Design & Access Statement

Proposed alterations to existing building to provide additional office accommodation and modernise the workshops and storage area.

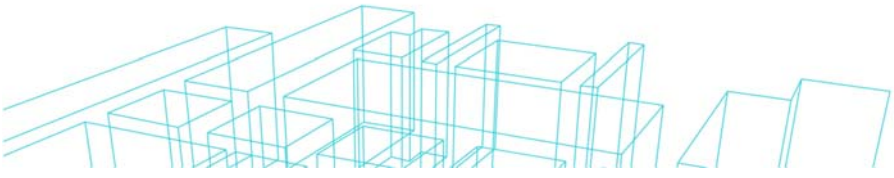
at

Holmes Road Depot, Holmes Road
London NW5 3AP

for

London Borough of Camden

July 2017



Pellings

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1. Introduction

1.1. This Design & Access statement has been prepared by Pellings LLP on behalf of London Borough of Camden to support an application for planning approval for alterations to provide additional office accommodation, modernised storage, workshop facilities, improved CCTV monitoring station, improved parking & circulation areas, upgrade of the insulation value of the building envelope and improvements to the existing heating and ventilation arrangements in the building.

2. Site Location and Appearance

2.1. Holmes Road Depot occupies a site within a mixed development area in Kentish Town within walking distance of Kentish Town tube station and the bus routes along Kentish Town Road. The site is therefore very accessible with a PTAL rating of 5.

2.2. The existing depot occupies a site on the north side of Holmes Road and east side of Spring Place. The vehicular access to the central courtyard of the depot is from Holmes Road with a security barrier at the entrance point. There is also an access from Spring Place used mainly by Veolia.

Extract from Google Maps

2.3. Holmes Road depot presently comprises:

- Housing & Community Safety CCTV monitoring service
- Camden repairs call-centre
- Camden woodworking repairs office & workshop
- Camden metalworking repairs office & workshop
- Camden glass sheet workshop & storage area
- Camden street-lighting repairs office & stores
- Storage facility for sand, cement, fencing, paviors, blocks & bricks
- Storage for all materials associated with the building repairs industry
- Storage facility for tools associated with the above
- Storage chemicals & welding gas bottles associated with the above
- Parking facilities for the vehicles associated with cleaning and repairs
- Storage for waste materials collected from the borough awaiting disposal
- Redundant vehicle servicing workshop

2.4. These areas occupy the ground, mezzanine and first floors of the building. The building has an in-situ concrete frame construction with pre-cast concrete panels to the exterior of the building at ground floor level with single glazed centre-pivot clerestorey aluminium windows above. The concrete frame is exposed and at first floor there are mill finished aluminium single glazed windows with coloured spandrel panels beneath.

At second floor, the building comprises residential flats which do not form part of the development proposals but which have already had window replacements

Existing frontage onto Holmes Road

2.5. The flats at second floor are in two sections. Flats 1-4 at 78 Holmes Road are located above the south limb of the building and overlook Holmes Road. Access to the flats is from a separate pedestrian entrance off Holmes Road. There is also a medium rise block of flats no's. 1-21 at 76, Holmes Road which are situated at the east end of the site and have separate vehicular and pedestrian access from Holmes Road.

The separate vehicular entrance for Flats 1– 21 from Holmes Road is partitioned from the Depot site.

2.6. The vehicular entrance to the depot is through the archway on Holmes Road and has a secure access with a barrier and an attendant. The central courtyard and the ground floor of the building is approximately one metre higher than Holmes road level and the access is ramped up from the roadway.

The existing pedestrian access to the site is also through the archway via a flight of steps and a guarded access and gate which is controlled by the attendant.

Vehicle and pedestrian access arrangement from Holmes Road

2.7. The plant room within the depot provides hot water and heating to the residential units 1–21 at 76 Holmes Road on the second floor at the east end of the site. This arrangement will not be changed as part of the proposals. Flats 1–4 at 78 Holmes Road have independent hot water and heating.

2.8. There is an access to the site from Spring Place which is used by Veolia for access by refuse lorries and dustcarts. Veolia do not use the access from Holmes Road.

2.9. The Spring Place forecourt has a covered vehicular access which leads through to the depot central area. This covered space also has parking facilities for Veolia vehicles.

2.10. There is no intention to change the way in which the depot is used by Veolia as a result of the planning proposals. A new sub-station will be constructed in the South corner of the Veolia service yard with direct access onto Spring Place and adjacent to the sub-station there will be a low voltage switchroom.

Depot delivery vehicles can already gain access to the site from Spring Place and exit onto the Holmes Road.

3. Planning Policy / Restrictions

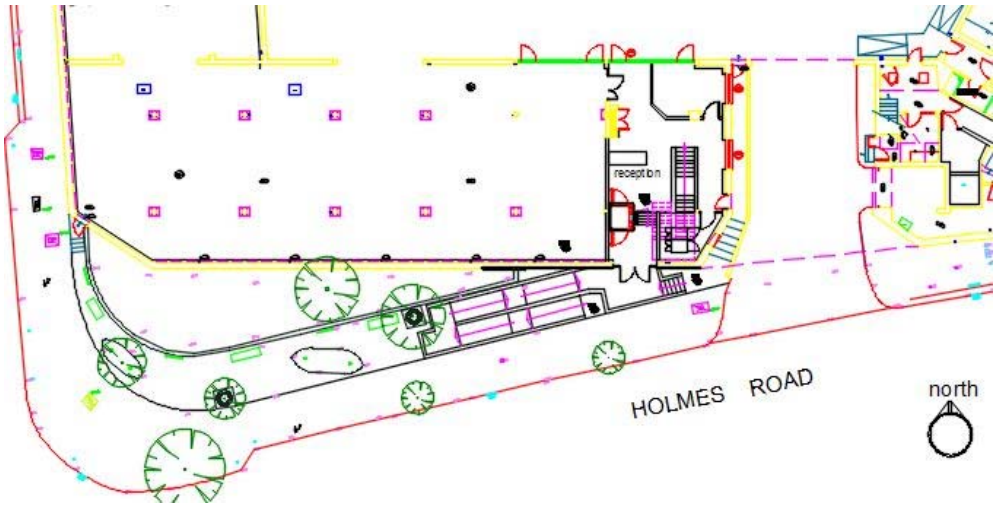
3.1. The Inkerman Conservation area lies directly south of the site but does not include the depot site within the conservation area.

