5.11.2 Street Lighting Plan

The drawing on this page is an extract of the street lighting plan prepared by Ritchie Daffin. Refer to the original drawing for further detail.

1. DO NOT SCALE FROM THIS DRAWING

2. READ IN CONJUNCTION WITH ALL DRAWINGS AND SPECIFICATIONS.

3. ALL EXTERNAL LIGHTING TO BE MINIMUM IP65 RATING. LOW LEVEL TO BE MINIMUM IK10.

4. ALL EXTERNAL LIGHTING DALI CONTROLLED

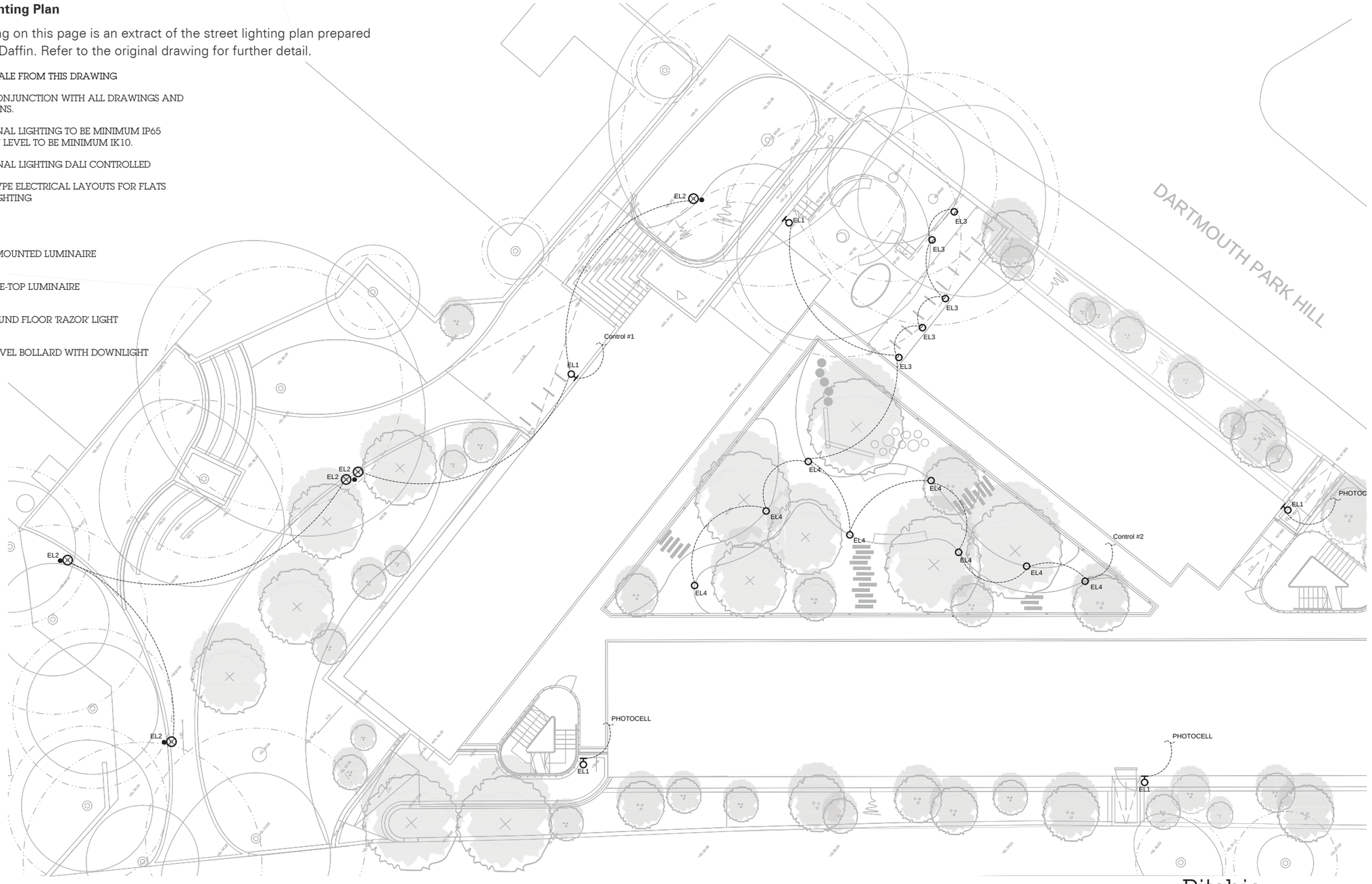
5. SEE FLAT TYPE ELECTRICAL LAYOUTS FOR FLATS EXTERNAL LIGHTING

WALL MOUNTED LUMINAIRE

4M POLE-TOP LUMINAIRE

IN-GROUND FLOOR 'RAZOR' LIGHT

LOW-LEVEL BOLLARD WITH DOWNLIGHT



Ritchie + Daffin

6 Further Design Considerations

6.1 Modern Methods of Construction and Structure

As part of the project brief from LBC, the design team have considered opportunities to deliver the project using Modern Methods of Construction (MMC).

