Design Guide Part 2: Architecture and development context

RIBA Stages 1 – 2

2018 V1.0 Grey Cover

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Contents

1 Introduction

1.0 Prior Reading

It is imperative for readers of this document to first refer to the introductory Part entitled:

'*Design Guide Part 1 – Principles and overview'.*

Part 1 gives vital information and context that apply to all projects.

1.1 Purpose of the UEA Design Guide

The Design Guide (as a whole) is written for employees of the UEA, architects and external consultants and contractors. The purpose of the Guide is to act as a briefing document to give designers an overview of the design requirements, constraints and challenges presented by the UEA's specialist needs. It applies to all new-build and refurbishment projects, controlling quality in the production of designs, specifications and the subsequent performance of buildings.

The Design Guide aims to discuss strategic matters and does not provide an exhaustive treatment of statutory or best practice design and compliance requirements; its primary purpose is to establish a starting point for design *briefs*. It is the responsibility of readers/duty holders to ensure subsequent designs are complete, compliant and able to meet the final approved brief when measured in use.

1.2 Purpose and Structure of this Part of the Design Guide

This Part of the Design Guide (Part 2) is written for architects and designers who are responsible for developing buildings and spaces at RIBA stages one and two. It is split into three main sections as follows:

Section 1   Introduction

Section 2   Architecture; discusses architectural history, context and requirements for new buildings and spaces as well as for refurbishment projects.

Section 3   Growth and development regulation; discusses the campus masterplan and how the opportunities and constraints brought about by the local planning authority and the conservation requirements of the campus.

1.3 Interpretation

Any Part of the Design Guide may be referenced in project contractual documentation in order for the UEA to control quality. The following interpretations apply:

Enforced requirements; the use of the word(s) 'shall', 'are required', 'is required' 'must' or 'will be' denotes a requirement that is non-negotiable and shall be used as the basis for designs, technical submissions and/or activities. If such a statement conflicts with a statutory obligation then a report to the UEA's approving authority shall be produced highlighting the conflict, for his or her final decision regarding compliance.

Requirements needing confirmation; the use of the word 'may' denotes a negotiable requirement or indication of a solution, where innovation and further calculation, design and discussion may be required to arrive at an optimised solution.

Quality; the Design Guide aims to arrive at the UEA's highest design aspirations and standards. It may be that, at the UEA's sole discretion, solutions are value engineered during subsequent design iterations. Designers are encouraged to consider where value engineering may result in an improved financial performance should funding constraints occur.

Currency of third party documents; where superseded standards and regulatory documents are referred to in the text, the reader shall apply current versions and disregard superseded versions.

Proof; where the word 'proof' is used e.g. 'proof is required', a written report or installation certificate must be produced for approval depending on context.

Approval and proof; all designs shall be approved by the UEA. Approval shall be interpreted as meaning written approval from either the UEA's appointed approving authority or by the Head of Engineering and Infrastructure where no other approving authority is appointed. Approvals shall be sought prior to design decision points or installation activities (depending on context) and shall be made in writing. Where approvals are sought, a written technical submission shall accompany the request setting out, with proof (e.g. calculations, drawings), the case for the approval. The purpose of the approval process is to ensure designs meet the strategic requirements of the UEA.

The obligations owed by external architects, consultants and contractors to UEA and their liabilities to UEA is not in any way diminished or otherwise reduced by the approval process. UEA is not taking over the roles and duties of the external architects; consultants and contractors who will remain fully and totally responsible for the design and/or works carried out by them or on their behalf by their staff; agents; sub-consultants or sub-contractors.

1.4   Version control and updates

Any new or amended content is highlighted in yellow so readers can easily identify changes from previous versions. Where no yellow highlights exist the document either remains unchanged or it is the first version to be published.

2 Architecture

2.0   Introduction to the UEA

Built on 200 hectares of beautiful parkland on the outskirts of the historic city of Norwich, the UEA campus is one of the most innovative in the country, combining natural beauty with architectural flair. The campus has won more than 20 architectural awards and ongoing multi-million pound investment continues to enhance residential, teaching and research facilities.