3.2. The site does not fall within a flood risk zone.

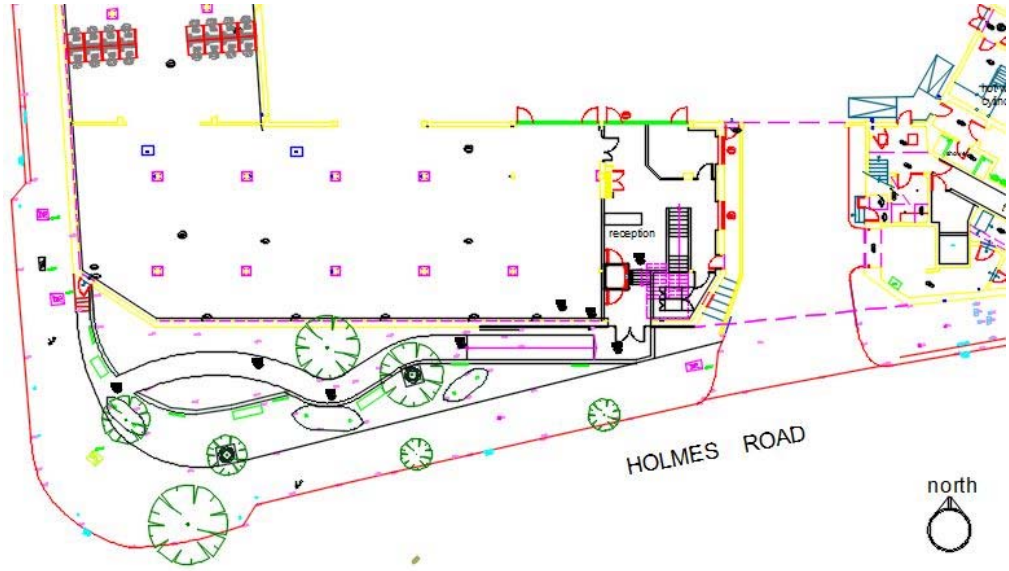
3.3. There will be no trees affected by this development.

3.4. The urban landscaping scheme in front of the building which extends from the corner of Spring Place along Holmes Road will not be affected by the proposals.

3.5. The new pedestrian access for the building was considered carefully and alternative options prepared and presented to the planning department for comment prior to the current design being chosen. The two rejected options are indicated below and were discounted because the character of the street and the landscaping at the corner of Spring Place was considered high value and there was no wish to change the appearance of this frontage.

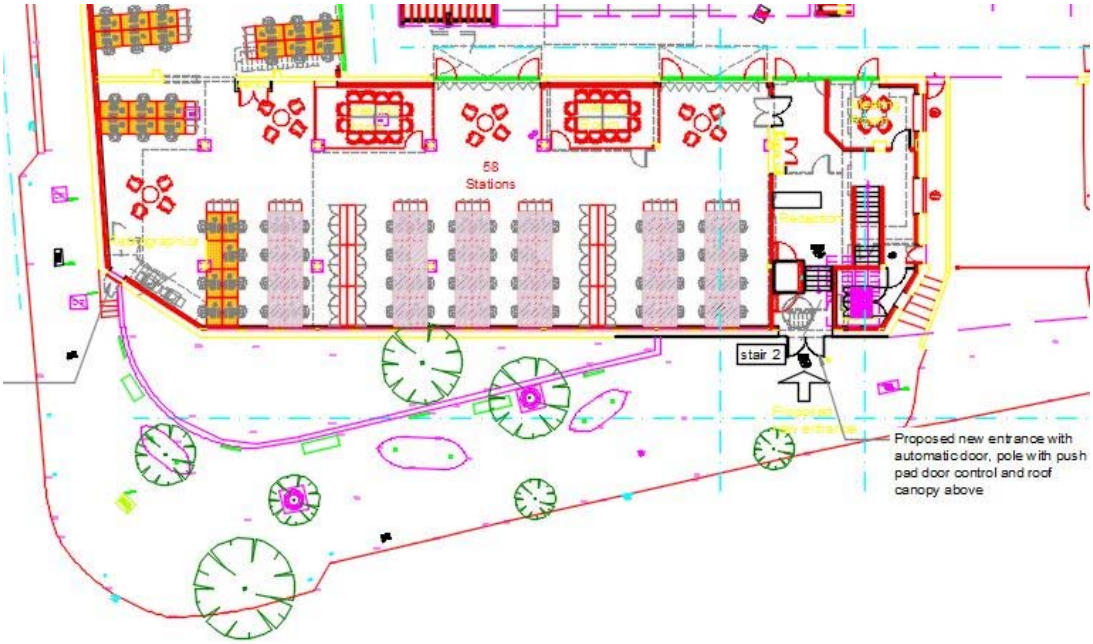


Option 1



Option 2

The ground floor level of the buildings is approximately one metre higher than the footpath on Holmes Road and it was important to provide a convenient entrance to the building with a level threshold from the street in order to satisfy the Equality Act requirements and was a primary requirement of the brief. The ramps indicated in options 1 & 2 were considered to be highly detrimental to the urban environment and it was therefore decided to provide access at street level and introduce a lift and steps within the building foyer.



Proposed Entrance Arrangement

This arrangement also provided easy access to the first floor office suites which hitherto had been quite tortuous and provides an additional means of escape route