At the early stages this process involved evaluating and refining proposals to suit the greatest range of MMC and traditional delivery methods.

The proposal has been designed to be delivered with a hybrid superstructure of Volumetric Modular construction at ground level and above, and a lower ground level in Reinforced Concrete.

The Volumetric Modular components will be manufactured off site in a factory, and then delivered on site to be assembled quickly and efficiently. This has the advantage of:

- Improving the quality and workmanship of key building elements through efficient production and quality control in a factory environment.
- Enhancing the long term sustainability of the building through a high performance thermal building envelope that minimises energy consumption for heating, and reduces associated annual costs.
- Minimising the environmental impact of construction with less waste and significantly fewer deliveries to site in comparison to traditional oonstruction. This reduces the associated embodied carbon footprint of the development.
- Reducing the work executed on site, which minimises disruption to local residents and adverse noise, air and air quality of life impacts.
- Shortening the overall construction programme to allow LBC to meet the needs of its Temporary Accommodation services more quickly.

The design team have developed the proposals to give LBC flexibility in determining how best to deliver the project at the next stage of work. This includes:

- Ensuring the proposal could easily be adapted to suit Cross Laminate Timber, Light Gauge Steel or other forms of MMC.
- Designing floor plans that stack as much as possible, to allow for a simple superstructure. This also means that rooms with similar functions are aligned between levels, to improve the acoustic and thermal environment.
- Designing structural spans and overall flat plan dimensions to suit transport for volumetric or panelised systems.
- Coordination of primary structure and services with the proposal, to suit Volumetric Modular construction and installation.
- Consideration of facade materials that will suit the proposed structural system so that this component of the building can also be erected quickly and safely.

6.2 Flood Risk and Drainage

Refer to the drainage strategy and drawings prepared by Infrastruct CS Ltd. for a full understanding of drainage proposals for the site.

Below is a summary of key drainage considerations in the proposal:

- Flood Risk - the site is classified as low risk.
- SUDs - the proposal incorporates tanked storage with a controlled greenfield discharge rate.
- Paving - it is recommended that hardstanding areas are constructed from permeable paving to address runoff rate and quality.
- Greenroofs are incorporated in all three blocks in the proposal to further support the retention and treatment of potential pollutants

6.3 Energy Strategy

Refer to the energy stratement and drawings prepared by Ritchie Daffin for a full understanding of the energy strategy.

Below is a summary of key features of the proposal:

- Building fabric - improved thermal performance to reduce heating requirements
- Space heating - electric underfloor heating to dwellings. This further saves space in small dwelling units
- Domestic hot water - air source heat pumps will be installed with environmentally-friendly CO2 refrigerant
- Renewable electricity - solar photovoltaics will be mounted on the roof. A solar thermal array will supplement hot water generation in the summer.
- Metering - dwellings will be individaully metered with a central management for hostel staff to monitor usage.
- Energy calculations - the energy consumption patterns will be domestic in nature and therefore Approved Document L1A and SAP have been used for the energy efficiency calculations for dwellings. In SAP2012 terms, an overall carbon reduction of 47% is proposed.
- Overheating - TM59 Modelling has been carried out and informed the design of windows and introduction of facade elements such as brise soleil and acoustically attenuated ventilation, to ensure compliance and management of the likelihood of overheating.

6.4 Sustainability and Home Quality Mark

Refer to the HQM Pre Assessment and Sustainability Statement prepared by Etude for a full understanding of the design team's approach to a high quality, sustainable design at Chester Road.

A 4.5 Star HQM rating is targeted, with a score of 62%.

As noted in the report:

The Home Quality Mark (HQM) has ... been used to set the key sustainability aspirations of the scheme and will be used to ensure they are delivered at detailed design and on completion. They cover the following themes:

1.Energy & Carbon Emission Reduction

2.Water, Drainage & Flood risk

3.Ecology & Biodiversity

4.Transport & Connectivity

5.Materials

6.Air Quality & Indoor Pollutants

7.Waste (Construction and Operational)

8.Daylight

9.Noise Levels

6.5 Daylight and Sunlight

Refer to the full Daylight and Sunlight report for planning prepared by BRE.

Since the project inception, the evaluation of daylight and sunlight impacts have informed the design development, massing and layout of the proposed scheme.