Consistently ranked in the top six What Uni Student Choice Awards and first for Student Experience in the Times Higher Education Student Experience Survey 2013, the UEA is part of the most cited research centre outside of Oxbridge and London and has won two Nobel prizes.

2.1   Architectural History

The first phase of the UEA's distinctive university was completed in 1966. One of the essential characteristics in the planning tasks of the new universities of the 1960's was to make the campus as far as possible a residential one, without necessarily resorting to the expensive custom of the completely self-contained college. The issue of combining the out-of-town campus with a residential unit produced innovative high density institutions which characterise the campuses of this period.

Sir Denys Lasdun[1] intended for the UEA campus to mark a move away from the enforced formality of the traditional college hall of residence, addressing the changing way of life for students during the 1960's. Central to Lasdun's concept was the idea of a compact campus where students would leave their front door and walk together elsewhere on campus. The opportunity to rub shoulders and chat with students, lecturers and researchers, he foresaw, would be an inherent and important part of university life.

Lasdun's original concept was realised in the form of the 'ziggurat' residential units and what has become known as the 'Lasdun academic wall[2]', the interdisciplinary teaching building that runs a quarter of a mile forming the central spine of the campus. Unlike many of its urban counterparts, this bold experiment in the brutalist style has resulted in a successful and vibrant community. Lasdun's architectural success is partly attributed to the juxtaposition of his bold architecture against the 'seemingly limitless' parkland landscape designed by Brenda Colvin[3].

Lasdun successfully anticipated the continuing societal trend towards informality producing a design that has provided a world class learning environment for over 50 years. Since the 1960's the campus has enjoyed much new development resulting in c270,000 m² of GIA[4]. Many buildings, either maintaining Lasdun's original themes or contrasting them, have been commended for innovation and success either for their architectural form or their pioneering standards with regard to resource efficiency[i].

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[1] The first appointed University Architect at UEA was Sir Denys Lasdun (1914-2001).
[2] Or 'teaching wall'
[3] Brenda Colvin (1897-1981); one of the founders of the Institute of Landscape Architects (now the Landscape Institute)
[4] Gross internal floor area; this is projected to increase by another 55,000 m² by 2030.

2.2   Architectural Requirements

2.2.1 Introduction

This section conveys architectural guidelines for new buildings and refurbishment projects at the UEA.

2.2.2 The UEA market proposition

It is useful to consider here the current marketing brand proposition of the UEA[ii] which is:

'AT THE UEA I CAN BE UNCONVENTIONALLY BRILLIANT'.

Unconventionally brilliant is underpinned by three principles:

1. BE CONFIDENT
2. BE YOURSELF
3. DO DIFFERENT

The UEA seeks spaces that facilitate these values.

2.2.3 Design idiom principles[iii]

These principles shall be applied to every project from small-scale refurbishments to new buildings.

1. Innovate
2. Achieve an unparalleled student experience
3. Achieve balance across the campus
4. Consider wholeness
5. Prioritise comfort for students, staff and visitors
6. Delight and surprise
7. Use materials to create atmospheric spaces
8. Create ambience with lighting
9. Designs shall be human in scale, humanist in design
10. All built environment shall be long life, low energy and loose fit;
11. Prepare for the future

The sections below discuss each idiom in greater detail:

1. **Innovate;** the UEA seeks buildings that push boundaries in a way that controls risk.

2. **Achieve an unparalleled student experience;** a central plank of the UEA's marketing strategy is achieve the highest ranking for student experience (SE). SE is one of the key differentiators between universities and the UEA's success can in part

be attributed to its careful management. The UEA invites creativity and innovation for realising this idiom but considers the following points to be non-negotiable:

- Life enhancing;
- comfortable;
- sense of order and
- safe.

3. **Achieve balance across the campus;** the UEA campus provides numerous sources of stimulation. Through balance, a greater sense of order and calm can be achieved. Architects and designers shall balance:

- heritage and the future by applying architectural expressionism that is well mannered and of its own time and not a pastiche of the earlier periods;
- operational with ambience requirements and
- engineering with aesthetic style.

