within the main campus with access from internal circulation routes. A small area of parking and also service access is located north-east of the Arts Spur of building 3.

3. There are several pedestrian and cycle access/egress points around the campus with Cow Drive to the north of the Bluebell Road campus junction providing part of the pink pedal-way route east-west from the City (along Bluebell Road and the Avenues) via Chancellors Drive into the Norwich Research Park (NRP) and Norfolk and Norwich Hospital across the river Yare to the west. At the eastern end of the Wall is a convergence of several pedestrian and cycle access points and provision of cycle parking facilities. The security lodge and associated service and other spaces is next to the roundabout to the north-east.

4. Earlham Park and the Sportspark are to the north along University Drive. Earlham Park forms part of the Earlham Conservation Area and is designated as historic parkland. The campus itself is separated from the surrounding area by areas of established planting along Cow Drive and by Violet Grove along the southern edge of the Park.

Constraints

5. Policy / development plan designations – The application site falls within the specific area designation within the Local Plan as UEA Campus (DM26)

6. Heritage designations – Grade II listed Lasdun Wall. Other nearby buildings are noted as having significance within the UEA Conservation Development Strategy. The Grade II walkway and Grade II* ziggurats are important to the setting of the Teaching Wall. Earlham Park Conservation area is adjacent to the north-west as Violet Grove reaches the campus boundary. The grade II* listed Earlham Hall and immediate grounds sit within an area of tree planting within the Park. The wider Park is also designated as historic parkland (DM9).

7. The UEA Campus has evolved since the original Lasdun development in the late 1960’s and as buildings have evolved out of the central core they have stuck more or less rigorously to the Lasdun “grid” layout. This forms an element of the master-planning approach to the campus and is also part of its intrinsic interest. Within the area of the application site the “grid” is defined by the Lasdun Wall and Registry buildings, roadways, blocks of landscaping leading down to Chancellors Drive and development along Chancellors Drive itself. The Arts Spur is evidence of an earlier

planned connection to a second Teaching Wall intended to run parallel to the current Wall (DM3, DM9).

8. Natural environment designations / issues – There are various trees and landscape features in the area and on site suitable for protection. Yare Valley protection area, woodland (DM6, DM7) and open space designations to the north, east and west (DM8) are other notable features in the area.

9. Environmental constraints – Previous history of land uses with potential for contamination (DM11). Topography – a wide variety of site levels exist on the extension site and adjacent area. Generally, the campus area is sloping towards the river as part of the river valley. The site area has an approximate 3m level change east to west. Layout – The UEA Campus or Lasdun "grid" layout as mentioned and constraints to establishing such a relationship due to maturing landscaping and position of utilities and other service connections since established within the area (DM3, DM7, DM9). Ground stability – not known, further assessment required as part of discussion on site drainage strategy (DM5, DM11). Parts of the site are close to Environment Agency mapped surface water flood areas or within some identified surface water hazard areas, to be assessed in terms of issues such as landscape design and building use (DM3, DM5)

Relevant planning history

10. Several more minor changes have occurred within or to the Lasdun Wall which are not wholly relevant to these proposals. Some "extensions" to the Wall have occurred at the Biomedical Research Centre (BMRC) and Lawrence Stenhouse Building which have varying degrees of connectivity to the main Lasdun Wall. More recent relevant history of works on campus and to the Wall include the following:

Ref	Proposal	Decision	Date
04/00093/F	Erection of phased 2/3 storey decked car park with associated alterations to existing car park, landscaping and roadworks.	Approved	01/06/2004
07/00236/F	Erection of decked car park and dry biomass combined heat and power facility. (Revised Scheme).	Approved	20/11/2007
16/01291/L	Alterations to internal walls of level 3 and minor works to partitions in level 1 & 2. Arts Wing	Avoiding a refusal Finally Disposed of	28/06/2017
18/01061/F	Creation of a cycle storage area on the existing Boiler House roof, including provision of a shelter, Sheffield cycle stands to ramp and roof areas, a gate to Chancellor's Drive entrance with associated works. Installation of plant equipment.	Approved	16/05/2019
19/00511/L	Refurbishment of science block 5 lecture rooms SCI 5/0.31 and SCI 5/3.05	Approved	26/06/2019

Ref	Proposal	Decision	Date
19/00771/F	Installation of underground services and associated engineering works (revised proposal).	Approved	09/09/2019
19/00874/F	Alterations to existing footpaths.	Approved	06/09/2019
19/01427/F	New 'The Sky House' building (Class D1) and associated infrastructure.	Approved	11/05/2020
19/01748/F	Construction of new cycle parking facility for up to 526 cycles and associated landscaping/infrastructure including improved accesses to Dr Bike and from the INTO Building.	Approved	26/06/2020
19/01521/F & 19/01522/L	Internal and external alterations to Building 6 of the Lasdun Wall to facilitate the delivery of a new centre for engineering at UEA, with associated landscaping.	Approved	22/06/2020
19/01612/FT & 19/01613/L (last telecoms record on building 3)	Removal of existing 3no. antennas and installation of replacement 3no. antennas on existing support poles. Ancillary development including installation of 9no. remote radio heads (RRH's), 1no. GPS mount and 3no. freestanding frames.	Approved	28/01/2020
20/00499/F & 20/00500/L	Temporary installation of fixings to secure concrete spandrels and creation of temporary re-usable holes into external columns for scaffold fixings	Temporary Approval	21/10/2020
21/00782/D	Details of condition 3: Phasing plan of permission 20/00499/F.	Approved	10/01/2022
21/00783/D	Details of condition 3: Phasing plan of 20/00500/L.	Approved	12/01/2022
20/01547/F & 20/01548/L	Alterations to the western elevation of the Teaching Wall, installation of condensers to ventilate the associated workshop rooms and blocking up of window, to facilitate the delivery of a new centre for engineering at UEA	Approved	17/02/2021
21/00858/F & 21/00859/L	Temporary installation of fixings to secure concrete spandrels (additions to and variation in detail of some previously approved panel fixings)	Temporary Approval	11/02/2022

The proposal

11. The site proposal is shown as split into 2 areas of work – firstly full height extensions on the north of the Lasdun Wall at building 3 together with an extension to the Arts Spur and associated works at high level for plant, machinery, and ventilation to enable science and research uses in particular at this end of the Wall. Other areas of building 3 will be in engineering and general teaching use and will

also house some of the reception and admin function moving from the Registry building. There are associated external works around access and landscaping redesign. These external works include service access, saline tank and refuse enclosure and a covered / part below ground service walk and entrance to the north end of the Arts Spur.

12. Secondly, an approach to a phased refurbishment of the Lasdun Wall aimed at responding to building failures arising from inception design and the buildings ongoing use for the last 60 years. Demolition included with the application relates to removal of some spandrel panels, internal walls and strip back in some areas to the original concrete building frame.

13. Building 3 is generally described within the application as being phase 1 of a whole building refurbishment scheme. Incorporated into these current proposals is a move of science and research spaces from building 6 at the opposite (western) end of the Wall to the refurbished building 3, this “new” use is largely enabled in the proposal due to the reorientation of the building with an increased floor span. The design approach requires a 28m depth of floor plate to promote what are seen to be efficient spaces for science and research together with suitable internal circulation space. This UEA brief requirement for such deep plan modular laboratory layouts is said to be delivered in the most efficient way by the proposed development within the application.

Summary information

Proposal	**Key facts**
Scale	
Total floorspace	Net additional gross internal floor space following development of 2674.5m² bringing the total new floor area to 14197.5m². Main uses included are teaching rooms, Productivity East workshops and labs, general use workshops, autoclave suite, specialist laser lab, Controlled Environment Facility (CEF), instrument platforms, bio-imaging and structural imaging, biology labs, some specialist and analytical labs, synthetic chemistry and analytical labs, small quantity of specialist labs and supporting labs and various write-up spaces. Science Research space is located on all floors of B3 although it is concentrated in the Arts Spur on Levels 0 and 1.
No. of storeys	The ground levels around the Wall step down towards the river Yare. This means within the new proposal the building spans 7 floor levels with some being subterranean or revealed in the stepping of ground level. The finished floor level of the roof remains the same as with the existing building 3.

Proposal	Key facts
Max. dimensions	The height of finished floor level 03 to finished roof level is in the region of 26.6 metres with the building (with the exception of plant screens and equipment) matching the height of building 3. The extension out approximately doubles the depth of the Wall, but the extension is stepped in and out to give some relief to the north side elevation and expose more elements of the original building.
Appearance	
Materials	The main feature on the new extensions will be fibre cement boarding with potential for matching glass reinforced cement cover materials where used as external insulated cladding over or close to existing concrete. Upper-level screening to plant is in fitted glass. The extensions also feature areas of glass curtain walling.
Construction	Extensions are formed from a concrete frame with fibre cement façade – materials being selected for durability / maintenance and to respond to the simple palette of materials used across the campus. Existing building columns will be clad with thermally insulating glass-reinforced cement panels to improve thermal performance of the main Wall.
Energy and resource efficiency measures	The proposed scheme provides a strategy targeted on excellence in building design and function with a bespoke design framework encompassing best practice from multiple assessment methodologies including BREEAM, SKA, LETI, Labs21, S-Labs and UKGBC. This approach intends sustainability to be applied to each part of the project in a bespoke manner. The scheme should provide betterment over Part L of the Building Regulations, of 10.5% in terms of energy. The proposed ‘fabric first’ works to improve the thermal performance of the façade of the existing building will improve post-refurbishment performance with the betterment over Part L of the existing post war, thermally inefficient building, close to that achieved for the new build extension. Renewable energy sources include roof mounted photovoltaic panels (PV’s), air source heat pumps (ASHP) and connection to the campus district heating system (DHM).
Operation	
Opening hours	Open to students and public throughout the day. Likely to be controlled access within the building
Ancillary plant and equipment	Plant room spaces are located around each building plus dedicated plant enclosures are designed for roofs. Equipment is likely to be mainly fume extract fans, mechanical ventilation heat recovery units (MVHR), air handling units (AHU), Condensers (for heat recovery), air source heat pumps (ASHP). All supply and extract air to the building will be filtered for particulates. The fume extract and

Proposal	Key facts
	discharge arrangements will be the same as existing in other parts of the Wall.
Transport matters	
Vehicular access	Marginal realignment of University Drive and changed carriageway and connection into Chancellors Drive
No of car parking spaces	Repositioning of 3 existing car spaces and redesign to allow for accessible disabled parking.
No of cycle parking spaces	Redesign of existing single tier cycle spaces to include retention of existing 144 spaces within a tiered cycle parking system.
Servicing arrangements	Bin store and delivery points on Chancellors Drive. The former post room accessed from Chancellors Drive has been relocated to premises within The Street.

Representations

14. Advertised on site and in the press. No letters of representation have been received.

Consultation responses

15. Consultation responses are summarised below the full responses are available to view at http://planning.norwich.gov.uk/online-applications/ by entering the application number.

Anglian Water

16. No objection in principle. Noted there are no Anglian Water (AW) assets in the area; foul drainage is within the catchment of Whitlingham Trowse Water Recycling Centre which does not have capacity but AW would take steps to ensure that there is sufficient treatment capacity if PP is granted; development will lead to an unacceptable risk of flooding downstream but will work with the applicant to ensure any infrastructure improvements are delivered; require confirmation as to whether this will be gravity or pumped system – therefore request a condition requiring an on-site drainage strategy, including on-site foul water drainage works, connection point and discharge rate; also for informatives on any PP for notice being required under Section 106 of the Water Industry Act 1991 to connect to a drain, protection of existing assets (public drain), statutory easement width of 3 metres from the pipeline, and any sewer adoption agreement.

17. Noted preferred method of surface water disposal for AW would be to a sustainable drainage system (SuDS); surface water strategy/flood risk assessment submitted is unacceptable to Anglian Water due to no evidence of the hierarchy being followed or for point of connection to the main sewer; recommend condition for surface water strategy to ensure appropriate control over the surface water drainage approach; condition also to advise that no hard-standing areas to be constructed until the works have been carried out in accordance with the strategy. Noted application

includes employment/commercial use asked for informative advising that an application to discharge trade effluent must be made to Anglian Water.

18. **On re-consultation** confirmed they have no additional comments to add.

Twentieth Century Society (C20 Society)

19. Object. Strongly disagree with the assessment that many months of engagement with heritage stakeholders and the Local Planning Authority (LPA) has been undertaken to ensure the design response seeks to mitigate any harm to the heritage asset in the design approach as much as possible, arriving at less than substantial harm and on the contrary consider that the proposed works would constitute substantial harm.

20. Reiterated their pre-application comments of 4 August 2021 and is extremely disappointed that the proposals remain substantially unaltered since that date.

21. Do not feel that the proposed extensions would be “carefully calibrated and sympathetically massed” and consider them to be over scaled. Additionally, the proposals would adversely impact the settings of the adjacent Grade II* Ziggurat blocks. Agree that retaining university use would be beneficial in heritage terms, but that this aspect of significance could be retained by continued use for alternative teaching purposes, or student accommodation, which would be compatible with the existing floor plate.

22. The proposals are justified on economic grounds, which C20 Society do not feel should outweigh the heritage arguments including preservation of historic fabric and original plan form. That there is no alternative to the proposed refurbishment if the building deterioration is to be stopped or without refurbishment and such intervention it is likely that the whole Lasdun Wall will need to be closed permanently is clearly not necessarily the case and has not been conclusively proven.

23. As far as the façade upgrade works to allow the University to achieve its Net Zero Carbon targets C20 Society have previously advised they would only be willing to support a re-glazing scheme provided the quality of detailing was of sufficiently high quality for such a major element of an internationally significant campus. Stress the need to maintain the appearance of the listed building, reducing any reflectivity changes and maintaining the slimness of fenestration elements and are not convinced that blocking off some of the windows would be compatible with such an approach.

24. Therefore, recommend refusal of planning permission and listed building consent. Also understand that trial sections and full-size mock ups of aspects of the proposed new window system (including the new sill detail which would necessitate a substantial visual change) are planned to be available to view on site. As such reserve judgment on this aspect of the proposals

25. **On re-consultation** advised C20 Society is now satisfied with the proposed replacement of glazing. This maintains the appearance of the original design while improving its performance. The reversion of the glass to the transparency of the original design is a positive decision. However, they maintain their strong objection to other aspects of the proposal – the extensions to the Wall will entail significant

damage to the historic fabric and any refurbishment should be carried out without over scaled extensions, which cause harm to a listed building.

Norwich City Council - Design and conservation

26. Commented on ongoing design evolution and scheme impacts both on the local area and on designated heritage assets. Provided detailed comment in relation to the nature of impacts and advised that the harm caused is less than substantial. Suggested a variety of conditions and suggested how and what mitigation strategies the applicant could use to reduce levels of harm being caused.