Proposed Development

4. *Purpose*

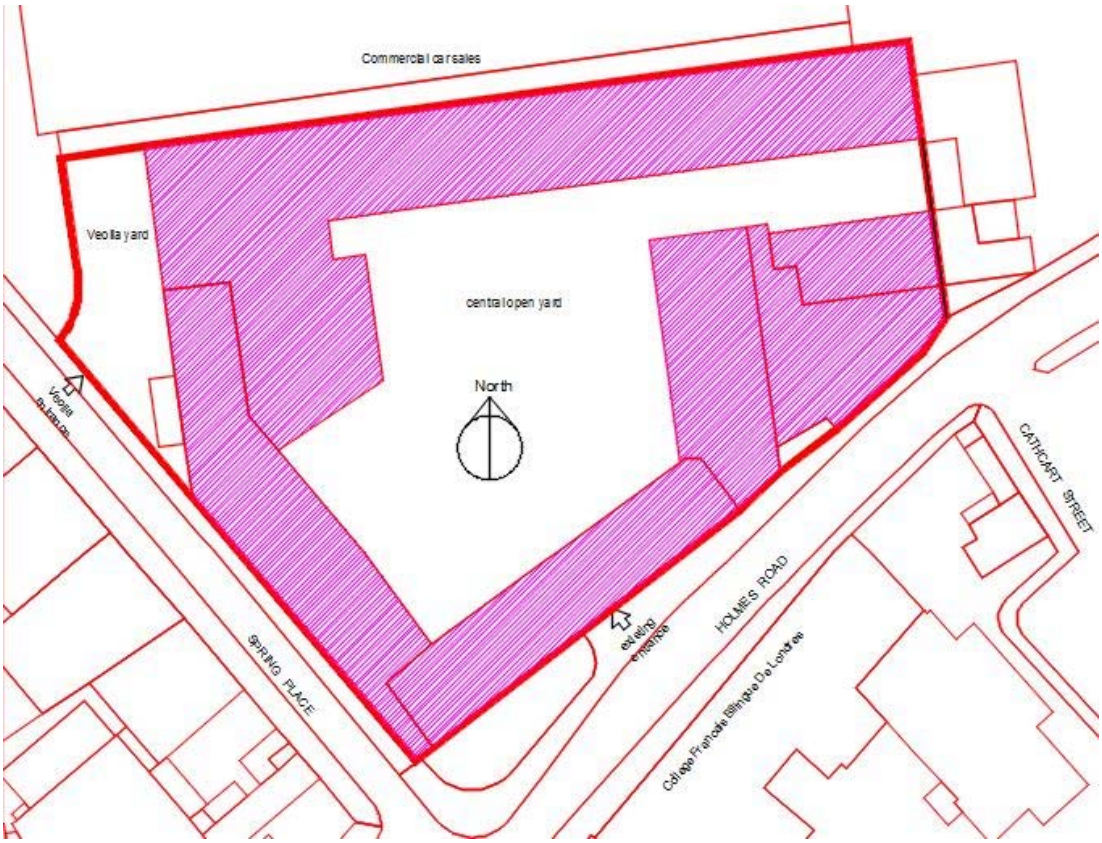
4.1. The works will provide suitable accommodation for additional staff who will be relocated from current office accommodation at Jamestown Road where the existing building is to be vacated. This scheme is designed to improve the efficiency of the Holmes Road asset.

4.2. The buildings were originally constructed in 1976 and were specifically designed to provide the areas and spaces for the Camden Depot. Since that time there have been piece-meal improvements to the site but services and infrastructure is in need of modernisation. The modernisation works are part of the proposals which are the subject of this application.

Alterations to the building

4.3. The existing building form will remain unchanged but there will be changes of use within the envelope and repairs and alterations to the envelope associated with the modernisation up-grades and the changes of use.

4.4. ***Site Plan***



Workshops

4.5. The original metal and glazing workshops were sited at ground floor on the east side of the complex. Both workshops have roller shutter access doors with 5m ceiling height to underside of concrete slab. These will be relocated to the more convenient locations on the west side of the site adjacent to the existing woodworking & joinery workshop.

Stores

4.6. The existing stores are housed in an area on the west side and even with the addition of mezzanine platforms do not have sufficient space for the materials store. The stores will be relocated into the east side of the site and the storage system modernised to provide an efficient system and a more secure environment. This location will also improve the methodology for deliveries.

Offices

4.7. Offices are in use at first floor on the west side and at ground, mezzanine and first floor on the east side of the site.

4.8. The offices used by the Housing and Community Safety Team and the Parking Enforcement Team are situated at first floor north-east and are in use 24/7 and monitor the CCTV system throughout Camden. This is a high security area with secure access systems.

4.9. The offices at first floor on the east side are used by the call centre and this office suite will have no alteration works other than the window replacements.

4.10. Existing offices at first floor on the west side will be reconfigured as open plan offices and will have direct access from the new ground floor reception via stairs and lift.

4.11. Existing offices at first floor on the south side will be retained but re-ordered and refurbished.

4.12. The redundant vehicle servicing area at ground floor on the south west side will be re-ordered to provide a new entrance and foyer, meeting rooms and open plan offices. New toilet and canteen facilities will be formed on the east side to service the new offices.

4.13. The existing offices accessed from the courtyard on the west side have been altered to form washing and changing facilities for the staff who arrive at the site by cycle. Drying room facilities are provided at the existing mezzanine floor level. This forms an important part of the green travel arrangements for the site. See item 4.23.

4.14. Additional washroom arrangements have been incorporated into the scheme to comply with the requirements of BS 6465.

Plant rooms

4.15. The existing plant room is situated on the east side of the main entrance and has three boilers which provide hot water and heating to the site and to Flats 1–21 on the east side at second floor. The equipment will be upgraded as part of the works and services to the flats maintained.

4.16. A new plant room will be formed within the existing mezzanine store on the east side which will supply to the east side of the site and new services will be provided.

This will receive water and gas from new supplies to the site.

Dust Cart Barrow Storage

4.17. An area beneath the roof on the north boundary has been allocated for the storage of 22 barrows for Veolia

Security

4.18. The new building is located within the existing 'secure line' and there are no suggested alterations to the existing securing of the site.

4.19. Access to the site for staff will be controlled by fob key and there will be a video door access for the new main entrance.

4.20. There will be video door entry for the external door access for the CCTV monitoring team on the west side of the building as existing.

4.21. Access arrangements for the flats will remain unchanged.

Central Area

4.22. The existing central area is used only by Camden service vehicles and this will remain so. There is a location within the yard for the existing large waste skip which is emptied twice per week. The new layout for the central area has been designed as a one-way system and the skip sited in the safest and most suitable location.

Existing waste skip in yard

4.23. The proposed scheme assumes that staff will cycle to and from work. Showers, drying room and changing facilities have been provided which are accessed directly from the yard and cycle storage racks for 72 cycles have been provided.

4.24. Four disabled parking spaces have been allocated within the parking area.

4.25. The existing external storage areas in the centre of the yard will be removed and the contents stored within the new store areas on the east side.

