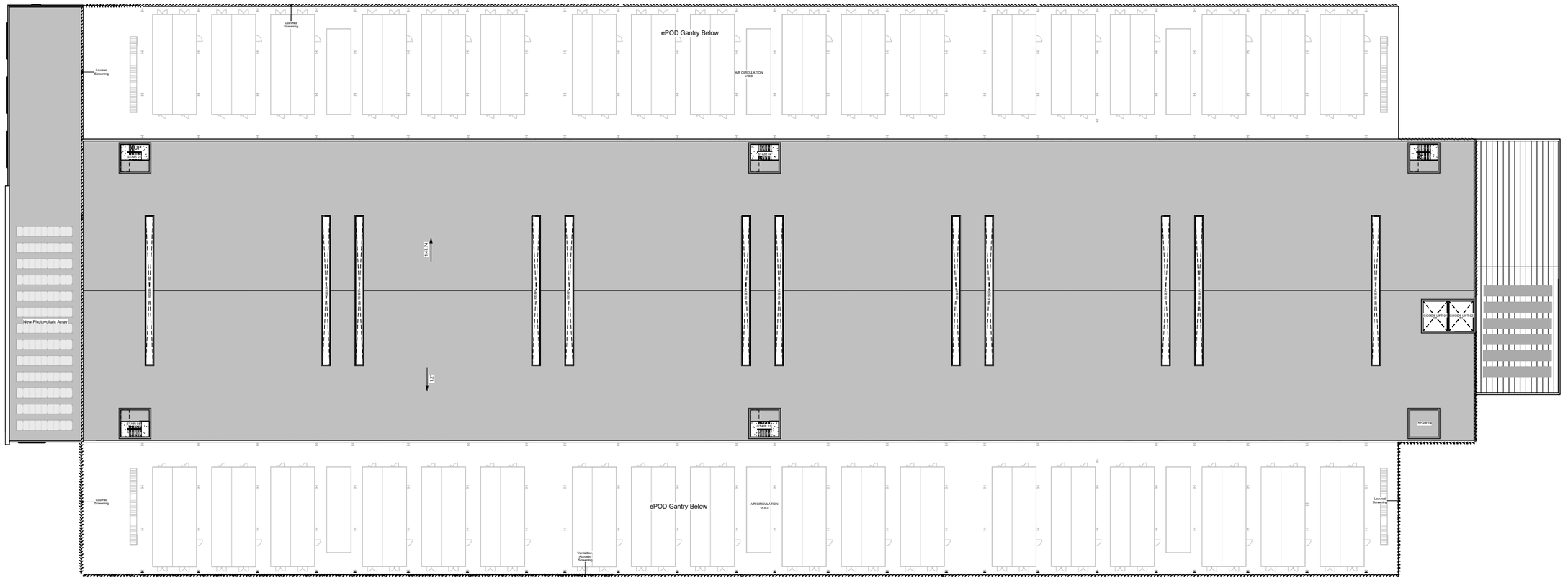
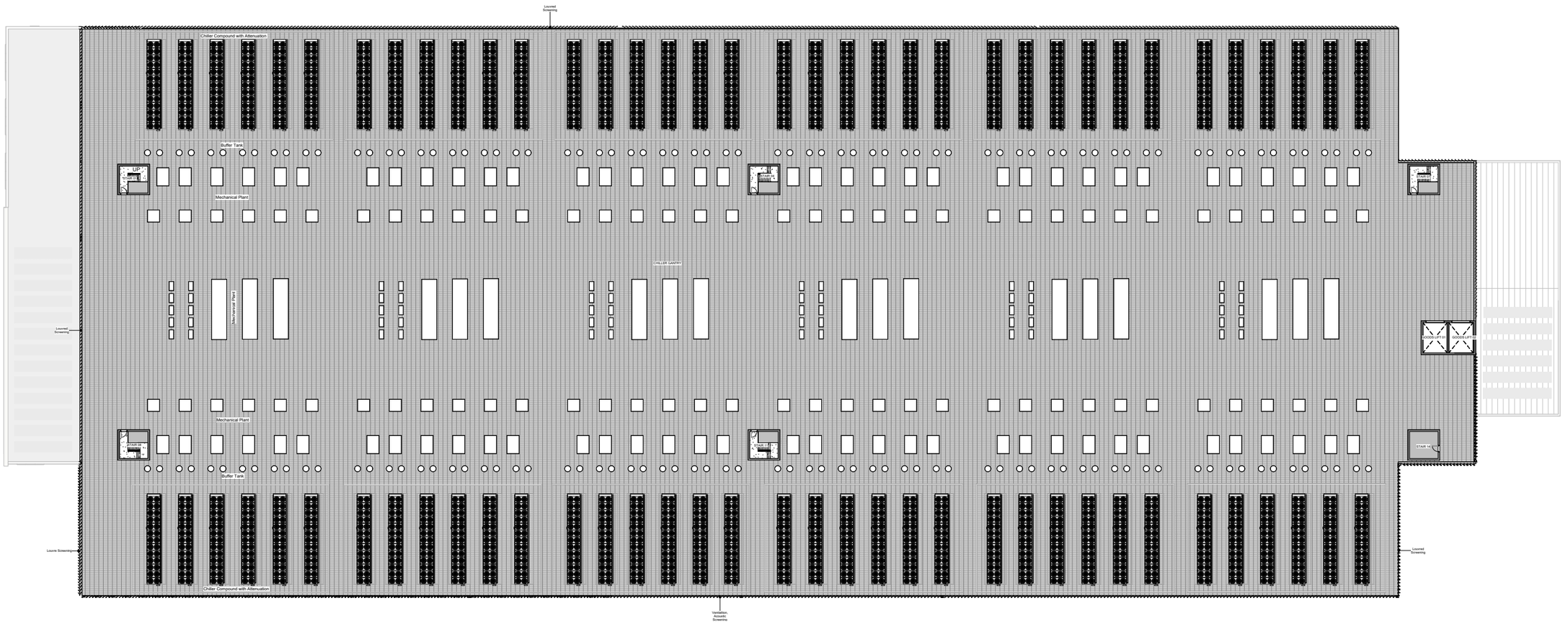
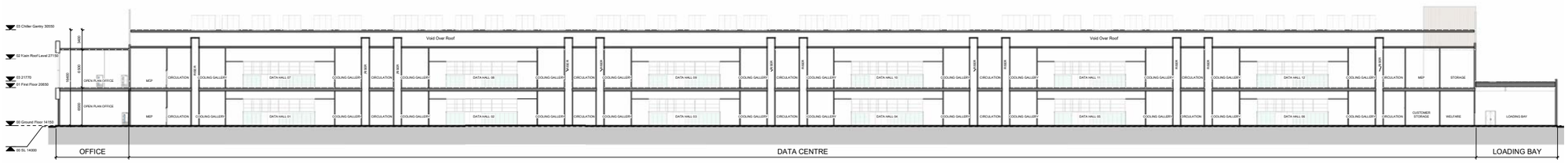