Fire Officer

27. No comment

Historic England (HE)

28. Consider these proposals would result in less than substantial harm to the historic significance of the building in terms of the NPPF and while the new laboratory facilities could deliver a benefit to the wider public, would not support the application.

29. Noted the masterplan approach by architect Denys Lasdun at the heart of which was the concept of a building containing teaching facilities. The essence of the masterplan has been built in terms of the Wall, walkways, ziggurats forming a functional and visually striking composition seen from the new Broad created as part of the landscape design. This is one of most recognisable and celebrated works of the 1960s ‘new university’ movement. Noted the part finished nature of this masterplan and newer buildings constructed in the following years where the northern range of the Teaching Wall would have stood. However, the eastern end remains unencumbered, and this is where the solitary spur is to be seen giving this end particular significance. The extensions obscure the Wall itself and affect an ability to appreciate the spur. Have recommended that any extension is done in a way which had less physical impact and might either reduce the visual effect of obscuring the wall and the spur or to reinstate something of the Lasdun concept by extending from the spur. Such less harmful options were rejected by UEA chiefly for operational reasons. The promoted design raises concern on loss of historic fabric and on visual impact which cannot be mitigated. However, the scheme is a carefully considered design of some quality which seeks opportunities to emphasise the presence of the original building.

30. An additional consequence of relocating laboratories is the very large amount of plant proposed to be installed on the roof. Noted the importance of Lasdun’s architectural composition as seen from the direction of the Broad. The amount of rooftop plant proposed would be seen in these key views and has required additional screening as part of the design which adds an additional horizontal line to the profile of the Wall. The differentiation between the rooftop concrete towers, a crucial element of the design, is noticeably diminished by the screen wall. This would result in harm to the historic significance of the listed building.

31. As well as the effect on the exterior, HE considers there would be harm to the listed building through the internal works proposed to the plan form and from the loss of some fittings. This is partly mitigated by circulation patterns and retention of stair

cores. If loss is inevitable due to asbestos these should be replicated to maintain the coherence of these spaces. In addition, some fittings outside the stair cores are of particular interest. The assessment of the whole Teaching Wall carried out by Purcell identifies more extensive and perhaps better examples of fittings and furniture, although some of this is by Fielden and Mawson and not Lasdun. They do contribute to the significance of the building overall and the loss of historic fittings as a result of the proposed new laboratories would be harmful to the building's historic significance. There are positive elements in the general approach to interiors such as removing suspended ceilings and exposing the concrete structure. It is unfortunate that the highly demanding fire plan for the building would require intumescent paint to be applied but on balance the exposure of this structure would be considered positive. The general approach suggested for ventilation and light fittings to differentiate them from the concrete structure is a positive approach which will allow better appreciation of the original construction.

32. The south elevation of the Teaching Wall would also undergo change. The structural condition of the concrete facing panels has long caused concern and temporary remedial works have been implemented. The scheme would introduce a permanent solution, remove any hazardous materials and increase thermal insulation while the panels are retained in place. This approach is supported and is associated with installing improved insulation to floors and ceilings.

33. The windows of Lasdun's Teaching Wall constitute a large part of the elevation and also a large part of its architectural character. Notes 'the external envelope is considered to be particularly important in terms of the Listing' and that given this importance 'alterations will only be possible if they are not considered harmful to the existing historic character and are fully justified in terms of ensuring the future preservation and beneficial use of the building.' The issue of improving the thermal performance of the windows and correcting a drainage detail causing problems in the fabric below the windows has been subject of discussion with HE who requested that a full range of options for improving the windows are considered including replacement, reuse or adaptation of the frames. The latter could greatly reduce the harmful impact on significance by reducing the amount of historic fabric lost. The current application includes a window condition report as an update to an earlier 2014 assessment. These consider replacement of the existing windows, but not their repair and improvement. Conclusions states that in terms of the appropriate British Standard the existing windows are beyond repair. This is not unusual for listed buildings to run against current standards and a more nuanced approach to assessment of windows would be expected and conclusions about window replacement or repair tested. The wholesale replacement of windows on this section of the Wall proposed would cause considerable harm to the significance of the listed building. The NPPF requires that 'clear and convincing' justification is sought for any harm and as no proposals for repair and upgrading of the existing windows have been developed, HE finds it difficult to conclude that options to reduce the harm, while still delivering the public benefit of an improved building, have been fully explored.

34. As with the design of the extension, careful consideration is given to the detail of the new windows, looking at the most effective way of maintaining the broad pattern of fenestration as well as the dimensions of the frames and glazing bars aiming to maintaining the broad aesthetic of the building, if not the value of its fabric. Acknowledge that the proposed final option for the replacement windows goes a considerable way to achieving these aims in their own terms.

35. The NPPF states that clear and convincing justification should be made for any such harm and that ‘great weight’ should be given to the conservation of listed buildings irrespective of the level of harm caused (paragraphs 199 and 200). This justification should be especially convincing where harm to buildings of a high grade of listing is concerned, as is the case with the grade II * listed ziggurats. HE are therefore concerned that some elements of the scheme could result in harm to the architectural and historic significance of the grade II listed Teaching Wall itself, listed walkways, library and grade II* listed Ziggurats through development in their setting. Part of the northern side of the Teaching Wall would be demolished and an important part of it obscured, profile of the southern elevation would be altered and fabric lost, some interior fittings and part of the plan form would be changed. The demolition in particular would be highly damaging. On balance conclude this to be less than substantial harm to the listed building in terms of the NPPF, paragraph 202. Noted that Paragraph 202 of the NPPF requires local planning authorities to consider the public benefit of proposed changes and weigh this against harm to the heritage assets. HE would accept that the new laboratories could deliver public benefits. The design is based on highly exacting specifications which the applicant states require the precise form of extension proposed.

36. **On re-consultation** Reiterated that the extensions would, because of location on the Wall, result in harm to historic and architectural significance of the Wall and remain of the view that only an alternative location would significantly reduce that impact. Also, that the addition of the plant on the roof and the screen to hide it would result in harm to the architectural significance. On the internal alterations and replacement windows and new information on both noted discussions with the applicant and Council officers.

37. The document ‘Planning Addendum Volume 2 …” looks at window condition and repair options and also options for improving the performance of the windows, both to address the drainage detail built into the sills and increase thermal insulation. Previously considered design options for a more conventional drainage detail (a projecting sill) which would also change the appearance of the windows and have a negative effect on the building through changes to its appearance. The Addendum also suggests that achieving an improved thermal performance would result in further visual changes to the window frames. The visual changes to any retained, but improved windows are of concern as the fine detail of the windows externally is important in the design aesthetic.

38. Noted it is difficult to balance the harm resulting from loss of historic fabric against that from visual change, but HE notes that the design for replacement windows does, with the exception of the changed sill detail, constitute a good approach to maintaining the appearance of the building. Providing an agreed design is implemented across the whole building for future phases of work feel there could be an argument to install new windows which better achieve conservation of the appearance and architectural significance of the building. However, notes the excessive size of corner mullions included in samples of the new windows and would very probably have a negative effect on the appearance of the building. Ask that the Council confirm detail of the mullion and reinforcing elements of windows.

39. Noted HE are unlikely to support render to parts of the building exterior and a proposal to paint the exterior facing panels of the Teaching Wall with Keim anti-carbonation coating. These are cast concrete of a far better quality and widespread corrosion of reinforcing steel is not seen. The use of the Keim product would

therefore be wholly cosmetic and not in line with the agreed approach to concrete repair and conservation.

40. Remain concerned that the proposed extension and replacement windows would result in harm to the architectural and historic significance of the grade II listed Teaching Wall itself and also of the listed walkways, library and grade II*listed Norfolk and Suffolk Terraces through development in their setting. There could be an argument for replacement of the windows if the appearance of the building and its architectural significance would be conserved, although the loss of historic fabric would remain. Would encourage the Council to seek improvement of the proposed window design. The Council should assess the merits of any justification but in heritage terms HE would not support the application as it stands.

Norwich City Council - Environmental protection

41. No objection in principle.

Norwich City Council - Landscape

42. No objection in principle. Has requested various modifications including to pathways, landscape features and layout within the site and additional information to support the design approach to landscaping and site enhancements to offset impacts arising from development. Also sought clarity on a green infrastructure strategy for campus wide enhancements to help offset on-site habitat and tree loss – such a scheme is an important requirement for enabling development on this site. Is content that the items raised during discussions have been addressed especially in relation to the sunken terrace, general layout and cycle storage area. Will require further details of the proposed swale including birch tree planting as the design is finalized with the drainage engineer and suggested issues of ground compaction and potential root damage along desire lines which would benefit from air spading.

Norfolk County Council - Highways (local and strategic impacts)

43. No objection in principle. Discussed the proposal in relation to detailed design and provision of suitable access, construction activities, parking, cycling facilities, highway design and travel planning for the area. Commented that the main strategic highway concerns are with the construction phase when HGV traffic will be evident on the local highway network. This poses potential risks to pedestrian and cyclist traffic within and beyond the campus. A Construction Traffic Management Plan with HGV routing and risk management plan and subsequent compliance with the 'Construction Traffic Access Route' are suggested by condition.

44. The increase in floor space to the teaching facilities is significant, yet no explanation is given as to why the associated provision of cycle parking will remain as existing. Notwithstanding this concern, there is approved provision for additional cycle parking on the campus that could tackle any deficit. What remains of concern is that the cycle parking area does not have adequate cycle access from University Drive. Currently the cycle park leads to a footway and a loading bay that is often obstructed by vehicles. This layout problem should be revisited. Despite these concerns, it would be difficult to substantiate an objection, and additional condition is recommended for provision cycle parking, EV charge points, car parking and servicing being provided prior to use of the building extension.

Norfolk County Council – Lead Local Flood Authority

45. No detailed comment as scheme below consultation threshold. LPA should satisfy themselves that the applicant has demonstrated compliance with the NPPF paragraphs 155 - 165 by ensuring that the proposal would not increase flood risk elsewhere and will incorporate sustainable drainage systems. The applicant should also demonstrate how the proposal accords with national standards and relevant guidance or stated their reasoning and the implications of not doing so. LLFA have also provided summarised the relevant section of the County Council's standing advice.

Norfolk historic environment service

46. No objection in principle. The application would not have any significant impacts on the Historic Environment in terms of below-ground archaeology. No conditions for archaeological work will be required on these applications.

Norfolk police (architectural liaison)

47. No objection in principle. Encourages the agent and UEA to consider applying for the Secured by Design for this refurbishment to help reduce crime, fear of crime and disorder. Advised that a Commercial Developments Design Guide is available for use. Provided detailed in terms of main entrance design and desire that the area beyond is seen as Private to the general community; noted scheme avoids blank windowless elevations to promote a development that increases Natural Surveillance; recommends that clear signage noting surveillance is taking place and surveillance features are incorporated into the scheme; that reception desks should be high and deep enough to afford protection for the receptionist, but designed to consider the needs of a wheelchair user; to consider the design criteria for car parking laid down in the police owned 'Park Mark' initiative; suggested surveillance of cycle parking facilities and use of secure cycle parking storage and parking options; advocates promoting both cycle security and cycle marking/registration; suggests a carefully designed Lighting plan to cover all vulnerable areas should be in place; that any landscaping plan needs to provide all specified shrubs and hedges that have a maximum growth height of one metre and all trees should be "up pruned" to a minimum height of two metres to maintain a clear field of vision around the site; and that a suitably designed, fit for purpose, monitored intruder alarm system must be installed.

48. **On re-consultation** reiterated earlier comments and also noted that the cycle security area is somewhat distant from active rooms of the existing building and could be considered to be lacking in appropriate guardianship levels and therefore provides increased potential vulnerability to users. Included standards for public cycle parking document June 2021.

Norwich City Council - Ecology

49. No objection in principle. Asked for several amendments and clarifications and following discussion and submission of further information has reviewed the updated Preliminary Ecological Assessment (PEA) and Soft Landscape Proposals incorporating Biodiversity Net Gain (BNG). Also now seen the full BNG metric which in principle is acceptable and suggested conditions in relation to landscape design

ensuring the BNG report is fully actioned, site lighting details required, bird nesting protection and further mitigation details required.

Norwich City Council - Parks and Open Spaces

50. No comment

Norwich City Council - Tree protection officer

51. No objection in principle. Discussed impacts on site in relation to tree value and agreed to various tree removals due to their condition and contribution to the landscape value of the area. Noted submitted arboricultural information is acceptable and agreed to defer to natural areas officer in terms of the numbers of replacement trees which might be required for the site.

Yare Valley Society

52. No comment

Assessment of planning considerations

Relevant development plan policies

53. **Joint Core Strategy for Broadland, Norwich and South Norfolk adopted March 2011 amendments adopted Jan. 2014 (JCS)**
    - JCS1 Addressing climate change and protecting environmental assets
    - JCS2 Promoting good design
    - JCS3 Energy and water
    - JCS5 The economy
    - JCS6 Access and transportation
    - JCS7 Supporting communities
    - JCS9 Strategy for growth in the Norwich policy area
    - JCS12 The remainder of the Norwich urban area including the fringe parishes

54. **Norwich Development Management Policies Local Plan adopted Dec. 2014 (DM Plan)**
    - DM1 Achieving and delivering sustainable development
    - DM2 Ensuring satisfactory living and working conditions
    - DM3 Delivering high quality design
    - DM4 Providing for renewable and low carbon energy
    - DM5 Planning effectively for flood resilience
    - DM6 Protecting and enhancing the natural environment
    - DM7 Trees and development
    - DM9 Safeguarding Norwich’s heritage
    - DM10 Supporting the delivery of communications infrastructure
    - DM11 Protecting against environmental hazards
    - DM22 Planning for and safeguarding community facilities
    - DM26 Supporting development at the University of East Anglia (UEA)
    - DM28 Encouraging sustainable travel
    - DM30 Access and highway safety
    - DM31 Car parking and servicing

- DM33 Planning obligations and development viability

Other material considerations

55. **Relevant sections of the National Planning Policy Framework July 2021 (NPPF):**
    - NPPF 2 Achieving sustainable development
    - NPPF 3 Plan-making
    - NPPF 4 Decision-making
    - NPPF 6 Building a strong, competitive economy
    - NPPF 8 Promoting healthy and safe communities
    - NPPF 9 Promoting sustainable transport
    - NPPF 11 Making effective use of land
    - NPPF 12 Achieving well-designed places
    - NPPF 14 Meeting the challenge of climate change, flooding and coastal change
    - NPPF 15 Conserving and enhancing the natural environment
    - NPPF 16 Conserving and enhancing the historic environment

56. Supplementary Planning Documents (SPD)
    - Heritage interpretation SPD adopted December 2015
    - Landscape and Trees SPD adopted June 2016

Other guidance

- Development Framework Strategy (DFS) 2010 – setting out the future potential to meet development needs to 2035 on the main campus – this was prepared by UEA and endorsed by the City Council in 2010.
- UEA Development Framework Strategy Draft Evidence Base Review (2019) – the DFS review of 2019 has been accepted as a supporting evidence base for the Greater Norwich Local Plan (GNLP) review (which aims to update to the existing Joint Core Strategy).
- UEA Conservation Development Strategy (CDS) (2006); UEA Conservation Development Strategy Update (2020) – the UEA in conjunction with the City Council and Historic England produced the conservation development strategy. The 2006 CDS was reviewed by stakeholders and endorsed by the City Council. The review was in part an element of the ongoing strategy to produce an evidence background for works on campus and to the Lasdun Wall. This runs alongside the Lasdun Academic Teaching Wall Draft Statement of Significance (SoS) (2019).
- Other background documents guiding campus change are UEA Landscape Strategy (2010); Grounds Maintenance and Conservation Plan (2011); UEA Biodiversity and Landscape Management Plan to 2020.