Power Supply & New sub-station

4.26. The equipment in use at the depot includes the CCTV monitoring services and the associated cooling required for the servers and the requirement for an uninterrupted power supply (UPS) in the event of a power supply failure. It also includes for the comms rooms and the cooling for the same and the ventilation system for the refurbished and new offices.

The existing electrical supply has been calculated to be insufficient to operate the site and a new sub-station is required. This has been located within the yard off of Spring Place and is indicated on the drawings.

Appearance

4.27. The original building was constructed as a concrete frame structure with an exposed concrete frame and with infill brick panels and aluminium single glazed horizontal sliding windows.

On external elevations, there are exposed precast concrete panels to ground floor with aluminium single glazed centre-pivot clerestorey windows at high level. The windows are centre-pivot single glazed mill finished aluminium

At first floor level above the exposed concrete beam, and within each concrete bay there are single-glazed window screens which have spandrel panels below cill height and with opening lights over fixed lights and with top-hung single glazed windows at high level.

The internal elevations also have the exposed concrete frame but have infill panels of red brick, exposed concrete lintels over single-glazed windows and roller shutter doors to stores and workshop areas.

Internal Elevation of east side

4.28. The fenestration to the internal elevation at first floor is similar to that on the external elevation but in lieu of a spandrel panel there is a panel of red brickwork.

4.29. The scheme proposes to retain the precast concrete panels to the external elevations but to replace the clerestory windows with fixed spandrel panels in aluminium frames. These panels at ground floor level will be above the suspended ceiling in the office areas and the void will be used for services and the VRF system.

4.30. The brick panels and roller shutter doors at ground level on the internal elevation to the west side will be replaced in the new office areas with glazed curtain walling which will be designed to have door access within the curtain walling as required and with spandrel panels at high level above the suspended ceiling and below desk height.

4.31. The new office area at ground floor on the east side will be modified. The roller shutter doors will be removed and doors and windows adjusted or inserted to suit the new plans. At first floor, the call centre, the windows will be replaced with aluminium double-glazed windows.

4.32. At present, the original mill finished single-glazed horizontal sliding sash windows have been supplemented with aluminium single-glazed horizontal sliding secondary sash windows.

Heating & Ventilation

4.33. The existing offices at first floor are heated by hot water radiators and the ventilation to the offices is by opening the horizontal sliding windows to provide natural ventilation.

Throughout the first floor, the window openings have been modified by installation of aluminium single-glazed secondary windows.

As a result, the secondary windows and primary windows are opened to facilitate ventilation that contributes to considerable heat loss and difficulties with temperature control.

4.34. This scheme proposes new aluminium double-glazed windows throughout the first floor with spandrel panels over the fixed light or opening windows. A ceiling void will be created by installing a suspended ceiling at the junction between the spandrel panels and the head of the window frame.

4.35. The radiators will be removed and the offices temperature and ventilation controlled by a variable refrigerant flow system(VRF) which will run within the ceiling void and take in air from the spandrel panels over the windows and distribute the tempered air through ceiling grilles to the office areas.

4.36. The VRF system will require some plant to be installed on the first floor roof adjacent to the plant that is already there.

4.37. The existing acoustic baffle will be extended around the new plant and will match that which is existing.

Fire & Means of Escape

4.38. The existing buildings have been designed with concrete slab floor and roofs which afford a high fire resistance between floors of at least one hour.

The partitions constructed within the new proposals will provide one hour fire resistance to all means of escape routes.

The stair provision to exhaust people from first floor to ground have been checked by our fire consultant and found to be satisfactory.

The fire alarm system within the building has recently been upgraded and this system will be extended to cover all the refurbished areas.

A report from Hoare Lea is included in the application documents.

4.39. The fire panel will be relocated into the new entrance foyer when the scheme is complete.

Structure

4.40. The work required to the structure to form the new entrance from Holmes Road has been designed by our structural consultant and will not result in adverse effects upon the existing concrete frame.

Additional repairs will be carried out to the concrete frame although these will be primarily cosmetic.

The formation of the new entrance will be facilitated by the removal of two of the precast concrete panels which will allow a new glazed entrance screen to be fitted. As part of this screen, a glazed canopy will be designed to protect people waiting to enter and to indicate the location of the entrance.

5. Sustainability

5.1. The existing roof and wall constructions date from 1976 and therefore have very poor energy characteristics.

The proposed scheme will upgrade the insulation values of the walls and roof to accord with the requirements of the Camden sustainability standards.

In addition, the roof above the external storage area to the north boundary will be re-surfaced and fitted with photovoltaic panels to provide additional energy from the sun.

5.2. These measures will ensure that the carbon produced by the building will be reduced significantly and an energy report has been prepared by our consultant which is included as one of the application documents.

5.3. A location has been designed at the front of the building which will enable a District Heating Scheme connection to the plant room in the future.

6. Conclusions

6.1. The proposed scheme will provide a much needed refurbishment of the existing building and improve the appearance of the elevation which fronts onto Holmes Road and the Inkerman Conservation Area.

6.2. The proposed scheme will provide a sustainable asset and suitable accommodation for Camden staff for the future.

APPENDIX

Pellings

Holmes Road Depot, Camden
Feasibility Report
08/09/16 Revision 01

FIRE ENGINEERING

Audit sheet

Rev.	Date	Description	Prepared	Verified
00	15/08/16	Feasibility Report First Draft	AE	CH
01	08/09/16	Revised Feasibility Report – Stair 1 Width Updated	AE	CH

Contents

Executive summary

The purpose of this report is to assess the feasibility of the proposed refurbishment of the existing Holmes Road Depot, Camden. It is noted that the existing building predominantly consists of workshops and storage areas on the Ground floor and Mezzanine floor, with the First floor predominantly used as office accommodation. It is proposed for the existing structure and use of the building to be largely retained, with the majority of the works consisting of removing internal walls and partitions to create open plan or remodelled internal spaces.

This report describes the proposals and describes the feasibility of the proposed showing compliance with the functional requirements of the Building Regulations (2010). Where elements of the design are noncompliant, this document will provide details on whether the variations from the guidance document are considered reasonable and the impact such elements may have on achieving Statutory Authority approval.

The report has identified some limited areas where slight alterations to the design may be required (e.g. addition of a door to serve a mezzanine stair in the woodworking/metal working zone), some areas where on-site verification of escape widths are required and some additional areas where the fire engineering justifications will require development. However, no significant issues are envisaged in developing an acceptable fire safety design (however, this would ultimately be subject to Building Control approval).