Roof Plan, NTS

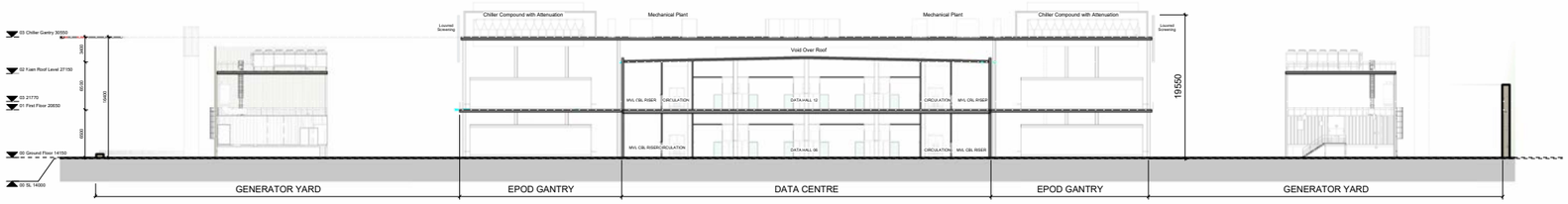


Chiller Gantry Level Plan, NTS

6.3 GENERAL ARRANGEMENT SECTIONS



Section A-A, NTS



Section B-B, NTS

SUSTAINABILITY, ENERGY & WASTE MANAGEMENT

7.0

7.1 SUSTAINABILITY

The statement also considers opportunities to reduce carbon emissions through the efficient operation of the building, the procurement of renewable electricity, and the potential for future technological advancements throughout the operational life of the development.

Within the design, some of the proposed sustainable features include the provision of photovoltaic panels on available clear roofspace, which includes the office and substation. Options for rainwater harvesting for use as grey water for flushing toilets and site landscape irrigation. Heat re-use within the office, and a district heating connection point for future connection by an offtaker (as illustrated on the adjacent site plan).

Site Plan, NTS

7.2 ENERGY

An Energy Statement has been prepared by Ramboll in support of the planning application which outlines the anticipated operational energy demand of the proposed facility and explains the site's selection in relation to the availability of electrical capacity and its proximity to strategic renewable electricity infrastructure.

The site has been selected due to its proximity to renewable electricity from the North Sea wind farms.

Please refer to the reports prepared by Ramboll for further details.

7.3 WASTE MANAGEMENT

The proposed development has been designed to facilitate the efficient and sustainable management of waste throughout both its construction and operational phases.

During operation, waste generated by the facility will be managed internally in accordance with an approved Site Waste Management Procedure. General and recyclable waste will be stored within a dedicated refuse storage area located at the eastern end of the building, adjacent to the service yard, providing convenient access for collection vehicles while ensuring waste handling activities are contained within the operational area of the site.

Waste will be collected at appropriate intervals by a licensed third-party waste management contractor and transported for recycling, recovery or disposal at suitably authorised facilities. Collection frequencies will be managed to ensure that waste storage remains efficient, secure and does not adversely affect the operation or appearance of the site.

Recognising the specialist nature of the development, the scheme also incorporates a dedicated recycling area within the service yard for the secure handling of redundant IT equipment and associated electronic components. Equipment reaching the end of its operational life will be dismantled where appropriate and managed through accredited recycling and recovery processes, maximising the reuse and recycling of valuable materials while ensuring the secure disposal of data-bearing equipment.

Overall, the proposed waste management arrangements have been designed to minimise waste generation, maximise recycling opportunities and support the principles of the circular economy, ensuring the development operates in a sustainable and responsible manner throughout its operational life.

APPEARANCE

8.0

8.1 DESIGN DEVELOPMENT

The proposed palette of materials has been carefully developed to respond to the differing functional requirements of each building element, whilst creating a cohesive architectural composition that integrates with the surrounding landscape. The material selection has been informed by the Landscape and Visual Impact Assessment (LVIA), using colours, textures and finishes that complement the existing landscape and reduce the visual prominence of the development.

Colours have been selected from the Landscape and Visual Impact Assessment (Sheils Flynn) images in order to blend the proposed development into its surroundings >

sheilsflynn

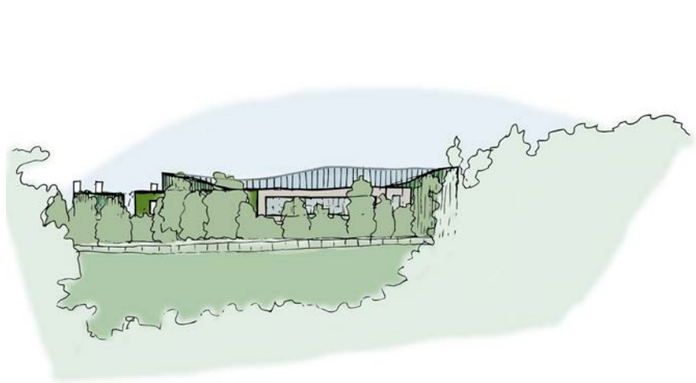
OS Reference : 621878.884 E 303930.696 N
Elevation : 37.272 mAOD
Direction of view : Northwest
Horizontal field of view: 90 degrees