These documents have some relevance in considering these proposals and help to identify buildings of significance and inform new development and other changes to buildings and landscape on Campus.

Case Assessment

57. Planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise. Relevant development plan polices are detailed above. Material considerations include policies in the National Planning Framework (NPPF), the Councils standing duties, other policy documents and guidance detailed above, and any other matters referred to specifically in the assessment below. The following paragraphs provide an assessment of the main planning issues in this case against relevant policies and material considerations.

Main issue 1: Principle of development

58. Key policies and NPPF paragraphs – JCS1, JCS2, JCS5, JCS9, JCS12, DM1, DM3, DM6, DM7, DM9, DM22, DM26, DM28 NPPF sections 2, 6, 8, 9, 11, 12, 15 and 16.

59. The site is located within the defined University Campus, as shown on the Local Plan Policies Map, where the principle of development for University purposes is acceptable providing it is for university related uses and is in accordance with the master-planning documents currently in place for the University including the 2010 DFS and, as necessary, with any subsequent detailed guidance endorsed by the Council for individual parts of the site. Local Plan policy for the Campus is included within DM26 and promotion of educational and employment facilities within the area is supported by JCS policies 5 and 9.

60. The importance of the University to economic growth in Greater Norwich is recognised by the LPA and relevant policies identifying it as part of a strategic employment site. Specifically, at JCS policy 5 it is suggested that opportunities will be improved through facilitating the expansion of and access to education provision and encourages the development of links between training/education provision and relevant business concentrations including co-location where appropriate. It is also important to see the campus as an important research base for various faculties.

61. New educational facilities provided in a sustainable manner are supported under policy DM22 subject to protection of the environment, highway safety and site operational requirements. They should provide efficient and effective use of their sites and plan for growth and, as appropriate, the residential accommodation needs of future students. The policy also supports provision of other recreational facilities which are beneficial to local communities.

62. The provision of community facilities including education use in a sustainable manner is supported by paragraph 8 of the NPPF. Criteria for sustainable development is set out within policy DM1 of the Development Management (DM) Plan. At a local level this can be seen in the continuing Council efforts in helping enable educational development and growth within the UEA campus and in the linked development of training and knowledge industries on campus and in wider NRP areas.

63. To ensure that growth is sustainable and does not have a negative impact on neighbouring areas or the attractive landscape setting on campus the City Council has worked closely with the UEA on the production of various master-planning documents such as the DFS and its 2019 refresh as set out above. The policies

meet the requirements of paragraph 95 of the NPPF to proactively promote development which will widen choice in education to meet the needs of existing and new communities.

64. Related background policy documents include the Conservation Development Strategy and the Landscape Strategy, and these will in most cases be material considerations in assessing planning applications within the University Campus. In this instance they are used in assessing the Lasdun Wall, impacts on designated and non-designated heritage assets within this area and distinct landscape areas of the Campus. Further consideration is given to design, heritage and landscape within the relevant sections of the report below. Again, these documents highlight the importance of protecting the important elements of the campus in its buildings, setting and masterplan approach, creating a sense of arrival and in designing or adapting development to create an overall sense of place within the campus context.

65. The scheme involves new multi-storey extensions and refurbishment of building 3 within the Lasdun Wall, providing a space for science, research and engineering currently housed in building 6 in the Wall. The development on the north side of the Wall has potential to provide a welcoming gateway to the UEA for students, staff and visitors, and is aimed at refreshing and maintaining in use the largest of the key buildings on campus built in the 1960's and 70's. The scheme is within baseline floor-space calculations for the revised DFS. This is due to the recognition that the scheme is initially intended to enable decant space for the science faculties in building 6 allowing commencement of a 2nd phase of refurbishment works to the Lasdun Wall to improve its functional and physical performance levels to help meet educational needs in a more sustainable manner.

66. It is envisaged that only on final occupation of the refurbished Lasdun Wall will there be a net increase in floor space. The finish of the complete refurbishment is likely to be beyond 2030 dependant on securing funds for the works. The then increase in floor-space will likely be involved in a review of policies at that time as part of the rolling programme of policy review as required by the NPPF. To ensure that growth is controlled as envisaged within policy and within the proposal, conditions are suggested to seek to agree a programme for the refurbishment works of the Lasdun Wall and reoccupation of the building is related to phases of decant of the Lasdun Wall to provide protection against an unpredicted increase in growth within the plan period which might otherwise impact on the area.

67. Under policy DM26 development must, where relevant: a) conserve the landscape and architectural significance of the UEA, retaining a green edge; safeguard and (where appropriate and practicable) enhance the biodiversity and geodiversity interest of the campus and protect significant vistas; b) implement the UEA Travel Plan, promoting public transport use, walking and cycling, both within and to and from the university, encouraging shared car use and minimising single-occupancy car trips to reduce the overall need to travel by car; and c) promote public access to open spaces.

68. The proposal at present is considered to be compliant with some but not necessarily all of these policy requirements neither is it be completely in line with relevant guidance. An assessment is given below of key elements and how conditions have been chosen to ensure that the development aligns with policy requirements in areas such as design, tree loss, landscape, ecology and transport.

However, the development impacts on the architectural significance of key buildings on campus. This is assessed further below in terms of heritage and design impacts. The scheme as developed appears to be capable of being seen as suitable development sited within the defined University Campus and in supporting the upgrading and repair of the University estate to ensure the longevity of buildings and campus use. This latter point being key to the UEA to realise its key strategic objectives through the refurbishment of the Lasdun Wall.

69. The proposed development economically, socially and environmentally could be seen to represent sustainable development. The development will assist in securing UEA's position as a key economic driver for the region and will create upgraded educational spaces allowing improved offer by the UEA and new diverse and equitable opportunities. The development overall is considered to provide safe, accessible and an appropriate amount of accommodation to meet projected needs for the UEA and as such the proposal is considered accord with strategic elements of relevant policies and the DFS.

Main issue 2: Heritage

70. Key policies and NPPF sections – JCS1, DM9, NPPF sections 2 and 16.

71. The proposed extensions are close to the east end of the Teaching Wall and also at the north end of the Arts Spur to the Wall, designed by Lasdun and listed grade II. The Wall and Spur here are in view from the surrounding area although in part the view is broken up by the trees which have been planted within this arrival area. The significance of the Teaching Wall derives in part from being able to "read it" as a separate architectural form creating the long linear backbone to the campus. The view from the footpath at the end of the Wall shows a relatively unaltered part of the north side of the building up to the Arts Spur. The Spur would have formed a link to a planned, separate Teaching Wall running parallel to the north. It is agreed that all of the building's elevations have high significance with the exception possibly of the unfinished west end and Spur end which have moderate significance but are of interest architecturally and in a historic sense.

72. The applicant has suggested that the north elevation is of lesser significance than the south and in turn this "lesser" significance could automatically allow for an extension (or subsequent extensions) to be added to the building such as in the manner proposed. This is not considered to be the case and the overall building is experienced in different ways along its length and this eastern end of the building is appreciated in its landscaped setting, with greenery to the north and east; it has a far more domesticated and softer feel than the striking length experienced along the walkways to the south. This could be a key element of the buildings special interest from this experience/view and setting of the building. When viewed from the south the building has a relationship to other listed Lasdun buildings on campus and visibly demonstrates the masterplan approach to developing a campus which steps up in strata and sits as a village on the hill above the river valley.

73. It is important that the Lasdun Wall stays relevant and evolves to meet the needs of the University, but in a way that maintains its significance and primacy as the main listed element compared to the extended element(s). When looking at the north area to start, obscuring this stretch of original Wall and Spur will cause harm to the significance of the listed building and its setting. Further harm will be caused by the loss of building fabric and the proposed strip back refurbishment to be rolled out

across the Lasdun Wall and replacement of windows within the building. Given that all of these elements are largely inseparable an understanding of cumulative impact of the buildings extension and strip back refurbishment is important to any assessment of harm.

74. The buildings new extensions will be experienced in some long views but especially when close to the building. The small rectangular lawn of Founders Green was established in 1993 to commemorate the vision and determination of the Founders of the University and has some significance as an undesignated heritage asset as recognised within the landscape strategy and CDS. The area here is important as a potential gateway into the campus and is recognised as such within the DFS. As the spaces to the east and north are important to the building setting the submitted scheme has looked to improve the public realm here with some success.

75. The existing east end of the Wall could be diminished through the development of a large and dominant extension to the northern elevation, which may begin to compete with important areas such as Founders Green to the detriment of the space and main building. In pre-application discussions the difficulties of extending 20th century buildings of note were discussed along with issues around how an extension might work if seen more distinctly as a new step in the building's development to ease any impact the extension might have. It is noted that Lasdun has done similar assessment in revisiting and extending his own work, with some departure from the original design ideas.

76. How the extensions might become new building entities has led to the application as submitted. Along with the application the UEA have provided some potential precedent examples and a design argument developed in relation to the CDS where some examples provide a clear suggestion that the characteristics of existing design and the primary source of significance have survived refurbishment. These examples also suggest that change was inevitably expected by Lasdun and others. This is certainly the case with the Wall and can be seen with (less intrusive) extensions built further to the west at the Lawrence Stenhouse and BMRC buildings.

77. The design development in the current proposal is also aligned with an increase in retained fabric, including internal spaces and bridge links where you can still, to a degree, experience the original building. This has been a useful evolution of the proposal and whilst still resulting in harm to the listed building helps enhance the degree of acceptability of the new main extension in the height, spacing and form proposed. The level of harm has also been reduced to less than substantial and might be further mitigated by continued discussion and agreement on key details such as landscape design and suitable use of materials.

78. The extensions as designed have a degree of separation from the host building to better announce the extension as a new step in the building's language. When seen or experienced from the east end there appears to be an interesting stepping of forms which, subject to detail and material finish, would not detract from either the importance of the Registry tower or the experience when moving through the space the appreciation of the overhanging projection and double height columns of the east end of the Wall as it sits above Founders Green and announces the move into the campus and walkways to the south.

79. The two-part extension designed to reveal the vertical element of the service core as exposed within the original north elevation mid-way along this stretch of the Wall is interesting, although further detail would be required of any insulation covering of the concrete wall on the outside of the service riser. As with building separation and experience of the new internal double height spaces where spandrel panels are retained, this is seen as an important element to the building design and in relationship to the Lasdun Wall. The external lower bridges and approach at ground level give some sense of appreciation of the vertical interruption of the main building façade. This is important in still being able to read the main horizontal emphasis of the Wall and in allowing an appreciation of the original architecture and repeated vertical elements on this side of the building.

80. Whilst to varying degrees the extensions mask the original building, they, again if suitably designed and detailed, also seek to explain and enhance a natural sense of building development from close up and on entering the extension. With the north end of the Arts Spur the primacy of the “temporary” escape stair is maintained in views and sense of interaction with the building. The scheme also takes the opportunity to separate out any linked access spaces and on the surface side maintains a separation gap between the wall and car park level and on the west side of the Spur hides a link to the service lift partly below ground to not only protect close views of the Wall but also protect the understanding of the Climate Research Unit (CRU) extension. The increased depth of the building has also, by association with revising internal floor layouts, reintroduced the corridor connectivity through the entirety of the Wall at certain levels that revisits some of the original ideas of Lasdun in terms of interconnectivity of the learning experience.

81. In terms of materials, a system of rain screen cladding is being proposed as a facing material as well as elements of glass. This choice is discussed within the design section below, but a major design consideration is in the final detailing of joints, corners and pattern or tessellation of boards. These are likely to be acceptable, but conditions would be required to secure details of the final finish to ensure these are suitable and have an acceptable relationship to the harsher concrete modular materials on the host building.

82. The height of the plant enclosure and materials being considered at roof level appear to be acceptable in principle but again would require further detail by way of condition. In terms of the roof top screens / enclosures these have been subject to discussion and their scale and alignment changed to help reduce any impacts from the south side of the building. Additions here will also have a potential impact on the setting of the Grade II walkway and the Grade II* Ziggurats which are important to the setting of the Teaching Wall and character of the campus when viewed together. Such views help reinforce the understanding of the masterplan and specific placement of stepped buildings within the river valley. Some harm will also be caused to the north elevation, especially through any addition to the roof of the Arts Spur. It is envisaged that a colour scheme and finish could be worked up to ensure that the views from the wider area and from the south along the Lasdun Wall roof line are not being compromised or dominated by this series of proposed enclosures. Views and building appearance will be further enhanced by the removal of telecoms equipment (as discussed below).

83. Under the strip back refurbishment it is positive that the spandrel panels are not proposed to be removed to aid in the removal of asbestos as this would likely have led to significant loss of original fabric and difficulties in replacing original or even

new panels. Revised details for securing these panels and making the building safe, such as methods of interior fixing to stabilise the panels and insulation improvements, have been submitted which are acceptable. The detail of internal lining and loss of concrete detail around the window openings has been averted by design development. In terms of new internal division of spaces, a worked-up design detail for wall or ceiling junctions has been submitted which indicates that these should have very limited impact when seen in relation to window openings design feel or significance of internal spaces, such as the Lasdun ceiling detail and on other exposed concrete elements.

84. Following work with the UEA to help develop an understanding of the importance of the Wall a Statement of Significance (SoS) and the CDS have been developed. Both note that there are areas of the interior and elements within the interior that have some significance. Whilst the listing does not mention details of the interior in the list description, work on these documents helps in assessing positive or negative elements of any building change. There is a series of site investigation works being carried out by UEA to investigate asbestos presence. The UEA have also provided a draft submission document for a longer-term strategy for internal layout and finishes. This starts to better explain a strategy for building refurbishment and likely outcomes of such an intervention, especially in terms of building interiors. This is looking at simple building design features and consistency in use of materials (preferably within a limited palette) and has the noted success of recently agreed changes to the interior of building 6. The items of recognised importance within the design of existing interiors should also be part of the starter pack for design development for any agreed interior works which form part of building refurbishment.