In addition to these requirements is the need for visual balance; understanding which elements in a given space should be prominent and which should be more recessive achieves visual balance.

4. **Consider wholeness;** good design starts with the whole; the whole campus, the whole building, the whole project from engineering to surface finishing as well as the whole team.

Whether carrying out a refurbishment or designing a new building, any project shall take account of:

- The concept of Universal Design[5] – usable and marketable to people with diverse abilities (discussed more fully in Part 9 of the Design Guide[6]))

- the building and its position within the whole campus;

- how the piece of work relates to the rest of the building;

- how the building's spaces are likely to change in the future;

- the heritage and history of the building and the campus;

- any special features or important architectural details;

- creating wholeness of space and form;

- clutter free legible spaces and vistas and

- the usefulness and amenity of the spaces created between buildings.

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[5] What is Universal Design? National Disability Authority, Dublin. 2012 http://universaldesign.ie/What-is-Universal-Design/
[6] UEA Design Guide Part 9 *Universal design and access for all*

Projects at the UEA require the input of many people with different sets of skills and responsibilities. At the start of a project seek the advice of everybody involved to ensure any opportunities or issues can be addressed early on. Engaging with building users and FM teams instils confidence in design solutions.

5. **Prioritise comfort for students, staff and visitors;** people shall be at the heart of all decision making with the simple of aim of making places more comfortable and easier to use. Comfort shall take primacy over energy and resource efficiency, notwithstanding the need for spaces with superlative efficiency standards.

6. **Delight and surprise;** recognise what makes a space special and enhance and preserve these features. Examples (not exhaustive) are:

   - celebrating heritage;

   - promoting a sense of nature;

   - designing special lighting and

   - engaging with culture and art.

7. **Use materials to create atmospheric spaces;** designers shall avoid creating sterile environments. Most projects will include the requirement to meet an environmental standard such as BREEAM or Passivhaus and so using sustainable materials to create atmosphere is likely to be one of the design challenges.

   Colours, textures and attention to detail all contribute to atmosphere. The UEA seeks materials, textures and colours that are respectful of their context but are as experimental as concrete was in 1966. Natural materials have successfully created atmosphere for recent building projects.

8. **Create ambience with lighting;** Cost often dictates the choice and application of fittings with no consideration of how this impacts on the overall perception of space. Although lighting must make safe and functional environments, it can also be transformational – improving spaces, drawing attention to heritage or special features and helping to improve legibility. Part 6 of the Design Guide: *General requirements for electrical systems* gives further detail on photometric and electrical performance. With regard to aesthetics, luminaires should:

   - be appropriate to the architecture
   - understated and submissive to the architecture (with the exception of feature lighting)
   - be designed with finishes to match the surfaces the luminaire is mounted in or on
   - obscure the lamp source to prevent glare (notwithstanding that they need to meet the minimum luminaire output ratio described in Part 6 of the Guide)

9. **Human in scale, humanist in design;** if a design solves a functional problem as simply and elegantly as possible, the resulting form will have a beauty that is honest and timeless. This resulting form should respect and empower people of all nations and beliefs.

The use of simple forms are easy to price and construct and allow budget to be spent elsewhere; keeping details to a minimum allows time to be spent on things that really count.

10. **All built environment to be long life, low energy and loose fit;** the UEA owns and operates the majority of buildings on campus and so considers whole life cost and 'measured in use' performance to be key to achieving value for money (as discussed in Part 1 of the Design Guide: *Principles and overview'*). A loose fit approach ensures the flexibility required for change and to be able to adapt to future learning, teaching and research needs.

    While it is important to design *buildings* that can be successfully adapted over 40 years or more, the *campus* must be capable of adaption over a period much greater than this; there is no foreseeable scenario that results in a cessation of learning and research at the UEA campus.

11. **Prepare for the future;** designing for life and whole life costing has been touched upon above. Further measures may take the form of:

    - using standardised, constructed off-site and modular systems;

    - considering maintenance and decommissioning activities and

    - using emerging technologies

12. **Best practice in architecture;** architects and designers shall make reference to The UK Higher Education Learning Space Toolkit[7] when developing learning spaces.