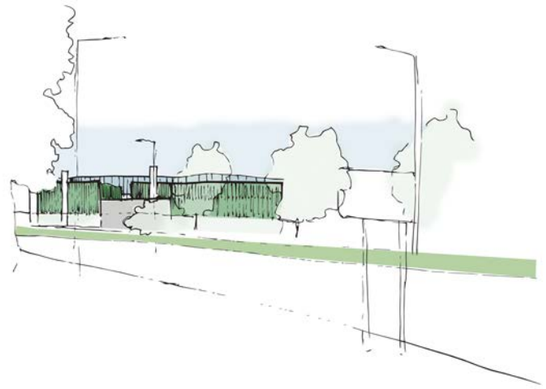
Projection : Cylindrical
Paper size : 841 x 297 (A1 landscape length x A4 portrait height)
Correct printed image size: 820 x 233 mm

Date : 01-04-2026
Time : 11:33
Camera/Lens : Sigma / AF 50mm f1.4D
Camera height : 1.6 m

Data source(s):
Development proposals (Data Centre, office building, generator and flues structures) provided by TPA Studio in RVT/PDF format.

Norwich APEX Data Centre
Viewpoint 4 - A47 bridge over the A140
Photomontage with planting and landform mitigation (Year 1) - Winter
Figure D.4e





Early concept sketches based on the Landscape and Visual Impact Assessment (Sheils Flynn) images. The massing, appearance and form has been developed to respond to the topography and landscaping as viewed from key locations.

8.2 MATERIAL PALETTE

Overall, the proposed material palette establishes a clear hierarchy across the development, distinguishing the civic character of the office accommodation from the more functional operational buildings. The careful selection of colours, textures and finishes, together with the integration of living walls and landscape planting, creates a cohesive architectural composition that responds sensitively to its landscape setting while reflecting the operational requirements of a modern data centre.