85. A condition is suggested to require development and submission of the document and in turn details of internal fixtures and fittings to help rationalise and limit any impacts arising from stripping back the interiors of the building and approach to the removal of asbestos materials. Such a document could then link the phase 1 refurbishment to all phases of refurbishment given that such an approach will likely become the overarching formula for future changes to help reintroduce a consistency to the interior of the Lasdun Wall which has been lost to varying degrees across the 4 buildings. This in turn would be a positive step in mitigating against the impact of stripping out the building and any impact from refurbishment or over-restoration.

86. In terms of window replacements further information has been developed to supplement the July 2014 window condition report. This included a mock-up of the proposed window detail and evidence that such details can be manufactured. The samples have been reviewed on site by officers.

87. Historically the LPA met with the UEA in 2012 to discuss window film and to discuss options for an ongoing repair or replacement of windows in the Wall. There has been a subsequent agreement by UEA and LPA to the updated CDS which includes a retention first approach to windows. The next step would be upgrade/repair and then replacement with suitable systems. As referenced at 2-13 of the CDS it states that – the windows

“perform well below current expectations in terms of internal environmental conditions and energy performance. However, their external visual appearance is crucial for the building’s significance. In conservation terms it would be preferable to

retain and upgrade the existing windows, but if replacement is necessary the objective is to improve performance while retaining the visual appearance. This is not a unique problem; for example, slender, single-glazed aluminium windows of the 1950s have recently been replaced at Great Arthur House in the City of London, using a new double-glazed window system that retains the slender profiles of the originals. If these windows have to be replaced, consistency in external appearance is vital for the aesthetic significance of the Academic Wall and whole elevations or large sections/blocks of windows should be replaced at one time, as opposed to piecemeal replacement".

88. The listing description and SoS also identifies the metal windows as of high significance and, on this basis, there is some presumption in favour of the retention of the original fabric / windows of the listed building and that this should be the starting point for assessing repair or replacement. The hidden rain gutter detail used on some of the windows at the junction with the spandrel panels is relevant to discussion around window replacement. This detail has caused some fabric deterioration due to the slim profile of gutter and ease with which rainwater pipes (which run into the building) are blocked.

89. In design terms the consistent hit/miss fenestration of the fully glazed windows and the windows with a mid-rail/transom should be retained in order to keep the same consistency of pattern in the fenestration in the look of opening/fixed windows. This is also important considering the phasing of the works and ensuring a consistent approach over a longer time span of installation for subsequent phases of refurbishment to the Wall. Following submission of information and re-consultation the C20th Society have agreed that the design for works to replace windows are acceptable and HE have advised on the requirement for conditions in relation to any final sill detail and mullion detail to ensure that these are not oversized or are detrimental to the final finish in terms of window design. Detail of glass finish will also be important to seek to ensure that the current use of window film is reduced and building appearance restored to its original intent for clear glass. These conclusions and suggested conditions are reasonable and should be part of any decision.

90. As this current scheme is part of a proposal of 4 phases of works this issue of cumulative impact is relevant in terms of precedent being set by any permission for the current proposals for future phases and/or extensions. Some understanding of the timing of works has been agreed under the spandrel panel fixings applications referenced above. Conditions are appropriate requiring details of the timing of future phases to ensure that an approach to whole building upgrade is being delivered especially for ensuring the very visual changes such as with windows are rolled out to ensure that harm to the building's elevations and importance within the setting of other heritage assets is understood and appropriately managed.

91. Overall, and notwithstanding the views of the C20 Society, the works are considered to result in less than substantial harm to heritage assets or setting. This includes assessment of listed buildings and impacts on the adjacent conservation area. The impacts have been further reduced by negotiation on extension design, window detail, landscape, layout, extent of works being undertaken and interiors assessment.

92. There are five fundamental pillars to the refurbishment strategy, which the UEA suggest are integral to the proposed development, and include:

● **the refurbishment must meet the academic needs of the University.** This helps drive portfolio improvement and income to reinvest in campus uses. The works of repair de-risk specialist and other teaching infrastructure and the proposal for refurbishment with extension provides betterment in lab design for meeting modern needs, thereby helping future proof the continued use of the building, student experience and security of teaching space provision;

● **all condition issues must be addressed to provide a future viable use of the building**. The UEA have detailed the remediation and ongoing maintenance costs involved in keeping the building in operation, which are considerable. There is a notable nervousness about the building's lifespan without suitable intervention in the short term and impact on operation should the building start to fail and need further short-term repair solutions which are increasingly becoming the case. The UEA are looking at a strategic fix which does not waste money on a wrong solution or does not reduce ongoing maintenance cost;

● **asbestos must be fully removed from all internal areas.** This is unlikely to be completely achievable, but the cost of ongoing monitoring and maintenance intervention are increasing. A process to remove and encapsulate appears to be a long-term solution to creating a safe environment for the building. A worst-case loss of one of the buildings within the Wall could lead to other estate being at risk such as linked academic uses on Chancellors Drive;

● **the refurbishment must provide an essential contribution to achieving Net Zero Carbon**. Net zero is primarily linked to energy use reduction from a fabric first approach to building insulation giving some progress to help in installation of other LZC technologies for energy production on campus. Poorly performing buildings also has a potential reputational impact for the UEA; and

● **the scheme must be affordable within the tight capital constraints of the University and within the context of the condition of the wider University Estate.** Development of the Estate strategy from 2015 onwards has looked at a more positive approach to building management. This would direct income to building improvement and in maintaining the entire estate rather than continuing building repair interventions which are costly and potentially lead to other undesirable building impacts, such as the required external strapping of the spandrel panels on the Wall. This would help focus investment for other estate buildings of heritage interest and also free up investment to look at new expansion thereby improving income to feed back into continued success at UEA.

93. Not all of these could be seen to be relevant to an assessment of planning balance. This includes a very narrow reference to achieving Net zero (NZ) for the campus. Historic England indicate that they would not support pursuit of NZ at any cost to the significance of the building or loss of historic fabric. It is mentioned in the energy section below that there is a lack of any substantive policy or legislation to suggest that NZ considerations alone override the primacy of any test required by the NPPF or importantly the Planning (Listed Building and Conservation Areas) Act 1990.

94. What is pertinent is the degree to which the UEA have tempered their proposal to include a lower building intervention in terms of loss or removal of key architectural elements such as the spandrel panels; a design approach which makes a positive statement in relation to the host listed building; recognition of which key elements are important and have significance and putting in place some principles to

maintain building characteristics and relationship to masterplan and landscape approaches important to the campus; acceptance of the need for an approach to design of interiors to bring back a unified feel to the entire Wall as refurbishment progresses; reintroducing key Lasdun elements such as corridor interconnectivity; investigation of retrofitting / refurbishment and design development of replacement windows; and in moving away from a concrete repair methodology to over cover core elements of the exterior concrete facades. These assist in reducing the level of harm likely to be caused by the proposals. In doing so it has led to a reduction in the level of objection from the heritage bodies consulted to elements such as the replacement windows.

95. The public benefit of the new academic spaces and potential this allows for the phased refurbishment of the listed Lasdun Wall buildings, improvements to the safety of the building for public use and de-risking of specialist and other teaching infrastructure along with betterment of lab design to align with modern needs thereby maintaining a teaching use within the Lasdun Teaching Wall which arise from the proposal is weighed against the harm to the significance of the building(s) and setting as required by the NPPF, given the nature of this application and the nature of the works and extent of changes it may be considered that the extent of harm created is acceptable. In terms of harm to non-designated assets on balance the limited harm caused is acceptable and has been limited by building design and layout changes during the course of negotiations about the site.

96. On balance, it is considered that the development complies with the requirements of Local Plan Policies DM3 and DM9; the requirements of the policies in NPPF chapters 12 and 16; and the statutory requirement in section 66 of the Planning (Listed Buildings & Conservation Areas) Act 1990 in relation to listed buildings and section 72 that stipulates that "… special attention shall be paid to the desirability of preserving or enhancing the character or appearance of the area.".

Main issue 3: Design

97. Key policies and NPPF paragraphs – JCS1, JCS2, DM3, DM7, DM9, NPPF sections 2, 12, 15 and 16.

98. As described in the section above, the approach to looking at the extension as a separate entity has some benefit in terms of local design and heritage impacts. The proposed extensions are to an extent designed so as not to dominate the area and this is achieved by extensive use of glazing to the façade at lower levels. There is also an interesting mix of solid and void areas, which has some resonance with the main Wall. Looking at the larger extensions individually, setting aside the listed status of the host building and comments made above, the set-back location of the new extension suggests, subject to satisfactory detailing of materials and higher-level screens, that this should not over-power what is already there in terms of space. The use of different layers of opening designs and proportionality of the façades is interesting and adds to the individuality of the design approach. This to a degree is repeated with the arts extension with use of glass as a means of creating a visual balance with the retained elements of the building that are of interest, such as the end escape stair.

99. The design as developed should draw people into the newly created entrance and student circulation space to help create a lively and interesting building backdrop to the area. The suggested main extension design, scale and footprint appear to achieve this.

100. Key to the success of the development will be the crispness of detailing and use of good quality building materials for both the building extensions and within any associated hard landscaped spaces, which should lead to an attractive, high quality cohesive development. At present it is understood that a system of rain screen cladding is being proposed as a facing material. This has been used elsewhere on campus and should acceptable. However, a major design consideration is in the final detailing of joints and corners and whether the use of suitable pattern or tessellation of panels is required to ensure that the cladding does not let the building down in its final appearance and has a suitable relationship to the harsher concrete modular materials on the host building.

101. Some information is provided to show that such fine detail can be achieved but conditions to allow further detailed discussion around specification of materials, joinery, glazing, screens, lighting etc. are suggested to ensure that this is still seen as a cohesive “campus” development. This includes materials for the arts extension and detail in connecting walkways to ensure what is proposed is the best match for the proposed buildings and builds in a relationship to what is a very strong and unified feel to existing buildings on campus.

102. Minor works for the provision of low level and below ground access to the Arts Spur; bin store enclosure and wall; and the separate saline tank and refuse enclosure are designed to be in keeping with similar design elements on campus and to create a unified design across the area. Their location and size have been carefully chosen to not dominate the areas in which they are placed. These scheme elements are acceptable subject to conditions relating to final surface finishes for the units.

103. The proposed replacement windows have been agreed with various consultees to be largely acceptable in potential design. The areas of concern would be around the additional horizontal line the new sill would create above the flatness of the spandrel panels. These form the dominant face of the building and are important in being the main simple horizontal bands of the Wall. The bulk of corner mullions and side window design is also of concern. The former having the potential to appear awkward or oversized and whether there would be some visibility through the window glass if these project within the interior. It is appropriate to take up the suggestion by Historic England that, notwithstanding the submitted information, the final detail of window elements such as sill and mullion are to be agreed by condition before installation.

104. In terms of interiors, changes here have some design impact in terms of how the building is experienced and its relationship to the overall approach to design by Lasdun and Fielden and Mawson. Following discussion, a draft interiors document has been submitted with the application and should help inform a unified approach

to interior fit out. Conditions are suggested to agree a final draft of the document and individual specification of fixed interior elements.

105. The roof enclosures and extent of required extracts and machinery for the “new” use has been developed over the period of pre-application discussions to ensure that any screen enclosure effective and hides what would be a large amount of equipment to serve science and research functions. Views of the screen from the wider area and from the south have been provided to ensure that the scale of these additions is balanced and various buildings’ relationship to the Lasdun Wall roof line itself are not being compromised or dominated by this series of proposed enclosures. This is driven by similar exercises carried out on earlier science buildings on campus and as part of the strategy within the CDS to limit the disruptive visual impact that such equipment and future as yet unplanned additions might have on the host building and its setting within the area. Overall, this is relatively successful and is designed to create a balanced addition at high level. The top edge in fritted glass should be relatively discrete and helps reduce the upward visual bulk of the Wall. Conditions requiring final samples of enclosure material and finish and details of fixings are suggested by condition to ensure that any impacts are as limited as possible.

106. The site has varied landscape characteristics with frontage trees as part of landscape continuity along University Drive and group planting of trees and other shrubs to the south of the security lodge. This has grown to screen the Registry building and tower which historically created the main entrance to the campus. As mentioned below key landscape features have been retained or designed into the scheme to help in defining frontages to the site and character of this space. In a sense when approaching from the north the location of the new entrance will be an interesting reveal when moving through the space. Changes to parking, path access and site planting and landscaping open up the space and makes more of an arrival point. This enables the new building extension on its east side to potentially act as a new gateway reception building as intended within the DFS, which the campus currently lacks.

Main issue 4: Landscaping

107. Key policies and NPPF paragraphs – JCS1, JCS2, DM3, DM7, DM8, NPPF sections 2, 12, 15 and 16.

108. The area around the site has varied landscape characteristics with frontage trees providing landscape continuity along University Drive and Chancellors Drive and group planting to the south of the security lodge with trees and other shrub planting. This has grown to screen the Registry building and tower which historically created the main entrance to the campus. The site has some attractive and mature trees worthy of retention and incorporation into any new scheme. There is also a reasonable coverage of trees and landscape features along some boundaries, some of which are beneficial to the character and biodiversity value of the area and setting of the campus. Mature trees along the northern boundary and nearby Earlham Park and Cow Drive which assist with the visual separation of campus and parkland and create a green link along part of the campus.

109. The parkland landscape in which the campus now sits was designed by Brenda Colvin who created a naturalistic valley landscape to complement the built form envisaged by Lasdun. The car park and roadway were formed as part of works in the early 1970's and character and design here is relatively unresolved in terms of an overall campus design. Lasdun and Fielden viewed this area as an additional opportunity to add architectural interest to the campus. The CDS describes the location as area 3 but it has potential to be considered as upgraded in significance given its particular relationship to the Lasdun Wall and links through into Founders Green and other defined boundary planting.

110. Landscape setting is an important feature throughout the Campus and with this development mitigation/replacement planting has been proposed. This has potential to provide for further site links and enhancements through site landscaping. Important landscape elements to enhance are a sense of arrival at the campus; woodland character and access; and a softening of the east and west sides as these blend into less urban forms of landscaping. The submitted landscape assessment indicates that there are some moderate/substantial visual effects as a result of the development. Most of these are due to large changes to close range views, north of the Wall. In these cases, mitigation is focused on good design quality sympathetic to the existing built form and in landscape design.