2.2.4 Key campus-wide spatial design principles and requirements

Architects and designers of significant projects shall consider the following statements that relate to master planning at the UEA:

- dense development at the core with decreasing plot ratios at the periphery;

- a skyline that does not challenge the Lasdun skyline;

- development planning that stems from and grows the landscape and extends its influence and geometry from the original University buildings;

- spaces between buildings that have meaning and utility;

- maintaining the visual amenity and connectivity of the landscape and the landscape design rooted in the Colvin tradition (a managed rural landscape);

- parking to be set at the boundaries of the site to encourage footfall elsewhere and

- the Norwich Research Park, of which the UEA is an important part, has to have a unity of design to protect quality and collaboration.

Readers needing to understand the wider masterplanning and strategic policies relating to the campus should familiarise themselves with the following documents that are appended to the Design Guide.

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[7] The UK Higher Education Learning Space Toolkit: a SCHOMS, AUDE and UCISA Collaboration

- *UEA Development Framework Strategy, 2010.*

- *Earlham Hall Vision and Development Document, 2011.*

- *UEA Conservation Development Strategy, 2006.*

- *UEA Landscape Strategy, 2010*

- *UEA Travel Plan Strategy 2017 – 2022*

Local planning policy, as it applies to the UEA, is discussed in Section 3 below.

3 Growth & Development Regulation

3.0   Introduction

The UEA campus is an integral part of the Norwich Research Park (NRP) which is a cooperative of world class research facilities. The NRP is regarded as one of the Region's most important 'engines' of growth and prosperity. The UEA occupies NRP East with NRP West providing a home to numerous institutions involved in environmental and food research and facilities such as the Norfolk and Norwich Hospital. While most of the institutions at NRP West are independent of the UEA, the UEA does develop and manage buildings at this location.

It is important to note that NRP West falls under the jurisdiction of South Norfolk Council with NRP East falling under Norwich City Council; the river Yare forms the boundary between the two local planning authorities.

The sections below consider local planning policy, as well as providing information on the development opportunities and constraints imposed by the conservation status of certain areas of the campus.

3.1   Local Planning Policy

Policy DM26 of Norwich City Council's local plan (adopted in 2014)[8] describes NCC's policy for the UEA quite succinctly and so is reproduced, in italics and in full below.

Development at the University of East Anglia (UEA)

Development within the UEA campus, as defined on the Policies map, will be permitted providing it is for university related uses and is in accordance with the agreed masterplanning documents currently in place for the University, and with any subsequent detailed guidance endorsed by the council for individual parts of the site. 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;*

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[8]http://www.norwich.gov.uk/Planning/PlanningPolicy/LocalPlan/Pages/SupportingDevelopmentAtThe UniversityOfEastAngliaUEA.aspx

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.*

Supplementary text

26.1   The University of East Anglia (UEA) is an important asset for the city and the county. It is a major employer and is internationally recognised for its excellence, particularly in the fields of environmental science and literature. Its importance to economic growth in greater Norwich is recognised by the JCS identifying it, together with the neighbouring Norwich Research Park and the Norfolk and Norwich University Hospital in South Norfolk, as a strategic employment site, and its being identified as a major focus for employment growth in the city. The growth of this employment site is fundamental to the economic strategy for the area, promoting the linked development of knowledge based industries, particularly plant sciences, education and the hospital.

26.2   As a consequence of the need for growth at the UEA, and to ensure that the growth is sustainable and does not have a negative impact on neighbouring residential areas and the highly attractive landscape of the Yare Valley and neighbouring parks, Norwich City Council has worked closely with the UEA on the production of masterplanning documents.

26.3   Work on these documents has informed the development of this policy, which covers all development in the university campus, as defined on the Policies map. This policy aims to ensure that any development within the university campus retains and enhances the special character of the university and its historic development, whilst protecting the landscape character and wildlife/biodiversity interest of its river valley setting. The masterplan has also informed detailed site allocation policies in the Site allocations plan.

26.4   The masterplanning documents already endorsed by the council consist of the UEA strategic principles document (2010), the UEA development framework strategy (2010) and the Earlham Hall area vision and development document (2011) (see 26.10 below). Further documents for specific sites will be produced (see 26.8 below).