This report will require further development in conjunction with the scheme design, and should form part of any Building Regulations application for the development.

1. Building Description

The proposed development consists of the refurbishment of an existing council building which provides workshop, storage and office accommodation. The council accommodation is located over two principal levels – Ground and First floor, although a small mezzanine level also exists between Ground and First floor in some areas.

The Ground floor currently provides workshops and storage space with a small quantity of office space. The refurbishment works on the Ground floor will consist of the removal of partitions and the addition of office space and meeting rooms in the place of existing storage areas. However, the Ground floor will still predominantly provide storage/workshop accommodation.

The Mezzanine floor currently provides storage and plant space. The refurbishment works on the Mezzanine floor will include the removal of a number of partitions to the stores to provide a more open plan space.

The First floor currently provides office space (split approximately equally between open plan office space and individual offices and meeting rooms). The refurbishment works on the First floor will consist of creating predominantly open plan office space with a small number of meeting rooms. It is also proposed to provide the First floor with an additional stair.

The existing single storey building located within the courtyard to the rear of the building will be demolished, and the courtyard external car parking provision will be remodelled.

Some additional (4no) flats are located on the Holmes Road elevation at second floor level. These flats are accessed via two stairs that are also used by the council accommodation beneath.

A further 21no flats are located at 76 Holmes Road. These extend an additional three storeys above the council accommodation. One of the stairs serving these flats also provides means of escape from the office accommodation, accessed via a roof area.

The flats do not form part of the redevelopment proposals. It is recognised that escape between the council and residential accommodation is shared in some instances. However, this is an existing arrangement, and it will be ensured that the refurbishment proposals do not adversely affect residential escape.

2. Statutory Guidance

The proposed refurbishment works are not classified as a '*material change of use'* under Part 2 of the Building Regulations (2010).

However, it is assumed that a controlled service or fitting will be provided or extended to the building, and that the proposals will essentially constitute Building Work. To this end, in accordance with the Building Regulations 2010, it will be necessary to ensure that the works comply with the functional requirements of Part B of the Building Regulations, or where they do no not currently comply with the Building Regulations, they become no less satisfactory following the works. This is essentially the 'no worsening' clause of the Building Regulations.

Therefore, provided that the refurbishment works do not result in the building or any element of the building being considered any worse in relation to the guidance document(s), there is no requirement to retrospectively require existing areas of the building to comply with Current Regulations. Notwithstanding, this document will provide information on the requirements of Schedule 1 of the Regulations relating to:

- B1: Means of warning and escape;
- B2: Internal fire spread (linings);
- B3: Internal fire spread (structure);
- B4: External Fire Spread;
- B5: Access and facilities for the fire service.

Guidance on how these functional requirements can be achieved in buildings is provided in a number of guidance documents, such as *Approved Document B - Fire Safety* (the 'AD-B').

3. Means of Warning and Escape

3.1 Means of Warning and Detection

AD-B recognises that in most buildings fires are detected by people, either through observation or smell and, therefore, often nothing more will be needed. However, it is also stated that in other cases (where the building is larger or more complex) that the building should be provided with a suitable electrically operated fire warning system with manual call points and audible sounders.

It is proposed to provide the building with an L3 fire alarm and detection system in accordance with BS-5939:1 (2013). It is noted that the proposed system will provide an increased level of safety when compared to the minimum recommendations of AD-B (of a system comprising of manual call points).

3.2 Means of Escape

3.2.1 Horizontal Means of Escape

It is proposed to assess the horizontal means of escape on a floor by floor basis.

It is noted that unless specifically stated in the following sections, that all doors should meet the minimum width requirements stated below. Existing clear widths should be measured to ensure the minimum clear widths are achieved.

- Maximum of 60 persons – 750mm;
- Maximum of 110 persons – 850mm;
- Maximum of 220 persons – 1050mm;
- >220 persons – 5mm per person.

Where the number of persons that may use an escape route exceeds 60 persons, the doors along the escape route should be arranged to open in the direction of escape (this includes final exit doors).

3.2.1.1 Ground Floor

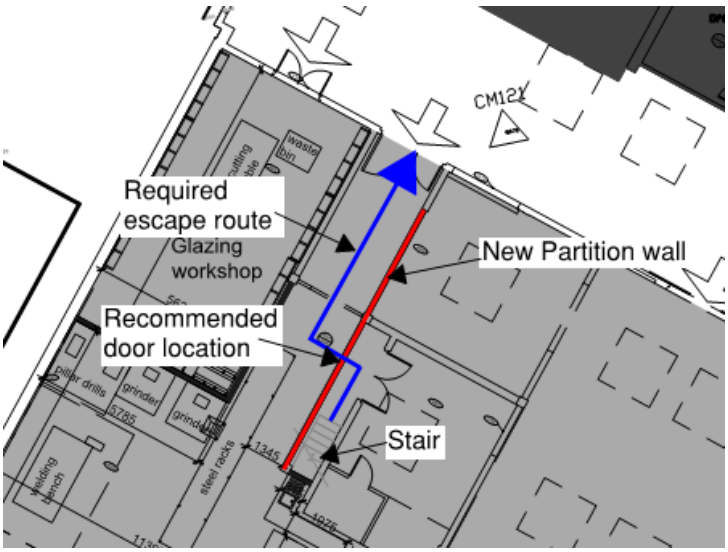
The majority of the Veolia and paint store areas will remain the same after the refurbishment works, however it proposed to remove the internal partitions within the scaffolding store and plant store to create a larger open plan area. It is our understanding that the front of the new open plan space is to remain open and,

therefore, the travel distances will remain within the single (25m) and multiple direction (45m) travel distance limits. However, if the front of the area is to be enclosed then there will be a 30m single direction travel distance from the most remote part of the space to the only exit and, therefore, an alternative exit will be required.