111. Landscaping has been kept relatively simple and informal landscaping ties in with the exiting landscaping characters within this area. This involves a focus on trees (most being extra heavy standards); woodland edge and Cow Drive enhancement; use of native species shrubs and hedgerows; reinforced boundaries; safe and interesting access and circulation routes and defensive planting. The development also includes new seating within a sunken area and overall creates strong architectural form to the formal landscape spaces, using established design features of other areas on campus and providing movement lines through the area.

112. Enhancements for pedestrian and cycle movement will help to secure an improved and more attractive pedestrian and cycle route within this area. Some minor revisions have been made during application discussions to improve interest within the spaces, rationalise pathways, formal hedge design, more native species aimed at providing both habitat and a food source for wildlife and to introduce low height hedging instead of low railing on some routes to protect landscape spaces from movement through the site.

113. The proposal as now submitted is overall an acceptable scheme and provides a good level of detail for the area. A condition is suggested requiring details of landscape planting, implementation programme, written specifications and a landscape management plan. It is also suggested that a plan is submitted at the detail stage showing below ground works along with any replacement planting to show how water catchment will work in relation to landscape management. Details of hard surface materials and biodiversity enhancements e.g., nesting boxes are also required by condition. As mentioned below such a landscape scheme is envisaged to be supplemented by a "Green Infrastructure Strategy" aimed at long term campus improvement which again is being sought by condition. The strategy aims are to assist climate change mitigation; improve health; promote sustainable growth; mitigate impacts of development; and improve biodiversity, accessibility and water management. An initial draft has been shared for review.

Main issue 5: Trees

114. Key policies and NPPF sections – JCS1, DM3, DM6, DM7, NPPF sections 2 and 15.

115. Within the application site at present is a large stand of trees and planting next to the north end of the Wall and other small groupings of trees within the service bay. 9 trees will require removal to facilitate the development. 7 of these are category ‘B’ and 2 are category ‘C’ trees. Whilst the main tree blocks have visual amenity value a number of the specimens to be removed are compromised due to the density of planting which has taken place and grown over time. As such their removal is seen to be acceptable. The more notable category ‘A’ and ‘B’ trees, which form a distinct edge to the site within an avenue running to the east have been retained.

116. The physical position of the buildings has been discussed in terms of tree protection and for works methods around retained trees and an indicative schedule of replacement trees provided. Discussion has also taken place for new large tree planting as a supplement to those to be removed on site and where possible these should be provided with space to establish and mature to high quality specimens. Due to the limited size of the “on-site” area the scheme indicates that tree replacement is restricted to 5 trees within the red line and 4 trees along Cow Drive to help enhance the value of this link. This is supplemented to some degree by possible smaller trees within the Sustainable Urban Drainage (SuDs) feature, shrubs and planted habitat.

117. In discussion it has been noted that further reduction of tree cover on campus has taken place as part of the recent works including in areas around the car park, Chancellors Drive and the west end of the Wall. To avoid double counting for tree replacements the applicant has been asked to review and has now submitted data for tree removal and subsequent replacement involved in such other developments and not as yet accounted for in terms of replacement. There remains, however, some need to carry out relevant tree replacement calculations for the application site and other areas to establish a true replacement level. The potential on and off-site deficit situation has been discussed and an approach to a campus wide green infrastructure strategy is being pursued in order to enhance tree planting numbers on campus and in the locality to meet biomass loss for this and recent development on campus.

118. With the application itself, tree replacement calculation would indicate on a simple calculation of habitat units that new planting of 52 trees might be required for the 9 losses. The wider strategy within a green infrastructure strategy would help offset such “on-site” and other losses and assist with habitat, ecology and tree planting enhancement and help maintain a “green” feel to the campus setting. The opening up of hard surfaces around trees at the edge of the site should beneficially improve site conditions for tree growth and future health. The trees here are seen as important habitats and established planting areas. The condition to secure a detailed landscape scheme will seek tree planting as a mature element of landscaping, provided to ensure that tree specimens replanted are of suitable size and variety to quickly establish a landscape setting to the area.

119. Early discussion and assessment on construction activities should ensure that vehicles and crane systems can access the site and be positioned to allow construction of the taller blocks without local impacts. Works on site should not have tree impacts and construction exclusion zones during works should prevent impacts on any root protection areas. This is assisted by retention of some of the sites retaining walls and footpaths which separate out trees from development areas.

120. Conditions are suggested to ensure compliance with AIA and tree protection plan and to seek as necessary any additional method statements in support of the development. This includes for example tree pruning, hard paving design, no-dig construction methods, root pruning, site set up and compound area details and design of temporary setback areas for fencing to paving works within root protection zones. Initial site meeting and an auditable system of arboricultural site supervision and inspection is also suggested as a condition which should inform on-site works and ensure appropriate forms of protective fencing and on-site controls are being provided.

Main issue 6: Biodiversity

121. Key policies and NPPF paragraphs – JCS1, DM6, NPPF sections 2 and 15.

122. The Site is at the northern edge of a complex of buildings which forms the heart of the campus and extends over areas of amenity lawn with trees, groups of tree stands, some ornamental planting as well as some hard standing spaces. The submitted ecological survey indicates that the site has a relatively low ecological baseline or value which is mainly enhanced by tree cover on site. The main site is within a very busy well-lit part of the campus and comprises mainly non-native trees and shrubs and has limited ground level cover. Within the tree and plant areas main species interest is primarily in terms of nesting birds. The trees on-site and the security lodge buildings are considered to have low potential for roosting bats and very low value for foraging.

123. The designated sites locally are mainly within the River Yare valley bottom. Within the immediate vicinity of the site is a local nature reserve (LNR) and a County wildlife site (CWS). These are Earlham Park woods and the Heronry and Violet Grove respectively. Cow Drive to the northeast is an old droving route which qualifies as a Hedgerow Habitat of Principal Importance. These appear to be unaffected by the development.

124. References to the biodiversity value of any habitat or habitat enhancement are to its value as calculated in accordance with the biodiversity metric. The biodiversity metric provides a way of measuring and accounting for biodiversity losses and gains resulting from development or land management change. Calculations are presented for biodiversity net gain within the submitted ecology report.

125. There is a small net gain (1%) when the site is considered on its own, but with the inclusion of other off-site enhancements there is a 14% biodiversity net gain. Enhancements will be via high quality landscaping including on-site by planting scrub and native bulbs; off-site areas to create mixed native scrub (hedgerow in-fill planting along Cow Drive); and by planting shade tolerant native turf. The proposal would, in the longer term, replace 9 trees (some of which have impoverished insect faunas) with 9 trees which should all have a relatively high ecological value. Other

enhancements could include bird and possibly bat boxes to be erected on trees within the site and nearby on campus.

126. The applicant has additionally been asked to consider re-use of timber from felled trees on site to help provide other ecological enhancements to provide net gains in terms of biodiversity. Hibernacula such as log piles located in quiet spots around the area or use with works to the Broad might be viable options. Bird nesting and bat boxes elsewhere on the campus (away from lit areas) are also suggested to be sought by way of condition. Whilst the UEA are reluctant to install bird boxes on the building it has been suggested that they should investigate and incorporate bee / insect bricks into the building to increase on-site enhancement value to an appropriate level. These could complement the proposed additional plants providing pollen.

127. To protect bird species, it is preferred that the works to trees, planting or hedgerow are undertaken outside of the nesting bird period (March to August inclusive). Conditions are also suggested to ensure suitable landscaping proposals and adequate mitigation are provided within and adjacent to the site. Light spill might impact on habitat and could create issues for bat species foraging and nesting within the Plantation area. Further conditions are suggested for information on any site lighting to be used.

128. As mentioned above the UEA are proposing that a wider strategy for habitat, ecology and tree planting enhancement to also help offset “on-site” losses is provided across the campus. This “Green Infrastructure Strategy” includes planting of trees as part of biomass offsetting but also aligned with a more comprehensive approach to habitat management and improvement. This would aim at long term campus improvement, managed in such a way that it complements the UEA’s future aspirations for further development and does not see short term planting which subsequently is removed which has been the case in the past for similar developments. This should be sought by way of condition and include details of planting, biodiversity and habitat improvement, management and implementation programme over a period of ongoing improvement over the next 10 to 15 years at least.

129. It is considered, having regard to the earlier and additional ecological statements and additional details on habitat and landscaping, that biodiversity issues and tree replacement can be addressed satisfactorily, that the scheme complies with existing policy and guidance and conditions are possible to provide potential for post construction mitigation measures and as such the scheme on balance is acceptable.

Main issue 7: Transport

130. Key policies and NPPF paragraphs – JCS6, DM28, DM30, DM31, NPPF sections 2, 9 and 12.

131. The main considerations for the proposal include accessible parking provision; electric vehicle charge points; cycle parking facilities and access into the site and new stores; changes to service access and bays; and management of construction activities. Existing accessible parking spaces to the rear of the site will be updated and improved on this side of the building within the service space. Drop off space is

also available along University Drive and both of these facilities are shown within a relatively short distance. These will be available to users of the campus and as part of the development to aid in accessible access to the building and the local operation of the highway space.

132. The creation of a new parking bay technically triggers a requirement for the applicant to assess and provide for new electric vehicle (EV) charging points either within the development area or nearby. Details of the location of 8 existing EV charging points have been provided. Potential locations for additional charging points have also been identified. The provision of EV charging points is in full accordance with the UEA's 2017-2022 Travel Plan, which states that the UEA will invest in 12 EV charging points. This level of provision is acceptable, and a condition is proposed to ensure provision of the charging points.

133. Cycling has been promoted on the Campus for a number of years and in addition to extensive cycle parking facilities on Campus the University has provided for bicycle servicing and repairs (Dr Bike) and a cycle to work scheme with showers etc. in key buildings across campus. As a result of the proposed development, 144 cycle spaces will be lost due to the redevelopment of the building. These 144 cycle spaces will be replaced by way of the new 132-space cycle shelter and 12 new spaces adjacent to the new cycle shelter.

134. Overall, there will be no net change in cycle parking within the vicinity of the building and all cycle parking lost due to the redevelopment will be replaced along with a betterment of existing cycle parking facilities. The cycle parking figures are considered compliant with policy requirements if the area of building 6 remains vacant. Also, given the availability of other facilities on Campus and assessment of known averages for student cycle ownership cycle parking is considered to be acceptable under the specific circumstances of the Campus. A condition is proposed to ensure provision of the cycle parking spaces.

135. The design of routes and cycle store layout aids accessibility and helps prioritise more sustainable modes of travel such as foot or cycle. Pathways in the area of the application are also shown to be widened and as necessary realigned to assist with pedestrian capacity. However, County Highways have picked up on a point of concern in relation to cycle access via University Drive and the pink peddle way. Currently the cycle park leads to a footway and a loading bay that is often obstructed by vehicles. They have reasonably asked that this layout problem should is reviewed and an appropriate scheme worked up as part of the improvement works. A condition is suggested to ensure suitable detail of final layout and in the design of access to the facilities being provided.

136. The development itself will act as a decant space for Science in Building 6 which is intended to be the second phase of the refurbishment of the Lasdun Wall. The scheme as such is technically car free development which assists with the Travel Plan initiative discussed below to help reduce the reliance on car travel to the campus. An unintended consequence should Building 6 be reoccupied would be a shortfall in cycle parking provision given the ratio of replacement cycle spaces as now proposed.

137. Provision of new cycle parking introduced close to Congregation Hall as a new core facility was discussed and agreed with the Sky House application. This was agreed under application number 19/01748/F for 526 new cycle spaces and associated

landscaping/infrastructure including improved accesses to Dr Bike. The stores are designed to be secure and accessible, with prominent features with clear visibility from adjacent buildings to improve security. This provision is further supported by the permission 18/01061/F to create an additional cycle storage area on the existing Boiler House roof, including provision of a shelter and 97 Sheffield style cycle stands accessed via the ramp to the roof areas. The implementation of some or all of these approved facilities could act as a back stop against under provision in the future.

138. Following discussions with the Council, the UEA have also been developing a Movement Strategy to inform new campus design and accessibility although this work has been curtailed by Covid 19 and subsequent changes to teaching and requirement for staff to be on site. There have been traffic counts undertaken across the campus as part of the works for the strategy, but conclusions as yet have not been fully drawn. The movement strategy aims to address the current and predicted mobility challenges and provide short, medium and long term solutions.

139. A requirement for the submission of progress reports of this strategy is suggested by condition again should building 6 come back into occupation which could then feed back into further changes which might be required in the local area of the Teaching Wall to accommodate increased access. When the assessment results are better known. This will future proof the campus mobility infrastructure. An interim measure to improve walking access along Chancellors Drive has been the approval of application 19/00874/F for alterations to existing footpaths to increase capacity in the short-term pending the full conclusions of the strategy.

140. A Travel Plan is in operation at the campus and since its adoption in 2002 has successfully minimised both the use of the private car on the campus and assisted modal shift to sustainable forms of transport for students, staff and visitors. The Plan has positively encouraged the use of alternative travel including walking and cycling and a regular bus link to the City is also available. The development itself is in line with the UEA's intent to reduce car travel to the main campus. The document is due to be updated in 2023. The transport statement explains the various initiatives being promoted to assist in modal shift.

141. The submitted transport statement advises that the new development will be subject to the requirements of the UEA Travel Plan. The role of the travel plan is explained in the submitted documents and the extension of use of this successful model is welcome. Ensuring a link to use of the Plan will be by condition requiring the development to be carried out in accord with submitted documents rather than a specific condition requiring submission of details of the existing known scheme. Conditions are also suggested in terms of a phasing programme for occupation of the building and decant of phases of the Lasdun Wall to ensure that the space created is managed for the purpose intended in campus refurbishment and to avoid any unmanaged impacts. This includes adverse impacts which might arise from campus intensification without the UEA having implemented any requisite cycle parking or movement layout improvements.

142. There are existing service access roads which access the Wall located on either side of the arts Spur. The carriageway and connection into Chancellors Drive is revised for the eastern area and space redesigned but still laid out to allow disabled parking and service access to the Wall. This entrance road has been revised and changes made to the design of the speed hump on this access to prevent vehicles

being grounded as they pass through. Tracking movements for large vehicles have demonstrated that service and emergency vehicles will still be able to move through this area safely and shared surface spaces and roadways are designed to enable maintenance access to buildings. The design should maintain safe cyclist and pedestrian access along this route in the longer term. A condition requiring a Construction Management Plan (CMP) to mitigate any impact on the main road network and ensure safe operation on campus during the construction phase is also suggested.

143. Refuse collections would be by commercial refuse contract as set out in the UEA Waste Strategy and the proposed location of the bin stores adjacent to the shared access areas on Chancellors Drive is appropriate. A recycling strategy for waste and waste management already operates on campus and the new scheme will be incorporated into existing on-site operations. Final design and retention of the store areas and access is suggested as a condition to ensure the satisfactory appearance and operation of this area. In the long-term access and servicing is controlled by University staff throughout the year to prevent fly parking. On balance subject to suitable conditions the scheme is considered to be acceptable in highway terms.