26.5 A portfolio of related documents has informed the production of the UEA masterplanning documents. These documents set out the history and local circumstances relevant to development at the university. They include the Conservation development strategy and the Landscape strategy, which give detail on clause (a) of the policy, concerning landscape, architecture and vistas. The masterplanning documents and the accompanying portfolio of documents will in most cases be material considerations in assessing planning applications within the university campus.

26.6   The masterplanning documents have identified that, in order to provide for the growth needs of the university, it is necessary both to have limited infill within the campus and to extend the boundaries of the campus.

26.7   The campus boundary extends to include:

- *recently developed sports facilities and their car park;*

- *the former Blackdale School site*

- *a long-term strategic reserve site allocation. This strategic reserve site is between Bluebell Road and Suffolk Walk and is likely to be required for further student accommodation towards the end of the plan period.*

26.8   Development briefs are intended to be produced for the former school and the strategic reserve sites. Further detail on each of these sites is in the Site allocations plan.

26.9   This policy requires all development, other than development involving very minor works or localised changes of use, to implement travel planning measures to minimise vehicular traffic to the site set out in the most up-to-date version of the travel plan. In addition, where possible, it requires improved public access to open space. Development at the former Blackdale School site would enable public access to Blackdale Plantation, whilst development of the strategic reserve site would need to make provision for improved access to the Yare Valley.

Earlham Hall

26.10   Earlham Hall is a grade II* listed historic building which adjoins, but does not lie within the existing or proposed university campus. It has an established use as part of the University. A separate allocation for an enterprise and innovation centre on land to the east of Earlham Hall is also proposed through the Site allocations plan (now built). This site includes Earlham Hall itself, but does not affect any areas of publicly accessible parkland around it.

A Vision and development document (VADD) has been prepared by the university with the aim of informing the overall design of a development scheme, securing the repair, refurbishment and beneficial long-term use of Earlham Hall and promoting complementary new development around it to enhance the setting of the listed building and the surrounding public parkland.

References

- *JCS policy 7: Supporting communities.*
- *JCS policy 9: Strategy for growth in the Norwich Policy Area.*
- *UEA strategic principles document, 2010.*
- *UEA development framework strategy, 2010.*
- *Earlham Hall vision and development document, 2011.*
- *UEA conservation development strategy, 2006.*
- *UEA landscape strategy, 2010*

The UEA strategy documents referenced in DM26 are available as appendices to the Design Guide and are described more fully in the sections below.

3.2   Development Strategy

3.2.1 The Masterplan

The UEA's Masterplan is prepared in three stages:

1. Strategic Development Principles Document (2010);

2. The Development Framework Strategy (2010) and

3. Detailed Development Briefs for each of the new development areas.

These documents are appended to this Part of the Design Guide (available separately and electronically) and are discussed more fully in the sections below:

1. **Strategic Development Principles Document;** the UEA Strategic Development Principles Document was published in May 2010. The document sets out and explains the UEA's approach to considering the different strategic options for accommodating its future growth.

   Two strategic options were considered and tested for their ability to meet the UEA's growth needs and requirements: "Single Campus" and "Off Campus". The "do nothing" option was also considered. The Strategic Development Principles Document's testing process concluded that the continuation of the "Single Campus" model is the most appropriate solution to deliver the UEA's growth targets and allow it to remain as a nationally and internationally recognised university.

   The document and results were subjected to a sustainability appraisal, conducted by Norwich City Council officers. The sustainability appraisal also confirmed that the "Single Campus Model" performed well in contributing to sustainable development, particularly in addressing social, economic and accessibility objectives, although it also acknowledged that issues did exist with the single campus option and that mitigation would be necessary.

   The sustainability appraisal also concluded that a number of environmental objectives can only be considered once the potential site options are known. These objectives have been considered and taken into account in the preparation of the Development Framework Strategy (DFS).

   Two documents, the Sustainability Appraisal and the Strategic Development Principles Document, were issued for a focussed consultation in March 2010. The majority of respondents to the consultation broadly supported the Single Campus Model, although some supporters had qualified concerns, mainly related to the potential choice of sites.