PPC aluminium RAL 9002 Grey White

PPC aluminium RAL 7038 Agate Grey

PPC aluminium RAL 6003 Olive Green

PPC Alumnium frames in RAL 7016 Anthracite Grey

Perforated aluminium panel PPC RAL 7001 Silver Grey to enclose flues

Light larch composite cladding

Green wall to LHS first floor of office building

Light stone cladding

Blue engineering brickwork with grey mortar

Green wall to LHS first floor of office building

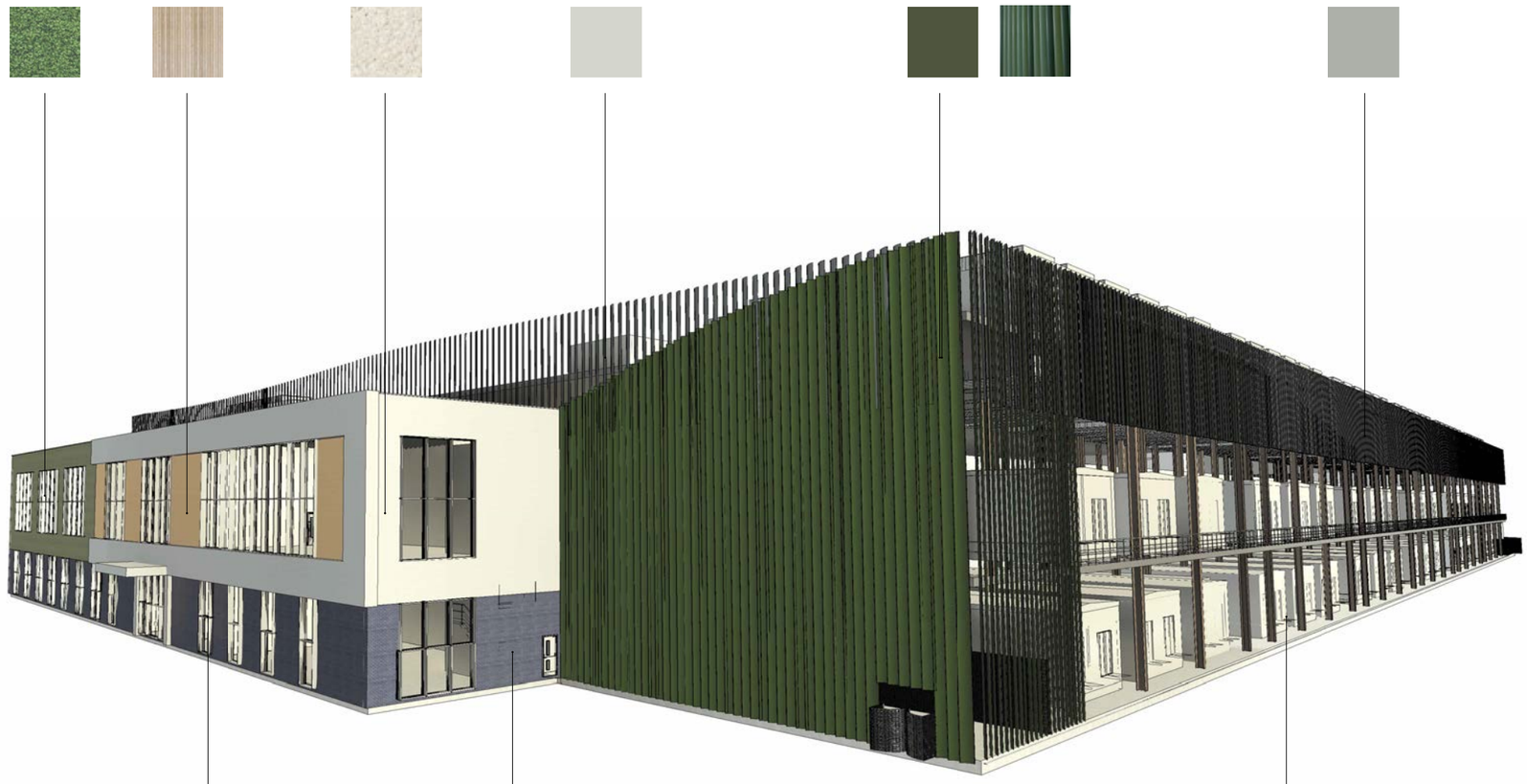
Light larch composite cladding to recesses between windows/ curtain wall

Light stone cladding feature wall

Louvre screen in PPC aluminium RAL 9002 Grey White

Louvre screen in PPC aluminium- majority RAL 6003 Olive Green plus other shades for gradient effect

Louvre screen in PPC aluminium RAL 7038 Agate Grey



PPC Alumnium external opening frames in RAL 7016 Anthracite Grey

Blue engineering brickwork with grey mortar to ground floor of office building

e-PODs and substations in composite metal cladding in RAL 7038 Agate Grey

View showing Office and southern elevation materials strategy

Perforated aluminium panel PPC RAL 7001 Silver Grey to enclose flues

Louvre screen in PPC aluminium- majority RAL 6003 Olive Green plus other shades for gradient effect

Louvre screen in PPC aluminium RAL 9002 Grey White with solid panel backing from chiller gantry level only

Louvre screen in PPC aluminium- majority RAL 6003 Olive Green plus other shades for gradient effect