Main issue 8: Nutrient neutrality

144. Key policies and NPPF paragraphs – JCS1, DM6, NPPF sections 2 and 15.

145. With respect to the recently introduced requirements set out on 16 March 2022 by Natural England (NE) with regards to the need for specific types of development to demonstrate nutrient neutrality in order to avoid further deterioration of sites designated for their ecological value and to comply with the requirements of the Conservation of Habitats and Species Regulations 2017 the application includes technical assessment in relation to this and argues that the proposed development is not subject to those requirements.

146. Norwich lies within the hydrological catchments of two sites designated for their ecological value and thus relevant types of development within the NCC area are subject to the NE requirements. The information advises that the proposed development does not include – overnight accommodation that would result in a net increase in population served by a wastewater system; discharges that contain nutrients (phosphorus or nitrogen); or acts as a use that increases level of staff or students on site by attracting people into the catchment and which generate additional wastewater and consequential nutrient loading.

147. Foul and surface wastewater from the site are treated by the Whitlingham STW which discharges treated water to the River Yare to the southeast of Norwich. There is therefore a direct hydrological connection between the site and the Broads SAC/Ramsar site via surface water routes. As indicated below in the drainage section surface water runoff will not be discharged to the ground therefore preventing direct ingress of collected water into the underlying aquifer. Other discharge consents are in place for a number of the departments within the site, which are formally consented, and which will be transferred to Building 3. On the basis of the submitted information and guidance on relevant project types there appears to be no nutrient water quality implications in relation to discharges from proposed development or laboratory areas within Building 3.

Compliance with other relevant development plan policies

148. A number of development plan policies include key targets for matters such as parking provision and energy efficiency. The table below indicates the outcome of the officer assessment in relation to these matters.

Requirement	Relevant policy	Compliance
Cycle storage	DM31	Yes subject to condition
Car parking provision	DM31	Yes subject to condition
Refuse Storage / servicing	DM31	Yes subject to condition
Energy efficiency	JCS 1 & 3 DM3	Yes subject to condition
Water efficiency	JCS 1 & 3	Yes subject to condition/
Sustainable urban drainage	DM3/5	Yes subject to condition

Other matters

149. The following matters have been assessed and considered satisfactory and in accordance with relevant development plan policies, subject to appropriate conditions and mitigation:

Air Quality

150. Given the end use of parts of the building as new science and research spaces there will likely be some potential for hazardous or polluting materials being extracted via new fume routes. The UEA have and continue to carry out detailed investigation in relation to extract systems and protection of the environment and air quality. The agent has confirmed that all supply and extract air to the building will be filtered for particulates. The fume extract and discharge arrangements will be the same as existing in other parts of the Wall which includes existing science and research uses. Conditions are suggested in relation to agreeing final details of plant and machinery and extract systems.

Amenity

151. The nearest noise-sensitive private dwellings are outside the campus at a considerable distance from the site. The nearest noise sensitive receptors are the occupants of the Wall and Registry buildings in the daytime, and the Paston House and Britten House student residences at night. Preapplication discussion between Environmental Protection Officers and the applicants' acoustic engineers agreed that the proposed plant noise emissions should be equivalent to the existing background noise level at the surrounding University buildings, which according to BS 4142 is 'an indication of having a low impact' and assessment has been undertaken of the local environment to measure the noise levels at the site and impacts of the proposals.

152. The plant noise egress limit is noted as LAeq 47 dB during the day as applied to the rooftop of the existing Arts 2 building where the representative background noise level was measured and the night-time plant noise egress limit is LAeq 45 dB and applied at 1 m from the worst affected windows of the student accommodation at Britten House. An initial assessment of the proposed plant items associated with the development has been carried out to define sound power limits for each item of plant to aid the determination of any acoustic attenuation measures. The conclusion of assessment is that the development is not expected to have a measurable impact on nearby receptors. The sound power limits required to achieve the noise egress criteria may change if the plant location, number of plant items or screen height is altered. Conditions are therefore suggested in relation to agreeing final details of plant and machinery, extract systems and plant enclosure.

153. In terms of impact on campus users during construction periods the contractor will be required to implement a Construction Noise Management Strategy. This should include controls on site operating hours; to take all reasonable steps to minimise the impact of noise; enforcing the noise management strategy; and use broadband 'white noise' type reversing alarms. Construction access and site management are discussed below.

154. Other impacts might be on future building occupants / users. Main impact will be from frequent traffic on Chancellors Drive dominated by noise from frequent diesel buses. It is likely that the proposed ventilation strategy for the building will be designed to respond to this and achieve acceptable noise levels within the internal environment. Conditions in relation to site lighting are discussed below but again these are likely to be designed to avoid any amenity impacts to building users and will not impact on other residences given the separation distances of these uses from the proposed development area.

Archaeology

155. The site is located within the campus and near to the Earlham Conservation Area. The host building is listed Grade II and there are other Designated Heritage Assets within the wider area – principally the Grade II and II* Listed Buildings within the University campus itself. There are no other designated heritage assets within the extension site itself but does fall under assessment for landscape quality.

156. Development on the site from the 1940s can be considered to have had a substantial negative impact on earlier archaeological deposits. Previous use as a golf course would have resulted in loss of earlier landscape evidence and can be anticipated to have had some impact on the survival of buried archaeology. This would be primarily through the excavation of bunkers and general landscape remodelling activity. The subsequent impact of the development of the UEA campus would have been far more extensive through construction of buildings, car parking, roadways and multiple service trenches.

157. Whilst earlier reports have indicated that there is a moderate potential for prehistoric and post-Medieval evidence and a low potential for significant remains of all other periods the Historic Environment Service have not asked for any archaeological planning conditions in this instance.

Construction Site Access and Site Management

158. The works which are adjacent to the main campus connection routes are likely to cause some disruption to campus operations and in a worst-case scenario spill out onto roadways along Earlham Road or Bluebell Road. Potential construction access options have therefore been discussed as part of the pre-application process. The application indicates that all construction vehicles will enter/depart the site off Chancellors Drive via Earlham Road to the north of the site. This route has been suggested to avoid Bluebell Road which is a busy entry/exit point and cycle route. The main contractor will be required to manage parking for construction workers, actively promoting sustainable travel including the provision of shared transport to site where appropriate and also aim to prevent works vehicles from parking on the main campus or car park. An indication is additionally given that no construction vehicle trips will be permitted during morning and evening peak network hours and any abnormal loads will be agreed and scheduled as part of a construction management plan (CMP).

159. Suitable layout for temporary material stores, safe entrance and delivery points and main office management facilities plus other portakabins as required, will also need to be located close to or within the application site to help avoid wider disruption. Additional explanation of these points to enable further assessment of local impacts and response to any concerns on safety would be expected as part of a CMP condition with designs worked up to show how works can be undertaken whilst retaining bus, cycle and pedestrian access through the remainder of the area whilst works are taking place. Wheel washing facilities are also likely to be required for some phases of work. As with other campus development this should be capable of being managed to prevent local or network impacts. However, a pre-commencement condition is suggested to ensure agreement of such details for the development before main works commence. Subsequent compliance with the 'Construction Traffic Access Route' within any CMP is also suggested as a condition.

Construction Phase Noise and Plant and Machinery

160. The works are along the main busy route of Chancellors Drive. There are no residences adjacent to the works. Works are expected to be carried out over a prolonged period when most buildings are in use. It is envisaged that the University would agree suitable arrangements with the contractors to ensure that no adverse amenity impact arises. The contractors would also be expected to work within any UEA best practice to protect local amenities on campus. Such information forms part of details expected to be agreed in line with the requirements of any construction management condition as mentioned above.

Contamination

161. This proposal is on an area of land historically used as part of Earlham Hall farm and more recently as part of the golf course created within the area. From the 1960’s/70’s educational buildings and operations have occupied the area. The proposed development and use is not an overly sensitive one and the development would appear to pose a moderate to low risk to users of the site and to controlled

waters. Site investigation documentation phase 1 geo-environmental and geo-environmental interpretive reports have been supplied with the application to seek to agree remediation strategies and limit potential conditions for the development.

162. It is not envisaged that any significant pollutant linkages exist on this site. This position has previously been confirmed by pollution control officers in terms of protection of human health. The Environment Agency (EA) has historically advised on contamination issues and aquifer information for the area and requested controls related to contamination and piling works to protect groundwater sources.

163. As part of the interpretive report there has been ground testing of what is likely to have been a re-contoured area of land close to the UEA entrance created in the early 70's. Analysis of ground water and soil samples indicate very limited impacts from contamination at the site. Gas monitoring also indicates that no protective gas protection measures are required for the scheme. However, the developer should seek to address as necessary any risks which arise from the discovery of any unknown contamination materials found during construction activities and also note any requirement to protect controlled waters from any potential contamination at the site. A condition to require development to be carried out in accordance with the recommendations of the geo-environmental interpretive report in relation to advice about groundwater protection; management of site environmental issues; submission of an environmental verification report; and for measures to be taken to address any contamination remediation and verification required from unknown contamination are therefore suggested for the avoidance of doubt.

164. **Asbestos –** some investigation for asbestos presence has taken place to help understand the extent of building strip back UEA believe is required and what might be reasonable to agree for a supporting case justifying any intervention into the fabric of the listed building.

165. More generally, as the uncontrolled demolition of buildings could result in the contamination of soils on site and in the vicinity, we would suggest an informative detailing advice from an environmental perspective that prior to any demolition commencing building/s are surveyed for the presence of asbestos materials in accordance with the Control of Asbestos Regulations 2012. Any asbestos containing materials which are identified should then be removed in accordance with the above regulations and waste regulations.

166. **Unexploded Ordnance (UXO) – a**ssessment for the presence of air-dropped UXO or for specific defence related use of the property has been recommended by the environmental officer. Such devices can have implications for site contamination and site safety. The suggested investigation of the presence of such features has been noted within the phase 1 geo-environmental report. Previous survey information and aerial photographs for the campus show that the risk from UXO is low but a report can give general guidance for site practice to mitigate the risk of the discovery of UXO's. The subsequently submitted geo-environmental interpretive report indicates that no evidence of UXO's was encountered in the investigation areas. It is therefore for the applicant to consider whether they wish to any further detailed report to guide groundwork contractors whilst on site.

Drainage / Flood risk

167. Whilst the site falls within Flood Zone 1 the land to the north along parts of University and Chancellors Drive appears on the Environment Agency 1 in 30, 1 in 100 year and 1 in 1000-year surface water flood maps. There is importantly some identified hazard for most groups within the general public and some groups especially children, the elderly and infirm. The Flood Risk Assessment (FRA) also indicates that mitigation will also be required to manage overland flow emanating from the site.

168. Under policy DM5 development proposals are required to show that they;

    "a) would not increase the vulnerability of the site, or the wider catchment, to flooding from surface water run-off from existing or predicted water flows; and

    b) would, wherever practicable, have a positive impact on the risk of surface water flooding in the wider area."

169. The policy seeks to ensure that new development incorporates measures to manage and mitigate against flood risk from all sources. Policy JCS1 is also used in addressing climate change issues.

170. The campus is served by a separate surface and foul water system, with the existing buildings and hardstanding areas served by a series of live below ground drainage pipes and connections. Surface water is discharged to a main carrier drain located within Norfolk Road which then runs south westwards through the campus, eventually leaving the campus within its south-western corner. Foul water drainage connects through to Bluebell Road. This relationship will continue with the proposed development as set out below.

171. The development changes the potential impermeable area of the site when compared to existing site layout. A flood risk assessment has been supplied to show how the proposal will impact on the site and surrounding area. Information has also been provided to show that all surface water disposal routes have been explored and that any new impacts will be managed and mitigated. The submission also indicates, subject to final detail, that the site does not increase flood risk both within the development and elsewhere off-site.

172. The site contains a principal aquifer and is identified as having medium to high risk of groundwater vulnerability, this is based on the likelihood of a pollutant reaching the groundwater. Guidance suggests that soakaways should be avoided where dissolution features are known to occur. The site ground conditions are shown to be unsuitable for the use of soakaways due to the presence of chalk at a shallow depth. Such dissolution features were found at the Enterprise Centre site. The chalk is weathered with low density and strength towards the top of the layer. The preferred method of disposal for the main site is therefore to connect to the existing surface water pipe network running to existing site connections.

173. Given that there is limited capacity to accept direct flow to the surface water system, flood attenuation proposals are suggested to be incorporated to consist of a partial blue/green roof / swale features of 2600m^2 for the soft-landscaped areas to the front of the building with an additional 100m^2 external below ground attenuation storage. These water retention features are a series of shallow (150mm-200mm)

cascading detention basins or swale features. This aims to provide additional amenity and biodiversity benefits as well as some attenuation storage capacity and a robust surface water conveyance, contributing to the overall SuDS hierarchy. The external vehicle parking area has been identified as a possible geo-cellular tank attenuation storage location. To avoid ground water contamination and due to the expected poor infiltration conditions, attenuation tanks will be lined with an impermeable membrane.

174. Permeable paving with sub-base replacement has also been considered for the proposed parking and/or localised cycle storage bays. This additional SuDS feature would be beneficial to facilitate additional attenuation storage as well as provide water filtration and pollution control for the proposed vehicular areas. For the car parking a site petrol interceptor should be adequate in providing the correct level of treatment for the runoff. Prevention of the further release of contaminants could be controlled through design of wrap to the modular tank system and areas under paving. The scheme should therefore be capable of being designed to avoid a risk to groundwater.

175. It is likely that surface water runoff can be managed and requirements for the 1:100 year storm event + 40% climate change, based on the allowable discharge rate and / or restriction to Greenfield run-off rates appear to be achievable subject to final design. The scheme through revised ground levels should also improve the surface water flood areas identified on the site which represent a danger to all risk categories. Conditions are suggested in relation to final SW drainage design, management and maintenance.

Lighting and CCTV

176. Certain design methodologies have been accepted for other campus schemes and the current proposal is expected to be developed to ensure a safe environment for users of this part of the Campus whilst avoiding any unnecessary clutter within the area or on buildings. The avoidance of light spill or glare within the area either because of ecological impacts or on building setting impacts. Given the location of the site there are unlikely to be impacts on adjoining users or residents arising from use of lighting or CCTV. However, to ensure control over the installation of such systems to avoid any visual amenity, ecology or external design issues conditions are suggested requiring submission of details for such equipment.

Renewable Energy and Energy and Water Efficiency

177. **Renewable Energy sources** – JCS policy 3 requires that major development provides at least 10% of their energy requirements from decentralised low carbon and renewable energy sources and for the largest proposals to demonstrate that they have taken opportunities to maximise the contribution of such sources.