2. **Development Framework Strategy;** the current Development Framework Strategy (DFS) was published in 2010 and builds on from the Strategic Development Principles Document. It considers the amount of space needed to accommodate UEA's projected growth. It tests the different sub-options for accommodating growth, with particular reference to their performance in delivering the UEA's requirements, viability and also in sustainability terms.

   An important part of the DFS process is to consider and test the existing planning policy framework for its continued relevance and appropriateness. The process provides Norwich City Council with robust information and reasons should any suggested changes to the existing planning policy framework be proposed.

   The DFS expresses in one document the UEA's aspirations for spatial development over the foreseeable future. It qualifies and quantifies the currently known amount of development space required to meet the UEA's growth ambitions. It also makes an allowance for 'Advancement' opportunities, i.e. sudden unplanned opportunities for funding (e.g. new schools/faculties) which, by their nature, are unknown and

unquantifiable but which support and enhance the core purpose of the university. The DFS identifies the preferred development locations to accommodate growth, the proposed phasing of growth and mitigation. The DFS was subjected to a sustainability appraisal and public consultation.

3. **More Detailed Development Briefs;** potential development locations identified in the DFS will be considered by NCC, which will decide which to endorse. Sites incorporated into NCC's LDF after this process will be taken forward and individual development briefs will be prepared to guide the detailed development of planning proposals. These will be prepared in conjunction with NCC.

3.3 Conservation Strategy at the UEA

This section provides information about listed building and conservation area status at the UEA. The following principle strategy documents give supporting information for development planning and subsequent applications for consent:

- Conservation Development Strategy (2006)

- Vision and Development Document Earlham Hall (2011)

- Landscape Strategy (2010)

These documents are being updated and so readers must check they are using the correct version.

3.3.1 Conservation Development Strategy 2006

Following changes to statutory procedures for managing historic buildings in 2007, the UEA entered into a pilot study with English Heritage together with NCC. The UEA was one of only a few participants in the legislative programme to commission and produce its own CDS as a tool for managing the conservation of its built estate, and this has resulted in national recognition for both the UEA and NCC.

The principal aim of the Conservation Development Strategy (CDS) is to set out a framework through which informed decisions can be made about alterations to listed buildings on the campus: the Lasdun Teaching Wall and Library listed Grade II, and Norfolk and Suffolk Terraces ('the Ziggurats') listed Grade II*. It should be noted that the CDS excludes Earlham Hall because it was acquired by the UEA in 2010; four years after the CDS was produced. Earlham Hall is treated by a separate document entitled 'Vision and Development Document Earlham Hall'.

The CDS should cover the built environment and landscape across the whole campus rather than just the listed buildings and their setting. This is because the character of the UEA has been formed as a result of successive master plans rather than the addition of buildings on an ad-hoc basis. It is therefore important to continue to view the campus as a group of interconnected buildings and landscapes.

The CDS is necessarily a comprehensive document with numerous interrelated spatial concepts. A summary drawing (DG 2a) has been produced showing the listed status of buildings at the UEA but care must be exercised in its use as it must not be referenced in isolation to the whole of the CDS.

The CDS 2006 document is appended to this Part of the Design Guide (available separately and electronically).

3.3.2 Landscape Strategy and Biodiversity

The aim of the Landscape Strategy is to provide a number of distinct principles and policies which can be used to continue the development of the landscape and campus to ensure that it provides a setting which will reflect the importance and stature of the UEA and its buildings, both now and into the future. It is intended to form a companion document to the Conservation Development Strategy to guide the future development of the University.

The following policies are set out in the landscape strategy:

- Strategic Policy 1: Conserve and enhance significant vistas
- Strategic Policy 2: Conserve the landscape and architectural significance of UEA
- Strategic Policy 3: Conserve the landscape setting of University Broad
- Strategic Policy 4: Provide a safe and welcoming environment for all
- Strategic Policy 5: Encourage access to wildlife
- Strategic Policy 6: Protect and enhance biodiversity
- Strategic Policy 7: Conserve a legible hierarchy of circulation
- Strategic Policy 8: Management of Trees

The Landscape Strategy 2010 document is appended to this Part of the Design Guide (available separately and electronically).