The report summarises the impact of the proposal and compliance with BRE guidelines for the following;

- Loss of light to surrounding properties, to include vertical sky component analysis, daylight distribution and loss of sunlight to windows and amenity spaces.
- Shadow plots.
- Daylight and Sunlight provision to the proposed development.

6.6 Transport

Refer to the full Transport Statement and drawings prepared by Motion for a detailed review of transport considerations in the proposal.

Below is an extract from the conclusion of the report:

- *Motion have been appointed by Bell Phillips to advise on highways and transport matters associated with the proposed redevelopment of the Chester Road Hostel in the London Borough of Camden.*
- *The site is located adjacent to Chester Road and Dartmouth Park, the site is located within close proximity to Archway to the east. It benefits from a wide variety of services and amenities and benefits from being in close proximity from bus stops and London Underground stations.*
- *The site is located in a largely residential area and benefits from being in close proximity to a range of amenities including shops, schools and medical facilities. In addition, bus stops are located within 100m of the site on Dartmouth Park Hill providing access to the Greater London area.*
- *The proposals comprise the redevelopment of the Chester Road Hostel to provide 50 bedrooms to be used as temporary family accommodation. The development will be car free, other than the provision of two on-street disabled car parking spaces located within close proximity to the vicinity of the site.*
- *This transport statement has demonstrated the following:*
  - The proposals accord with national, regional and local planning policies;
  - The site is accessible by a range of transport opportunities including bus, train, cycle and foot;
  - The proposed site will be car free; and,
  - Cycle parking will be provided on site;
  - The development would not result in a significant change in trips and the majority of trips would be undertaken by sustainable modes of travel; and,
  - The development will have a negligible impact on local parking conditions in the vicinity of the site.
- *It is therefore demonstrated that the development proposals accord with local and national transport related planning policies and would not have a material effect on the local highway and transport networks or infrastructure. It is considered that there are no reasons why the proposals should be resisted on traffic or transportation grounds.*

6 Further Design Considerations

6.7 Air Quality

Refer to the full Air Quality Assessment prepared by RPS Ltd.

Below are key extracts from the conclusion of the report:

- *Impacts during the construction, such as dust generation and plant vehicle emissions, are predicted to be of short duration and only relevant during the construction phase.*
- *The predicted NO2 concentrations fall within the London Council's APEC-B banding (based on conservative traffic data) requiring implementation of the mitigation measures to reduce exposure.*
- *Using professional judgement, the resulting air quality effect of the Chester Road development is considered to be 'not significant' overall.*
- *The Chester Road development does not, in air quality terms, conflict with national or local policies, or with measures set out in LBCC's Air Quality Action Plan. There are no constraints ot the development in the context of air quality.*

6.8 Noise

Refer to the full Environmental Noise Assessment prepared by Hann Tucker Associates.

Below are key extracts from the conclusion of the report:

- *A detailed environmental noise survey has been undertaken in order to establish the currently prevailing environmental noise climate around the site.*
- *Appropriate target internal noise levels have been proposed. These are achievable using conventional mitigation measures.*
- *The assessment shows the site, subject to appropriate mitigation measures, is suitable for residential development in terms of noise.*

6.9 Ecology & Arboriculture

Ecology

Refer to the full Preliminary Ecological Appraisal Report and drawings prepared by DF Clarke. The following summary is extracted from the report:

- *The proposed development site largely consisted of amenity grassland, hardstanding and introduced shrub. There were no areas that qualify as habitats of principle importance under section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.*
- *The site falls within 2km of four sites of UK/Local designations. There are 29 designated sites of non-statutory importance within 2km.*
- *The site has the potential to support nesting birds and bats. The surrounding area has limited potential to support protected species but bird and bat species are likely to be found nesting and roosting opportunities in the nearby Highgate Cemetery.*
- *The development works are likely to impact any nesting birds and bats present on site. The development is unlikely to impact on reptiles, great crested newts, hazel dormice, badgers, or white-clawed crayfish.*
- *Potential impacts of pollution running off into the surrounding area should be considered in order to ensure no direct or indirect impacts of wildlife outside the development boundary.*

Arboriculture

Refer to the full Arboricultural Report and drawings prepared by DF Clarke. The following summary is extracted from the report:

An arboricultural survey has been carried out and this report prepared to accompany a planning application for residential development at Chester Road Hostel, Chester Road, Highgate. All trees that could be affected by the proposal or have an influence on it were inspected.

This report seeks to provide information in accordance with British Standard BS 5837:2012, Trees in relation to design, demolition and construction.

This report's purpose is to allow the Local Planning Authority to assess tree information as part of the planning submission.

The proposal has been designed to incorporate the most visually important trees on site. Ten trees and one small group will need to be removed to facilitate the development. The tree losses are predominantly from within the centre of the site, and any losses will be mitigated by the generous landscaping scheme which accompanies the application.