It is proposed to remove the offices around the existing woodworking shop and replace them with changing rooms. It is also proposed to provide a metal workshop and joinery workshop within the existing woodworking space. A single direction travel distance of over 25m is noted in the proposed joinery workshop and, therefore, it is recommended that an alternative exit is provided from this space to outside (roller shutter doors etc. are not suitable for means of escape). It is noted that the inclusion of a new partition wall between the bottom of the stair from the Mezzanine floor and the final exit has made conditions worse than they were previously and, therefore, it is recommended that a door is provided through the new partition wall. This can be seen in Figure 3.1 below. *Note: if a route from the woodworking space and through the base of this stair is available, then this door will also provide adequate means of escape from the joinery space.*

It is noted that the proposed metal workshop may be considered as '*Industrial-Higher Hazard'*, which would impose single and multiple direction travel distance limits of 12m and 25m respectively. However, due to the provision of multiple exits the travel distances are well within the stated limits.

Figure 3-1: Escape Route from Mezzanine Stair



The larger proposed open plan office is provided with numerous doors to outside, such that all travel distances are within the travel distance limits. These doors should provide a minimum width of 750mm, which should be confirmed by on site personnel. Furthermore, the proposed meeting rooms are considered inner rooms, however this arrangement is compliant due to the provision of Automatic Fire Detection (AFD).

It is noted that the proposed open plan office in close proximity to the proposed public lighting store is provided with doors that open against the direction of escape, however this is considered reasonable as it is not anticipated that more than 60 persons will escape through these doors in the event of a fire. These doors should provide a minimum width of 750mm, which should be confirmed by on site personnel.

The alternative exit from the larger store in close proximity to the public lighting store is provided with an existing alternative exit via the men's WC. This route is required to satisfy the travel distances and is compliant in terms of the Building Regulations. However, we cannot comment on any additional issues that may arise with expecting women to escape through the men's WC.

3.2.1.2 Mezzanine Stores

The public lighting office and stores on Mezzanine floor are provided with two open stairs, such that the multiple direction travel distance limits are satisfied. From the most remote part of the stores the single direction travel distance is approximately 22m before escape is available towards either of the two open stairs. This distance is considered acceptable, particularly given the provision of AFD.

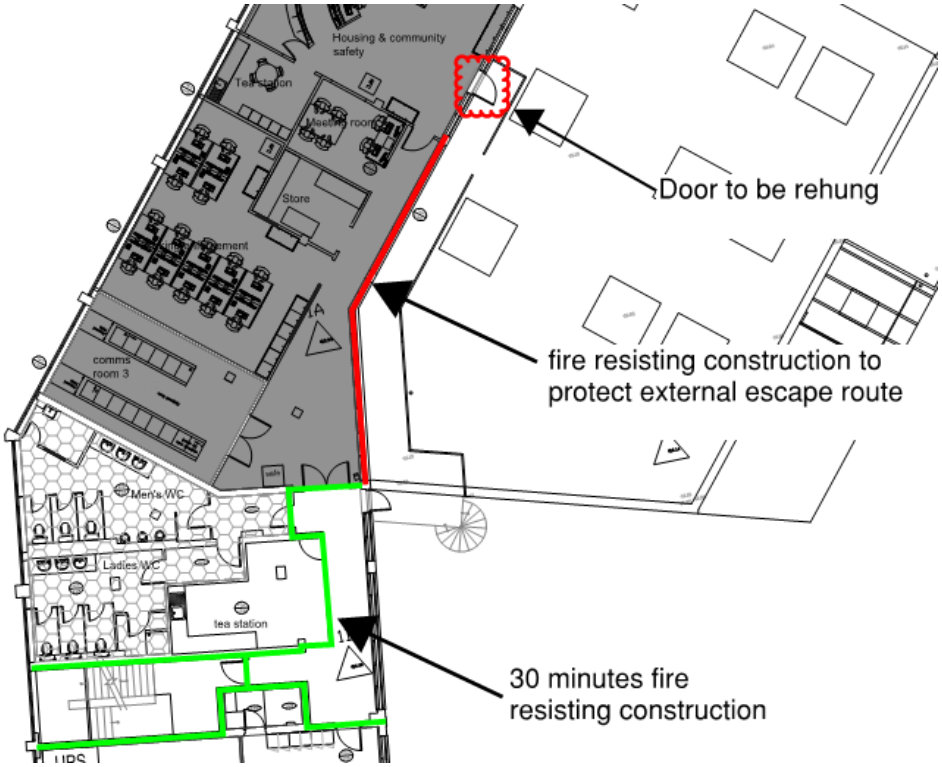
3.2.1.3 First Floor

The majority of the First floor is proposed to contain open plan office space with meeting rooms proposed as inner rooms. This arrangement is acceptable due to the provision of Automatic Fire Detection (AFD) and an inner room population not exceeding 60.

The external escape route (which provides access to the existing spiral stair) from the housing and community safety area should be provided with fire resisting construction from the internal accommodation up to a height of 1100mm above the escape route to ensure this route is available in the event of a fire in the internal accommodation, otherwise the single direction travel distance limit will be significantly exceeded. This can be seen in Figure 3.2 below. In addition, the door from the housing and community safety area should be rehung so that it does not partially block the escape route. The Tea Point should be provided with 30 minutes fire resisting construction (glazing requires integrity only), this will provide protection to the external spiral stair and will minimise the requirement to use the external spiral stair.

The door into the adjoining office is permitted to open against the direction of escape as the number of occupants seeking to escape through it is anticipated to be less than 60 persons.

Figure 3-2: Escape Route from Housing and Community Safety



Note – if the 1100mm high fire resisting construction to protect the external escape route is not practicable, then the internal access corridor will need to be constructed as a protected corridor, and the 30 minutes fire resisting separation will be required between the corridor and the adjacent comms room, CCTV room, store, parking enforcement and meeting rooms.

The principal 'L-Shaped' open plan office area is provided with access into three stairs. This office area contains 116 occupants (based on number of workstations shown). Escape from the office is available into three internal stairs – two are existing and one is a new stair that discharges into the new reception.

The remaining office (located to the east) contains 57 occupants. Escape from this office is available into one internal stair, and then via an existing external route into the stair serving the 76 Holmes Road flats.

The proposed stair nomenclature can be seen in Figure 3.3 below. It is recommended that the storey exits (doors into the stairs) serving Stair 1 and 2 are provided with a minimum clear width of 1050mm (220 person capacity) and that the storey exits serving Stair 3 and 4 are provided with a minimum width of 750mm (60 person capacity).

It is noted that the existing storey exits should be measured by on site personnel to confirm that the minimum clear widths recommended above are achieved.