Green wall to LHS first floor of office building

Louvre screen in PPC aluminium RAL 9002 Grey White

Light larch composite cladding to recesses between windows/ curtain wall

Light stone cladding feature wall

Aluminium panel to enclose flues in RAL 6003 Olive Green

e-PODs in composite metal cladding in RAL 7038 Agate Grey

Blue engineering brickwork with grey mortar to ground floor of office building

PPC Alumnium external opening frames in RAL 7016 Anthracite Grey

View showing Office and northern elevation materials strategy

Louvre screen in PPC aluminium RAL 7038 Agate Grey

Aluminium cladding to main data hall building in RAL 7038 Agate Grey

View showing main data hall building and loading bay materials strategy

8.3 ELEVATIONAL TREATMENT

The office accommodation, which forms the principal public-facing element of the development, has been designed using a palette of natural materials inspired by the traditional vernacular architecture of Norwich and the surrounding villages, which include brick, timber, render and natural stone.

At ground floor level, the office is predominantly finished in blue-grey brick, providing a strong visual base that anchors the building within the landscape and helps reduce its perceived scale. The muted colour has been selected to create a recessive appearance against the surrounding landscape and to complement the proposed retaining walls, which will be formed from locally sourced stone within gabion baskets.

The upper floor adopts a lighter architectural expression through the introduction of living green walls, light-coloured horizontal banding formed from non-combustible cladding panels, vertical composite timber-effect cladding and glazing. These elements introduce warmth, texture and seasonal variation, softening the appearance of the office and ensuring it presents an attractive elevation in views through the landscape, particularly from the setting of All Saints Church.

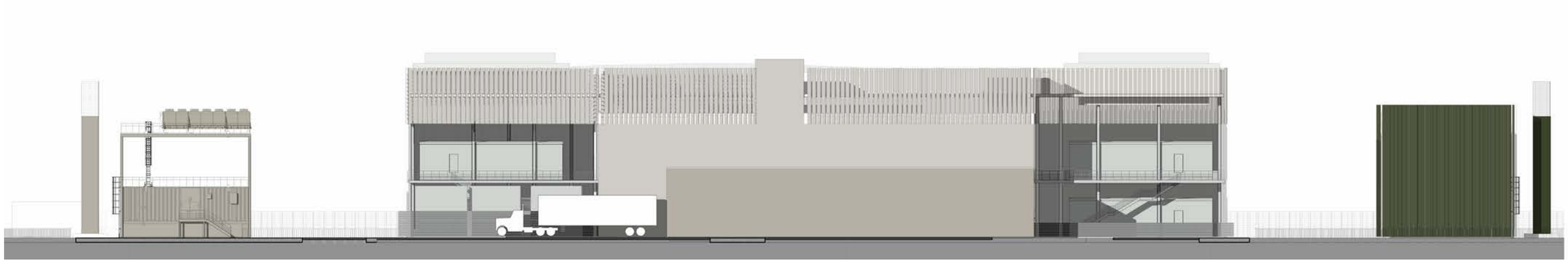
West Elevation, NTS

Beyond the office, the main data centre has been designed with a more utilitarian architectural language that reflects the highly functional nature of the facility whilst maintaining a considered and coherent appearance.

The primary building envelope comprises long-format insulated sandwich panels finished in a dark green colour, selected to enable the building to visually recede within the surrounding landscape. Much of the data hall façade is screened by the external electrical gantries and associated plant, with only the rear elevation adjacent to the service yard remaining fully exposed. As this elevation is not visible from the public realm, a simple and robust material treatment is considered appropriate.

The e-POD gantries located along the building's flank elevations comprise steel-framed structures with metal grating at first-floor level. These structures remain open to provide unrestricted access for the removal and replacement of critical electrical equipment and to maximise natural airflow to the rooftop cooling infrastructure, improving operational efficiency. Demountable edge protection is incorporated between bays to provide safe maintenance access. Where the gantries are visible from public viewpoints, vertical louvres are introduced to provide visual screening and create a more refined architectural appearance. Louvres are omitted where they would not be publicly visible or where they would unnecessarily restrict airflow, ensuring that materials are only used where they provide a clear functional or aesthetic benefit.