178. The scheme provides for a number of measures aimed at improved performance of the building envelope to reduce energy demand for ventilation, heat and light from non-renewable sources (see also sustainable construction section below). This includes managing solar warming by using appropriate glazing systems and building insulation. The building design has been assessed in relation to baseline data on energy usage and any ‘fabric first’ approach is targeted to achieve an 85%

improvement in thermal performance over the baseline and an additional 'in use' performance target for lowering energy use per m².

179. The submissions indicate that use of photovoltaic panels (PV) on building roofs is being considered to provide for electrical energy production to serve the building directly and air source heat pumps (ASHP) led Domestic Hot Water (DHW) systems. This indicates an energy improvement over baseline of 10.5%.

180. Low Zero Carbon (LZC) technologies are already in use on the Campus and include the biomass energy centre (BEC) which provides gas fired combined heat and power (CHP) and biomass CHP. The heat generated from the BEC serves the district heating main (DHM) which distributes heated water below ground to provide heating and hot water for buildings around the Campus. An additional recommendation proposed is to connect to the DHM served by the BEC. Future decarbonisation of the DHM is a strategic plan for the UEA and shall also provide betterment of 35% for baseline energy use. At present this is indicated as being converted to an ASHP led facility.

181. Again, a by-product of the heat generation of the CHP is electrical generation and information previously submitted suggests that the system characteristics would provide 0.6kW/h for every 1 kWh of heat generated. This is described as "free" electricity which could add to the LZC contributions to energy demand and energy requirement. It would be reasonable to impose a condition requiring the scheme to be connected to the DHM and BEC and for details to be agreed of the PV array and ASHP being proposed for the building to meet the policy requirements for on-site energy production and as such would be acceptable.

182. **Water Conservation –** The building is being assessed in terms of methods of conserving and re-using water through controlling water leakage, consumption and waste. Likely water usage has been assessed on a basis of re-provision or move of uses within the building which indicates there will be no increase in water usage across the campus and has potential for a reduction in overall consumption due to the water conservation measures that will be achieved through the refurbishment.

183. In any event the scheme aims to limit water usage by incorporating water saving facilities such as: low flush / dual flush WC cisterns; spray taps / low flow taps; flow restrictors; leak detection on water systems; Occupancy sensors and PIR sensors for taps isolating the supply after a pre-determined period etc. Grey water recycling has been discounted along with rainwater harvesting for the moment, with the exception of external water capture within the SuDs basins but could be included in future upgrades if a solution was practical without excessive maintenance. The development would appear to meet appropriate levels of water usage as promoted by JCS policy 3 and a condition is suggested to ensure such facilities are incorporated into the scheme.

184. **Sustainable Construction –** The UEA as an organisation are committed to carbon reduction targets and principles of sustainable design and operation of its new buildings. It has environmental policies and carbon reduction plans in place to support these aims. The application sets out a strategy for utilising standard sustainability and building performance assessment methodologies to ensure the development targets excellence in building design and function.

185. Specific sustainability Key Performance Indicators have been developed for the project using a bespoke framework which encompasses best practice from multiple assessment methodologies including BREEAM, SKA, LETI, Labs21, S-Labs and UKGBC. This approach allows for sustainability to be applied to each part of the project in a bespoke manner which is more appropriate to its form and function and provides a comprehensive and detailed methodology, which addresses the impact of the project on the environment, and both the well-being of the wider community and the occupants of the building.

186. Building fabric is being designed as a “fabric first” approach which aims to exceed requirements of the current building regulations. The development’s performance is calculated at 19.17% betterment over Part L of the Building Regulations, using the Standard Assessment Procedure for Part L. This figure is for the entire development, combining the betterment for the extension (19.49%) and the betterment for the existing building (18.46%). The proposed ‘fabric first’ works to improve the thermal performance of the façade of the existing building should provide excellent post-refurbishment performance with the betterment over Part L of the existing post war, thermally inefficient building being close to that achieved for the new build extension, once the proposed development is completed.

187. The building performance is enhanced by its design as a cast concrete structure, providing a high mass construction, which delays the realisation of changes in temperature and for stable temperature conditions in the building. The submissions indicate that 60% of embodied carbon emissions are associated with the sub-structure, frame, upper floors and roof of a building. The proposed refurbishment will retain these elements, resulting in a significant reduction in the building’s carbon footprint – typically the carbon footprint of a refurbished building is half that of an equivalent new-build.

188. With other UEA schemes we have also seen operationally the contractor’s sustainability requirements set out in a contract document to manage material usage, waste and on-site energy and water usage. Also, for the contractor to use local skills / sub-contractors, for the benefit of the local economy and in order to reduce transport movement. Such measures beneficial and it is envisaged that such practice will continue.

189. **Net zero carbon** – The University target is to reach Net Zero Carbon (NZC) by 2045. This target covers Scope 1 and Scope 2 emissions. These being Scope 1 – emissions from direct activity by the University, such as heating, cooling and powering buildings and fuel for UEA vehicles; and Scope 2 – the indirect emissions from UEA energy supplies. At UEA these emissions relate only to the electricity from the National Grid to provide lighting, computing and ventilation to the campus.

190. Decarbonisation of the DHW and the provision of ASHP systems on the central plant is a key part of meeting that target. The primary focus of the UEA’s strategy in the short term is to address ‘Fabric First’ and deal with the poor thermal performance of large inefficient elements of its estate, such as the Lasdun Wall, to help reduce its energy usage and demand in the first instance.

191. The timeline for the future decarbonisation works will be developed as part of the University's Infrastructure Strategy, which is currently being drafted. The University has pledged to be NZC by 2045, however there is a specific commitment to reach 80% (of Scope 1 and 2 emissions) by 2030, which will include the progression with campus-wide utilisation of LZC technologies. This approach to the issue is very welcome.

192. Whilst this subject naturally is looming large its impact on planning decisions is somewhat trailing behind in terms of defined policy. The planning system has 3 overarching objectives which includes the environmental objective to protect and enhance our natural, built and historic environment. Whilst the NPPF recognises or references the Climate Change Act 2008, the 2030 Agenda for Sustainable Development and Resolution 42/187 of the United Nations General Assembly for aspirations and choices for moving to a low carbon economy it does not at present promote the primacy of this particular net zero cause or provides links with specific planning legislation to outbalance a key aim of the Planning (Listed Buildings and Conservation Areas) Act to protect heritage assets.

193. Legislation allows local planning authorities to set energy efficiency standards in their development plan policies that exceed the energy efficiency requirements of the building regulations. At the present time, however, none directly exist in relation to this proposed development or in terms of NZC provides policy which could be set within an argument of benefit to more directly offset any harm caused to the significance of a listed building which in this case relates to by both the building extension and proposed refurbishment of the building.

Telecoms on main roof

194. In discussion with the UEA the LPA have previously agreed that it is preferable to see the removal of telecoms equipment on the main roof of building 3. An indication is given on this in recent delegated reports as detailed in the planning history above for any new or replacement telecoms fittings and the UEA have committed to this aim and have started the process of equipment removal. The current telecoms arrangement has grown over time adding clutter to the roof area and view of the Wall. These detract from the listed building and its appearance in views, especially from the south. Their removal should be negotiated as part of proposed refurbishment works to the Wall. Such removal would be beneficial in any event but would also help balance the level of harm potentially caused by other works being proposed.

195. The UEA are understood to be in discussion with telecom providers to enable this equipment to be removed. If the equipment is re-located to a less sensitive location on campus (subject to a separate application), this could be supported by policy DM10. In order to help balance the impacts of the proposed application works to the Wall and provide some further mitigation a condition is suggested giving a timeline for the removal of the equipment and suitable alternative on-site provision being provided.

Equalities and diversity issues

196. There are no significant equality or diversity issues. It appears from the submissions that the intention of providing fully inclusive access is being designed into the scheme. The scheme is to comply with the Disability Discrimination Act and provide level access into the building and to facilities within. This will include lifts to upper floors, a new level main entrance within the north side extension and new internal corridor links through the building which aim to connect through to all parts of the Wall. Specific disabled parking bays will be located near to the building. It is understood that generally areas will be designed to meet the latest Building Regulations - Part 'M'. It is considered that the development is unlikely to result in any detriment to people with disabilities.

197. The proposal will result in the change of educational facilities on the site, which is likely to have an impact on a range of age groups using the Campus but adds benefits of providing for updated on-site student facilities to meet existing and future demand. The proposal also includes communal study facilities which again are likely to be of particular benefit across the population spectrum. The scheme is designed with user / stakeholder engagement to inform accommodation layout designs which in principle appear to have worked for the University and for user groups involved in developing the scheme. In this instance, therefore, it is considered that the proposal would not have an unacceptable impact on people of a particular age group within the community.

Local finance considerations

198. Under Section 70(2) of the Town and Country Planning Act 1990 the council is required when determining planning applications to have regard to any local finance considerations, so far as material to the application. Local finance considerations are defined as a government grant or the Community Infrastructure Levy.

199. Whether or not a local finance consideration is material to a particular decision will depend on whether it could help to make the development acceptable in planning terms. It would not be appropriate to make a decision on the potential for the development to raise money for a local authority. In this case local finance considerations are not considered to be material to the case.

Conclusion

200. The principle for a scheme to erect an extension to aid educational use on campus is largely in line with policy DM26. Further detailed analysis of building repair strategies, design, landscape setting, site layout, window replacement etc. indicate that a balanced approach can be taken to the acceptability of the impact on local and national heritage assets and architecture to indicate that scheme design and further mitigation align the scheme to part (a) of policy DM26 and on balance is acceptable.

201. In terms of the holistic nature of the listed Lasdun Wall, it is important as part of any assessment that whole building strategies for change are adopted with regard to window replacement, key areas of building protection for interiors and possible future interior design detail for fixed elements of the building. Such agreement appears possible and is sought, as necessary, by way of conditions.

202. The public benefit of the new academic spaces which arise from the proposal can be weighed against the less than substantial harm to the significance of the Grade II listed building and its setting and to the impact of the proposals upon the setting of other listed buildings under as paragraph 202 of the NPPF. In addition, also to be weighed against the heritage harm are the benefits to the longevity of the building as a result of the proposed works, which mean that it can continue in its intended use as a teaching and research space. Given the nature of this application and the nature of the works and extent of changes it is considered that the extent of harm created is acceptable when weighed against the benefits of the proposal.

203. In terms of harm to non-designated assets, on balance the limited harm caused is acceptable and has been limited by building design and layout changes during the course of negotiations about the site.

204. Subject to conditions, the proposal is considered to be an appropriate use for this site and in part is guided by the masterplans for the Campus and adopted policies. The site forms part of the existing Campus and through travel planning and sustainable transport improvements historically is in an accessible location for student and other group use. The nature of the precise uses proposed would complement the surrounding area without giving rise to disturbance to properties within or beyond the Campus boundary.

205. The design and layout are considered acceptable and subject to further conditions and agreement provides for adequate replacement landscaping, biodiversity enhancement and tree protection measures and would be unlikely to cause detriment to the visual amenity of the area or to amenity assets within and adjoining the Campus. Cycle parking and service provision is capable of being suitably managed and to be appropriate to meet the needs of the proposal and overall, Campus arrangements. Subject to the suggested integration into the UEA travel plan the development is unlikely to result in adverse impact on the adjoining highway network and in any event, subject to condition on Campus refurbishment, results in no additional floor-space being created.

206. As such the redevelopment of the site for the erection of new student and community facilities is acceptable in principle. The proposed development economically, socially and environmentally represents sustainable development. The proposal would result in development that would further enhance educational facilities at the University of East Anglia. The development is in accordance with the requirements of the National Planning Policy Framework and the Development Plan, and it has been concluded that there are no material considerations that indicate it should be determined otherwise.

207. The development is in accordance with the requirements of the National Planning Policy Framework and the Development Plan, and it has been concluded that there are no material considerations that indicate it should be determined otherwise.

Recommendations

(1) To approve **application no. 22/00570/F - Teaching Wall Norfolk Road University of East Anglia Norwich** and grant **planning permission** subject to conditions such as those listed below (with delegated authority to the Head of

Planning and Regulatory Services to agree the final number and form of conditions):

1. Standard time limit;
2. In accordance with plans;
3. Details of external facing materials including final cladding detailing of joints, corners and pattern or tessellation of boards; windows/doors/curtain walling and glazing; joinery; plant enclosure material(s), railing, finish and fixings; rainwater goods; cctv; soffits/cappings; external louvers; manifestations, steel frame finish for covered service access and refuse enclosure; glass roof fixings etc.;
4. Details of phasing programme for occupation of the building and decant of phases of the Lasdun Wall;
5. Timing of and details of replacement cycle provision for on-site shortfall as required on re-occupation of buildings;
6. Construction Management Statement / Plan and site set up for temporary material stores; safe entrance and delivery points; main office management facilities; site management and noise reduction; safe bus, cycle and pedestrian access; wheel washing facilities etc.;
7. Compliance with the 'Construction Traffic Access Route' within any Construction Management Statement / Plan;
8. Details of cycle parking, EV charge points, car parking, bins and servicing areas;
9. Details of final layout of cycle access via University Drive;
10. Link to UEA travel plan;
11. Details of progress update for movement strategy report and findings;
12. Details landscaping scheme (including tree specification, surface water capture for landscape area irrigation, ecology enhancements on/off-site e,g. nesting boxes, soft and hard landscaping, furniture, handrails means of enclosure and retaining walls, Cow Drive edge works, treatment of felled tree materials etc.) implementation programme; written specifications; landscape management plan;
13. Details of mitigation Programme as Green Infrastructure Strategy including scope of activities / works, planting, tree replacements (and quota), management and implementation programme;
14. Clearance outside of Bird Nesting Season unless supervised;
15. Details of external lighting;
16. Arboricultural meeting and site monitoring;
17. In accord with Arboricultural Impact Assessment etc.;
18. Details of additional Arboricultural Method Statement – tree removal; pruning; no dig construction and hard surface design; root pruning; site set up and compound; design and operation of temporary setback areas;
19. Details of location of services and methodology for installation if within RPA’s;
20. Restriction of activities within root protection areas;
21. Details of low zero carbon technologies photovoltaic panels (PV’s) array and air source heat pumps (ASHP)
22. Details of new building connections to campus CHP / DHM;
23. Details of water conservation measures;
24. Details of on-site foul water drainage strategy for works, connection point and discharge rate
25. Details of surface water strategy / scheme including maintenance and management;
26. No hard surfaces shall be laid out unless in accordance with surface water strategy;
27. Stop works and details of remediation if unknown contamination is found;

28. Removal of telecoms equipment prior to extension occupation and details of timeline suitable alternative on-site provision being provided.
29. Details of plant and machinery;
30. Details of fume and flue extraction.