Figure 3-3: Stair Numbering

3.3 Vertical Means of Escape

The First floor is provided with three existing stairs and it is also proposed to provide a new stair to the serve the First floor offices. Stair 2 requires a minimum width of 1100mm (220 person capacity) and Stairs 1, 3 and 4 require a minimum clear width of 1000mm (150 person capacity). The existing stairs should be measured by on site personnel to ensure the minimum clear widths are achieved. If the widths described above cannot be achieved, then fire engineering justification will be required. Any doors located at ground floor level providing escape from the stairs should be at least as wide as the stair.

Disabled refuges should be provided in all stairs (or within lobbies that are adjacent to stairs), however it appears that Stair 4 is not provided with sufficient space for a disabled refuge and, therefore, this should be provided externally. These refuges require two-way communication and an area of 14000mm x 900mm.

The external spiral stair is currently used for means of escape and will continue to be used as such. The lack of fire rated construction to protect this stair at the lower level is considered reasonable given that the external stair will only be used in the event of a fire at the upper level, as in the event of a fire at the lower level occupants would simply use the enclosed protected stair.

3.4 Impact of Proposals on Residential Means of Escape

As discussed previously, means of escape from the flats located above the depot requires occupants to use stairs that are shared by the council depot occupants. This is an existing arrangement, and these routes will not be adversely affected by the proposals.

3.5 Additional Means of Escape Considerations

Further consideration will be required to emergency escape lighting, signage and the impact of access control on means of escape. This will be completed during the design stage.

4. Internal Fire Spread (linings)

There is no requirement to retrospectively bring all wall and ceiling linings in line with current regulations, however all new wall and ceiling linings will be required to meet the requirements of AD-B. This will generally necessitate Class 0 wall and ceiling linings to circulation spaces (including stairs) and Class 1 to all other spaces and rooms.

5. Internal Fire Spread (Structure)

There is no requirement to retrospectively bring all elements of structure in line with current regulations, however all new structural components will be required to meet the requirements of AD-B. Where new loadbearing elements (e.g. structural frame, floors etc.) are provided, these will need to be provided with 60 minutes fire resistance.

A fire resistance and compartmentation strategy will be developed during the design stage.

Nevertheless, the proposed refurbishment works are unlikely to require any significant additional compartmentation, although some upgrade works may be required for means of escape purposes.

Cavity barriers and fire stopping will need to be provided in accordance with AD-B.

6. External Fire Spread

The proposed refurbishment works will not adversely affect the risk of external fire spread and, therefore, there is no requirement to reassess the external fire spread requirements.

7. Fire Service Access

The proposed refurbishment works will not increase the height, plan area or external perimeter access for vehicles, and therefore, the Fire Service access provisions are not expected to be any different than existing.

The upper floor of the building contains office accommodation and the building is less than 18m in height (to finished floor level on the uppermost storey), therefore there is no need to provide firefighting shafts within the building. As the building is less than 11m in height (to finished floor level on the uppermost storey) and has a total plan area of less than 8000m^2, AD-B recommends that access is required for a pump appliance to 15% of the building perimeter. These access requirements can be easily met via the public highways (Holmes Road and Spring Place). Therefore notwithstanding the existing nature of the building, fire service access provisions to the council areas inherently satisfies AD-B.

Firefighting access provisions to the flats are not known. However, if dry fire mains are provided to serve the flats, the refurbishment works must ensure that these remain as existing, including the fire main inlet points.

8. Summary

In accordance with the Building Regulations 2010, it will generally be necessary to show that any proposals satisfy the functional requirements of Part B of the Building Regulations. However, where the design doesn't currently comply, the proposals must demonstrate that the design will be no worse than the existing arrangement.

Subject to a limited number of changes being made to the proposed design, the building will be considered as meeting the requirements of the Building Regulations. Generally compliance has been assessed against the recommendations of AD-B.

As stated within this document, there is no requirement to retrospectively bring the existing building in line with current recommendations, however in some cases it is recommended that existing elements are altered to provide a suitable level of safety. It is recommended that the following items are addressed:

- The minimum escape widths recommended in this document should be maintained and existing doors and stairs should be measured on site to confirm they meet the minimum requirements.
- Confirmation is required that the front of the space created by merging the scaffolding store and plant store on Ground floor will remain open. If this area is to be enclosed, then an alternative exit will be required from this area.
- A door is required to provide an escape route from the Mezzanine stair in close proximity to the joinery workshop. This is shown in Figure 3.1.
- The door from the housing and community safety area on First floor is to be rehung so that it does not encroach on the escape route. This is shown in Figure 3.2.
- The external escape route from the housing and community safety area on First floor is to be protected with fire resisting construction up to 1100mm above the escape route to ensure two directions of escape are available (alternatively the new internal corridor should be a protected corridor).
- The Tea Point is to be enclosed in 30 minutes fire resisting construction to protect the escape route.

The fire safety strategy considerations described within this report will require further development in conjunction with the scheme design.

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Gledsdale Associates
Consulting Structural Engineers

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Structural Appraisal
Report on
Proposed Planning Submission
for
Holmes Road Depot
Holmes Road, Kentish Town
London
NW5 3AP

INTRODUCTION

Gledsdale Associates were appointed by Pelling LLP as part of their consultancy team to provide structural engineering services for the proposed refurbishment.

COMMENTARY ON THE PROPOSALS

General

Holmes Road Depot is understood to be a 1970s concrete framed building with elevations treated in exposed aggregate pre-cast concrete panels, exposed concrete columns and upper floor slab edges and aluminium framed glazing. Many of the elevations are of brickwork infill panels to the concrete frame, particularly on the courtyard sides and to the residential flats.

Residential flats are located above the first floor offices along the Holmes Road elevation, and there is also a larger residential block at 76 Holmes Road at the east end of the building which extends over some of the depot ground storey.

The building is predominantly two storeys, excluding the flats, although various mezzanine structures have been provided more particularly within the former single storey workshop section to the east, and to part of the Spring Place wing.

To the North side of the site the there is a garage block with open side to the courtyard. This is constructed of a metal deck roof supported on Metsec type trusses which in turn are supported on steel columns.

The central courtyard is for vehicle access and parking and is finished with tarmac surfacing.

Condition of Existing Structures

An inspection of the existing structures has been carried out which did not reveal any major structural or movement problems.