The Biodiversity Map Revision J is appended to this Part of the Design Guide (available separately and electronically).

The UEA enforces a policy that requires no net loss of biodiversity and reminds consultants and contractors of shared obligations under the EU Habitats Directive[9] and EU Birds Directive[10]. No net loss shall be interpreted as meaning loss in one location can be mitigated by gain in another location.

There shall be no loss of, or significant reduction in, the populations of protected species on UEA grounds. Biodiversity shall be maintained and enhanced by adhering to the management plan for each red and amber zone on the UEA grounds.

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[9] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

[10] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds

4 Room Numbering

4.0   Introduction

It is a requirement for all projects that include space development, that the UEA's room numbering protocol shall be adopted from the earliest stage of the project.

4.1   Rationale

The rationale of the numbering system is that every unique space within the campus must have a unique identifier. To achieve this the system must be capable of identifying spaces based on the building, floor and room. The system is based on the assumption that every space that can be walked into must have a room number. Additionally every other space which occupies internal building area must have a unique identifier.

4.2   Ownership

To ensure data integrity and numbering consistency room numbers are 'owned' by the Estates & Buildings Division. No school or division may change or update room numbering in an area without the express permission of the Estates & Buildings Division. Requests for a room number change should be made to the Estates & Buildings Division in writing or via email to space@uea.ac.uk .

4.3   CAD Requirements

Every unique space which occupies an internal building area must be bounded by a closed polyline, created on a layer named 'POLYLINE' and coloured blue (Autocad colour 5).

4.4   Room Numbering Format

4.4.1 Building number

Example: 25/0.08

The unique building number must prefix every room number. Building numbers are issued by the Estates & Buildings Division IT/CAD Manager, a definitive list may be obtained from the Estates & Buildings Division web site or via email to space@uea.ac.uk .

4.4.2 Floor number

Example: 25/0.08

Each floor in a building has a floor reference. Floor 0 is generally the external walkway or for non-walkway attached buildings the entry level. Floors are numbered sequentially and are prefixed with a '0' – see Fig 4.
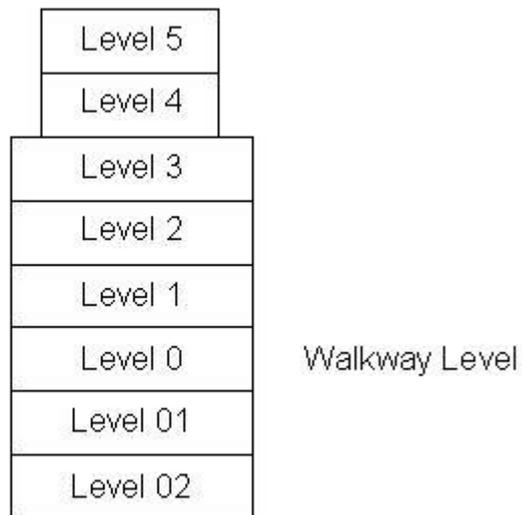
Figure 4: Level Numbering (General)

4.4.3 Room number

Example: 25/0.08

The room number is used to identify each unique space within a floor level. A space is numbered at floor slab level and is valid up to the ceiling of the space. Thus an atrium, void or multiple floor space would only be numbered at floor level.
Various types of space use different numbering formats as defined below with the exception of some older residential buildings that are dealt with under Exceptions below.

4.4.4 Standard rooms

Definition; a room is defined as any space that can be walked into.

Numbering format; rooms are numbered numerically with an optional alpha suffix.

Allocation scheme; rooms should be numbered in a clockwise fashion beginning with the first room to the left of the main entrance to the building. Rooms only accessible via another room should use the main room number with an uppercase alpha suffix.

Walk-in cupboards should use the main room number with an uppercase alpha suffix. Where rooms are divided additional numbers may be generated by adding an uppercase alpha suffix.