Article 35 (2) statement

The local planning authority in making its decision has had due regard to paragraph 38 of the National Planning Policy Framework as well as the development plan, national planning policy and other material considerations, following negotiations with the applicant and subsequent amendments at the pre-application and application stage the application has been approved subject to appropriate conditions and for the reasons outlined in the officer report.

Informative Notes

1. Unexploded ordnance;
2. Comments of Anglian Water in relation to notice under the Water Industry Act 1991 to connect to a drain, protection of existing AW assets (public drain), statutory easement width of 3 metres from the pipeline, sewer adoption agreement and that an application to discharge trade effluent must be made to AW.
3. Comments of Norfolk Constabulary;
4. Comments of LLFA;
5. Environmental protection/mitigation measures
6. Site clearance and consideration of wildlife;
7. Protected species;
8. Considerate constructor;
9. Removal of asbestos;
10. Notification of timing of works to avoid impacts on highway network.

(2) To approve **application no. 22/00571/L - Teaching Wall Norfolk Road University of East Anglia Norwich** and grant **listed building consent** subject to conditions such as those listed below (with delegated authority to the Head of Planning and Regulatory Services to agree the final number and form of conditions):

1. Standard time limit;
2. In accordance with plans;
3. Details external materials including final cladding detailing of joints, corners and pattern or tessellation of boards; windows/doors/curtain walling and glazing; joinery; internal joinery for doors/frames/openings; final sill detail, mullion detail and glazing; plant enclosure material(s), railing, finish and fixings; rainwater goods; cctv; soffits/cappings; external louvers; manifestations; supply and extract cowls, internal plant and machinery equipment (including vents and pipes position, size and finish), internal and external lighting, building signage; cctv; method, timing and extent of ceiling/soffit paint removal; design for wall or ceiling junctions; insulation including around the window openings; final design(s) of rear fixing of spandrel panel; intumescent paint; steel frame finish for covered service access and refuse enclosure; glass roof fixings etc.
4. For the avoidance of doubt removal of external fixings previously agreed
5. Details of document for a longer-term strategy for internal layout and finishes based on draft submitted with application;

6. Related details of internal fixtures and fittings specification of fixed interior elements;
7. Details of strategy for materials recycling for furniture, blocks and doors / fittings.
8. Listed building – making good.

Reason for Approval

The proposed alterations, subject to conditions, on balance will relate satisfactorily to the former arts areas and will respect the specific architectural character of these parts of the listed Teaching Wall. Subject to agreement of final details as outlined the works overall result in an appropriate form of alteration in the context of the internal and external design and layout of the building and will help to secure the optimum site operation through providing improved Campus facilities. The scheme provides an appropriate simple form of development. The continued functional use of spaces is of heritage benefit and some impact on the key elevations and internal spaces as a result of that, in the heritage led form of design interventions that should respond to the design and materiality of the listed building, is considered acceptable.

Whilst there is some impact this is considered to result in less than substantial harm to heritage assets or setting. The public benefit of the new academic spaces and potential this allows for the phased refurbishment of the listed Lasdun Wall buildings, improvements to the safety of the building for public use and de-risking of specialist and other teaching infrastructure along with betterment of lab design to align with modern needs thereby maintaining a teaching use within the Lasdun Teaching Wall which arise from the proposal is weighed against the harm to the significance of the building(s) and setting as required in paragraph 202 of the NPPF, given the nature of this application and the nature of the works and mitigation for the extent of changes it may be considered that the limited harm created is acceptable. As such the works to the listed building, subject to conditions, are considered to be appropriate and in accordance with the objectives of the NPPF, policies 1 and 2 of the Joint Core Strategy for Broadland, Norwich and South Norfolk (2011) and policies DM3 and DM9 of the adopted Development Management Policies Plan (December 2014).

Informative Notes

1. This consent relates only to the works specifically shown and described on the approved drawings. All other works, the need for which becomes apparent as alterations and repairs proceed, are not covered by this consent and may require a further specific consent. Details of any other works, submitted as part of a further application for listed building consent if required, should be submitted to the local planning authority and approved before work continues.


•New accessible ramp to entrance
•Plant screen to conceal roof services
•New external entrance portico
•Internal plant space on level 01
•General waste storage
•New landscape path
•New goods lift and spur staircase
•Existing spiral staircase to be retained
•Accessible car park
•EPR/NMR


•FC cladded screen on secondary steel support
•Triple height CW atrium
•Internal plant space on level 01
•Accessible car park
•External general waste storage
•New proposed landscape
•New accessible entrance
•New accessible ramp
•Existing ramp/footpath

6 PROPOSED OPTION

6.1 ORGANISATION OF SPACE

The red and blue diagram below shows how the proposed 'spur' extensions, combined with the existing floor plate, provide the required 28m deep floor plate. Larger modular laboratories are shown in red and their support/ ancillary space shown in blue. The proposal utilises the existing floorplate which is 14m deep and provides two 14m deep extensions to create 28m deep modern flexible laboratory space.

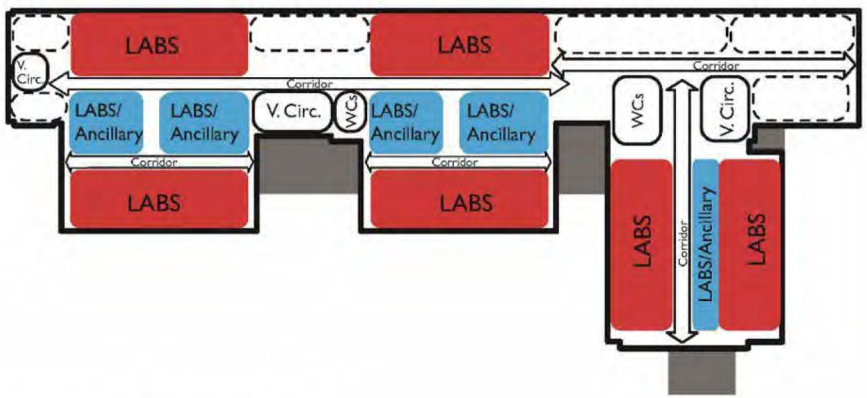
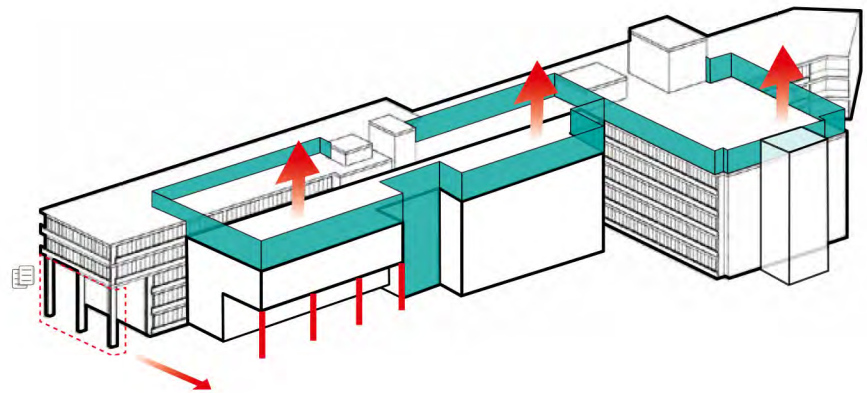


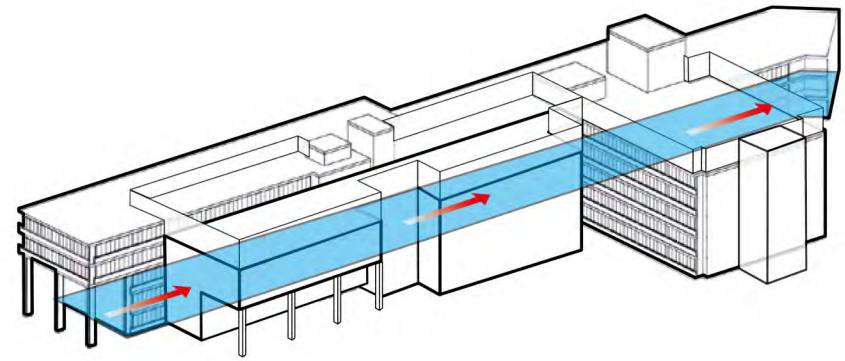
Fig 6.1 Layout for Optimum Brief Laboratory Planforms

Rooftop plant is required as the existing floor to ceiling heights are too low to provide horizontal ductwork within the interior. As the plant needs to be at roof level, the design provides space for this on the North side of the building. This reduces the visual impact of the plant from the main campus and key views from the Broad. The elements coloured green are the roof top plant screen and the vertical ventilation strategy is shown with the arrows.

The proposal provides a new accessible entrance which is close to the main car park and adjacent to the East end of the existing building and Founders Green. This new entrance will make Building 3 more accessible and enable future options for single-level access to the other parts of the Lasdun Wall.



- Ground floor connection: plant horizontal and vertical service distribution



- Internal teaching concourse accessible throughout entire Lasdun Wall

Fig 6.2 Concept Development

- Removing the panels also created a new risk, which was the panels may break or become damaged in the process. This risk would be avoided by retaining the panels in place during the works.
- The option to retain the panels in place was fully reviewed and found to still meet the thermal requirements assisting the University to reach its Net Zero Carbon targets.
- The option to retain the panels in place was also reviewed in terms of future flexibility. Although this option still left some asbestos in situ in the joint between the panel and the concrete frame, this asbestos could be encapsulated and therefore managed, without being exposed in any future adaptions to the building.

This proposal remains in principle as follows:

- Removal of the existing windows and gutter.
- Retain spandrel panel in existing position.
- Remove all floor screed as this is contaminated with asbestos, and encapsulate the connection between the floor slab and the spandrel panel as it is anticipated that asbestos material may be contained within the connection.
- Provide new internal thermally broken supports. These are to be subject to further detailed design with a specialist engineer and manufacturer.
- Provide new insulation and membranes to a new internal spandrel wall. This will also need to contain new fan convector heaters.
- Provide additional insulation at ceiling and floor level to mitigate the cold bridging between the spandrel panel and the existing concrete slab edge.
- Install new windows and gutter, with a gutter detail that takes water away from the façade (as opposed to bringing rainwater internally as existing - see cill details opposite showing existing and proposed)

Fig 6.42 Existing windows and the temporary supports required to support the spandrel panels

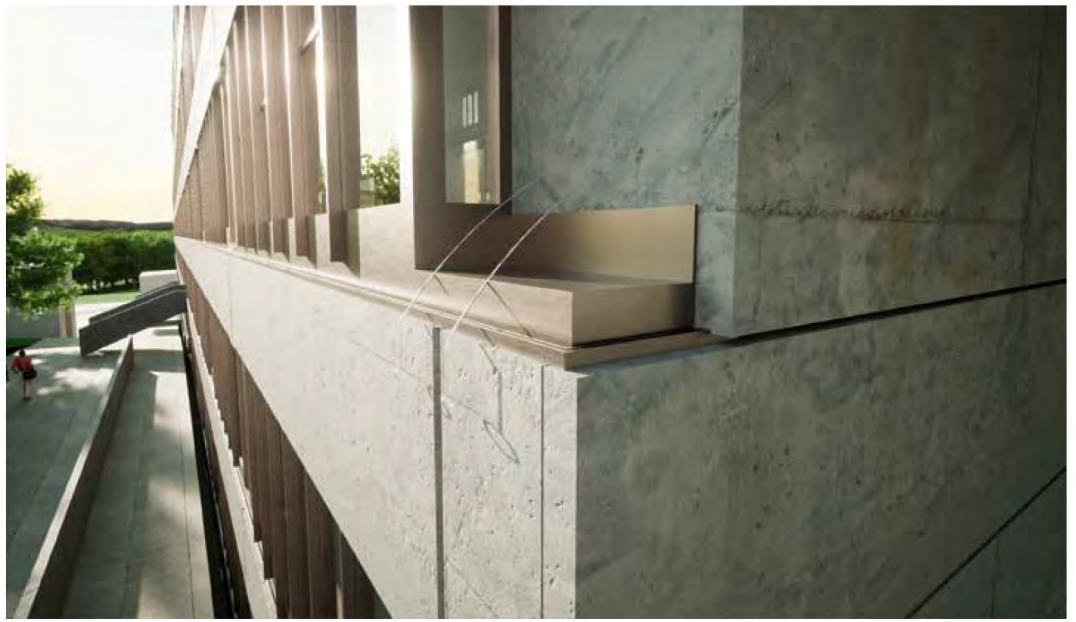


Fig 6.43 CGI of existing cill detail

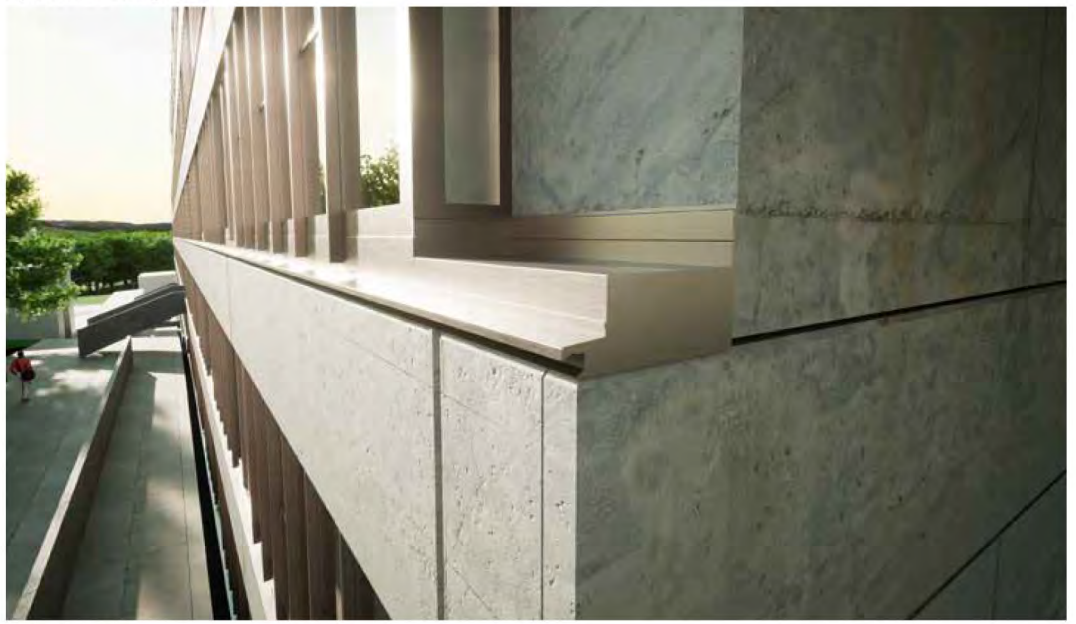


Fig 6.44 CGI of propossed cill detail