This report includes a generic arboricultural method statement to cover the principles of tree protection and works close to trees.

A detailed arboricultural method statement will be required following planning consent to include additional information on proposed paths/ structures within root protection areas, and service/drainage routes as they become available.

If the recommendations made within this report are followed, the development will be achievable in arboricultural terms.

6.10 Designing Out Crime

Security and Access considerations have been a key aspect of the propsoal development from the outset.

Bell Phillips Architects met with the Designing Out Crime Officer (DOCO) for Chester Road, Jim Cope, on 19th September 2019 to review the proposal in terms of Secure by Design.

The following key aspects of the design were discussed and recommendations discussed at the meeting have been incorporated into the final planning scheme:

- Building use
- Entrance, access and means of escape
- Layout and compartmentalisation
- Lower ground floor
- CCTV and surveillance
- Site boundaries
- Windows and doors

6.11 Heritage

Refer to the full Heritage Statement prepared by Bidwells. This statement reviews the following:

- Heritage Policy and Guidance Summary
- Methodology for Assessment
- Historic Context
- Site Assessment: Chester Road Hostel
- Comparative Study
- Heritage Assets
- Proposals and Assessment of Impact

The following is an extract from the conclusion of the report:

- *...careful consideration is required as to whether the removal of the existing building and its replacement, extension or external refurbishment would meet the desirable objective of the Act in favour of preserving or enhancing the contribution that 2 Chester Terrace makes to the character or appearance of the surrounding conservation areas.*
- *In relation to the Chester Road Hostel, it is considered that the Site makes a neutral contribution to the character and appearance of both the Conservation Areas and settings of the non-designated heritage assets assessed in this report.*
- *In terms of the non-designated heritage assets, paragraph 197 of the National Planning Policy Framework requires a balanced judgement to be undertaken when considering impact on non-designated assets. In this case, the proposals have been found to be sympathetic to their context resulting in a neutral impact to these asset's settings.*
- *In terms of local policy, the designs have been shown to respect its local context and character and utilising a sustainable and durable design which comprises details and materials that are of high quality and complement the local character, integrating with the surrounding streets and using high quality landscape design. As such the proposals comply with local policy.*
- *In summary the proposals seek to sympathetically redevelop the Site, using a contextual design which maintains the existing modest scale of the buildings and incorporates modulation in materials and massing. This creates an appropriate design which upholds the high standard of contemporary buildings within the area without negatively impacting on existing views. The overall impact to the heritage assets identified is therefore considered to be nil, preserving the character and appearance of the conservation areas and the existing contribution of the site to the settings of the non-designated heritage assets. We therefore find no reason in heritage terms for the council not to approve the application.*

6.12 Fire Strategy

Refer to the full Fire Statement prepared by BWC Fire Ltd.

A number of workshops and meetings have been held with the LBC Fire Safety Officer and the Temporary Accommodation Team throughout the design process.

With regard to the building designation, it is noted in the report that:

"The building is a form of hostel by basic prescriptive definition however the use and nature of the occupancy (being long term occupancy) results in the design team's view that the actual building is more akin to a general purpose apartment building. On this basis the fire strategy has been developed to this latter designation however this rationale is subject to agreement with Building Control."

Key features of the fire strategy include:

- Provision for both a 'defend in place' approach and for simultaneous evacuation of the entire building accommodation on the operation of the fire alarm system. This would require reprogramming of the fire alarm system.
- Fire alarm and detection systems are designed to suit the evacuation and use requirements of the proposal.
- Two circulation cores provide the majority of dwellings with two means of escape in both directions. The main entrance provides an additional means of escape.
- Staircases incorporate an exit directly onto the street, for emergency evacuation use only.
- Sprinklers will be installed to all dwellings.
- CFD modelling has been carried out to ensure safe evacuation from dwellings, given the atypical open plan layouts and size considerations.
- A number of dwellings have been designed with 'special' layouts in which the kitchen is located at the furthest point away from the entrance door, so that these can be allocated to residents considered to be more vulnerable.
- Further safety enhancements, such as a thermal cutout to cooking hobs, are detailed in the report.
- It is understood that all residents are interviewed prior to moving into the hostel, and this interview includes a full risk assessment. In addition, regular health and safety inspections take place to ensure that means of escape within each dwelling is not compromised.
- Early material selections have been evaluated in terms of regulation, suitability and specification. This will be refined through detailed design at the next stage of work.

BELL PHILLIPS ARCHITECTS

Unit 305, Metropolitan Wharf
70 Wapping Wall
London
E1W 3SS, UK

t: +44 (0)20 7234 9330
w: www.bellphillips.com