Examples: 1/0.01, 3/01.23A

4.4.5 Plant rooms

Definition; a plant room is a room that can be walked into containing mechanical and/or electrical plant.

**Numbering format;** plant rooms are numbered numerically and are prefixed with 'PL'

Allocation scheme; plant rooms should be numbered in a clockwise fashion beginning with the first plant room to the left of the main entrance to the building. Rooms only accessible via another room should use the main room number with an uppercase alpha suffix.

Example: 25/0.PL01

4.4.6 Stairs

Definition; any feature that contains treads and risers from the base of the first riser to the top nosing, including intermediate landings, between floor levels.

Numbering format; stairs are numbered sequentially and are prefixed with 'ST'.
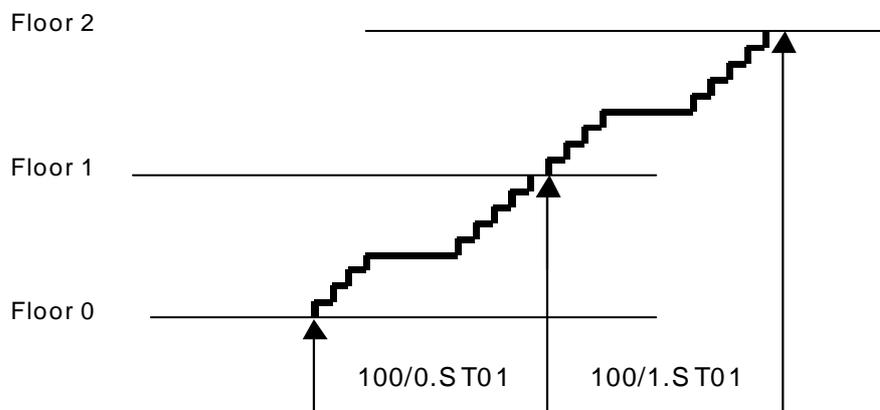
Allocation scheme; stairs should be numbered in a clockwise fashion beginning with the first stair to the left of the main entrance to the building.
Numbers should be retained for a whole stair case.

Example: 25/0.ST01

4.4.7 Corridors

Definition; any space which is used as a dedicated access route, landing or fire escape route through an open plan area.

Allocation scheme; corridors should be numbered in a clockwise fashion beginning with the first corridor inside of the main entrance to the building. If possible corridors that represent landings at the top of stairs should use the same number as the stair, i.e landing at top of 100/0.ST01 should be numbered 100/1.CD01

Numbering format; corridor numbers are prefixed with 'CD'.

Example: 100/1.CD01

4.4.8 Lift Shafts

Definition; any space that is fitted with a device to enable people or goods to traverse floors without the use of stairs.

Numbering format; since lift shafts rarely start at or finish at a defined floor slab level these are the only spaces which do not contain a floor level. Lift shaft numbers are prefixed with 'LS'.

Allocation scheme; lift shafts should be numbered in a clockwise fashion beginning with the first lift shaft inside of the main entrance to the building.

Example: 3/LS01

4.4.9 Service Risers

Definition; any space which is used to enable services to traverse floor levels. Service risers may not be large enough to walk into but should still be numbered as discreet spaces.

Numbering format; service riser numbers are prefixed with 'RS'.

Allocation scheme; service risers should be numbered in a clockwise fashion beginning with the first service riser inside of the main entrance to the building. Where possible consistent numbers should be used for a riser over its complete height, i.e. 3/0.RS01, 3/1.RS01 on each floor respectively.

Example: 3/0.RS01

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[i] Further information about the UEA campus can be found at:
- Concrete and Open Skies Architecture at the University of East Anglia 1962-2000, Dormer and Muthesius, ISBN 0-906290-60-0
- The History of the University of East Anglia Norwich, Sanderson, ISBN 1-85285-336-0 and
- http://www.eafa.org.uk/catalogue/213000

[ii] As described in the UEA Identity Brand Guidelines document (V9 2015) which can be found at https://portal.uea.ac.uk/arm/publications/logos-and-brand-guidelines/uea-brand-identity-guidelines

[iii] Elements of this section are taken from: *London Underground, Station Design Idiom*