The rooftop cooling gantry is enclosed by a system of vertically orientated aluminium louvres, which perform both visual and acoustic functions. The louvres are powder coated in a carefully selected range of green, mid-grey and light-grey tones, allowing the roofscape to respond differently depending on viewing angle, lighting conditions and landscape backdrop. This graduated colour palette



East Elevation, NTS

reduces the apparent scale of the rooftop plant and assists the building in blending with both the surrounding tree canopy and the wider skyline.

The standby generators and associated external plant comprise prefabricated steel enclosures with supporting gantries and integrated louvred screening. These elements are finished in a dark green powder-coated finish to ensure they remain visually recessive behind the extensive landscape buffers surrounding the site.

The secondary substation adopts a similarly restrained architectural treatment, utilising dark green insulated sandwich panels that complement the wider development. Photovoltaic panels are incorporated on the south-facing roof slope, contributing towards the site's sustainability strategy and reducing operational carbon emissions.

The entrance guardhouse has been designed with reference to the main office building, creating a consistent architectural identity across the campus. The building incorporates light-coloured banding, vertical timber-effect cladding and glazing to provide a welcoming yet secure arrival point for staff and visitors.

8.4 PROPOSED VIEWS

Aerial Perspective

Aerial Perspective

SECURITY & LIGHTING

9.0

9.1 SECURITY

The site incorporates comprehensive security infrastructure, including secure perimeter fencing, controlled vehicle and pedestrian access points, a guardhouse, CCTV surveillance, and security lighting.

A guardhouse is positioned at the entrance, with a small visitor's carpark to enable visitors to be badged in prior to accessing the site.

The perimeter security fence line has deliberately been set inside from the landscape buffer so it is discreet. The fence will be set behind a minimum of 20.0m of landscape buffer, and there is then a 3.0m sterile zone, to ensure clear sight lines are maintained along the perimeter, with no branches or other climbable objects within this zone which would be a security risk.

The detailed design of the site security strategy will be undertaken by a security specialist, but it is anticipated the fences will be between 2.4 to 3.0m high SR2 358 Welded mesh security fencing, powder coated in dark green to blend in to the landscape buffer.

9.2 LIGHTING

The external lighting strategy below refers to the Data Centre area only; the connected road and Substation A areas are excluded from the below.

The external lighting design and installation shall comply with the British Standard and local requirements.

- ILP Guidance Note GN01/21 – The Reduction of Obstructive Light
- BS EN 12464 – Light and lighting. Lighting of workplaces – Outdoor workplaces.
- BS 5266-1:2025 - Emergency lighting - Emergency lighting of premises. Code of practice.
- Lighting Guide 6 (LG6) - The exterior environment.

The proposed lighting installation shall be controlled by the photocell and the time clock. A dimming system shall be provided to comply with the nighttime pollution and lighting requirements. The proposed luminaires shall be additionally controlled via Presence Detectors to provide security lighting where required. Manual overriding lighting switch shall be provided.

The external lighting design and installation shall consist of wall-mounted and column-mounted luminaires. Installation heights shall be developed during the detailed design stage to ensure the required lighting level, uniformity and glare control is achieved in all areas.

Area	Lighting Type	Note
Entrance Route	Column Mounted	
Security Gate	Column Mounted	
Access Routes/ Circulation	Column and Wall Mounted	
Car Park (Office)	Column and Wall Mounted	
Car Park (Loading Bay)	Column and Wall Mounted	
Car Park (Substation)	Column and Wall Mounted	
Substation Area	Column and Wall Mounted	
Generators Area	Column and Wall Mounted	
Generator Gantry and External Plant Areas	Surface Mounted Linear Luminaires	
Loading Bay	Column and Wall Mounted	
Perimeter Security Lighting	Column and Wall Mounted	Shall be coordinated with CCTV and fence detection system if applicable.

The lux level shall be coordinated and agreed with the Client Security team.

A detailed lighting strategy is proposed to form part of conditions.

LANDSCAPE

10.0