Some areas of cracking to blockwork are probably due to thermal movement or shrinkage. These cracks are not progressive and can be repaired as part of the normal maintenance cycle if required.

Some areas of rust staining and slight spalling of the exposed external concrete faces have been noted and it is proposed to carry out localised repairs as part of the proposed refurbishment. Similar further carbonation testing is proposed to establish any additional protective treatment that may be required to the exposed concrete areas.

Proposed alterations

An assessment has been made with regard to allowable loadings on the existing concrete framed structure as follows:

Ground Floors

Most of the ground floor areas are given over to workshops or stores. It is likely that they were designed for such use when the building was originally designed in 1970's.
As such the floors are likely to have been designed for a live load of at least 7.5 kN/m^2 or possibly 10kN/m^2.

Upper Floors

Most of the upper floors are in use as offices and again the design is likely to have been based on this use. It is possible in the 1970's that the office loading was taken to be as much as 4 kN/m^2. The minimum that would have been assumed for open office design would have been 2.5kN/m^2 plus 1.0kN/m^2 allowance for partitions.

Roof Areas

The roofs may have been designed as access for maintenance only in which case the live load design would have been 0.75 kN/m^2. Some areas may have been design for roof plant, but it will be difficult to identify where these areas may have been.

Summary of allowable loadings for future use:

Ground Floor:

Live Load: 7.5kN/m^2

Upper Floors:

Live Load 2.5kN/m^2
Partitions 1.0kN/m^2

Total 3.5kN/m^2

Roof:

Live Load: 0.75kN/m^2

The proposed uses following the refurbishment will be such that they generally fall within the existing allowed floor load criteria

Use of roof to North block for siting of pv units:

Based on the initial information on the weight of the pv units and the allowable loading for the type of trusses, it would appear that, from the back analysis check carried out, the existing steel frame is capable of supporting the additional loads form the pv's. **It was not possible** to establish the exact type of the existing metal deck; however, by comparing decking currently available, it would appear that the existing decking should be capable of supporting the pv's without the need for additional strengthening.

New Entrance Area

The new entrance and lift area can be achieved by cutting away a section of the ground floor and recasting the entrance and lift support floor at the lower level. This lower level floor can supported from the existing columns and foundations as necessary.

The new stair opening will involve cutting away part of the first floor slab. This opening will need to be trimmed with new steel beams which can be fixed at the underside of the slab and supported back to the main columns or beam strips within the slab.

The external cladding in this area is pre-cast panels. It should be possible to remove one or two of the panels as necessary and re-clad the new opening and surround.

New Structural Openings

Where the proposals require new structural openings in infill walls and partitions these will be dealt with locally with additional trimmers or lintels being installed.

New Plant

Where existing plant areas are being used to house new equipment checks of the new equipment weights are being made to ensure they fall within existing allowable loads.

Where additional equipment is required local checks will be carried out and additional trimming members added, if required, to support the new plant.

I. D. Gledsdale B Eng, C Eng, M I Struct E

Mechanical & Electrical Services Planning Statement

for

London Borough of Camden

at

Holmes Road Depot
79 Holmes Road
Camden,
LONDON,
NW5 3AP

Pi Consult Ltd
Unit 2, Whiffens Farm
Clement Street
Hextable
Kent
BR8 7PQ

Document Ref: 170703 0461 M&E Services Planning Statement Rev P1
Issue Date: 3rd July 2017
Project Ref: 0461
Rev: P1

CONTENTS

1.0 INTRODUCTION

Pi Consult Ltd has been appointed to carry out the Mechanical, Electrical and Public Health (MEP) services design for the project.

This document has been produced to provide a high level concise explanation of the services elements which have a bearing upon the regeneration project planning submission.

This document should be reviewed alongside Pellings LLP planning application and other relevant planning documentation.

2.0 MECHANICAL SERVICES

2.1 HEATING

East Plant Room.

The existing East Plantroom serves both the East residential block and also the East commercial building. The existing boiler plant will be replaced, however it is anticipated that hydraulic separation and zoning control will be required satisfying current legislation in respect of metering and zoning.

The plantroom will require assessment of the existing combined boiler flue in order to provide replacement of the existing boiler plant. With the minimum efficiencies identified within the Building Services Non-Domestic Compliance Guide 2013 and the necessity to reduce the site wide carbon emissions, it is proposed that a more efficient boiler type be installed. This may require modifications to the existing flue internally, a chimney survey and potentially a new boiler flue lining system. At this stage, we do not believe that there will be any visual adaptations will be required to the existing chimney.

The Hot water generation for the commercial elements is currently by a gas fired hot water heater. The flue for this equipment may need to be replaced dependent upon the final equipment selection, along with a chimney survey and potentially a new boiler flue lining system. At this stage, we do not believe that there will be any visual adaptations will be required to the existing chimney.

[Existing view from Holmes Road]

West Plant Room.

The existing West Plantroom will be a new plantroom formed to provide separation across the site and balance the heating and hot services over the site.

The plantroom will be formed internally at Mezzanine level adjacent to Spring Place. The formation of this plantroom will require both ventilation and a boiler flue (**potentially a chimney)**.

The preference is to utilise balanced flue boilers with proprietary flue systems which should negate a combine single flue / chimney option; at this stage, we are considered individual balanced flue system in further detail complete with traditional wall terminals.

2.2 COOLING SYSTEMS

Comfort cooling shall be provided by way of existing systems where appropriate to retain and new proposed systems with high efficiency condensers.

Comfort cooling shall operate based upon demand and due to systems operating on floor plates with multiple external facades it has been deemed suitable to specify heat recovery heat pump systems.

The systems shall utilise low GWP refrigerant and installations shall be F gas approved.

Suitable acoustic measures shall be specified by the Acoustic Engineer to suit condenser noise breakout.

2.3 VENTILATION SERVICES

Toilets shall be ventilated in-line with Building Regulation Part F and where necessary be balanced complete with supply air. Where combined systems served more than one cubicle / toilet area ductwork shall be treated by X-talk attenuators.

Canteen / food preparation areas shall be ventilated by with of ducted supply and extract systems in line with DW 172 and the Clean Air Act.

Office ventilation shall be by way of supply and extract heat recovery systems with facade mounted Acoustic louvres where necessary. The Office areas shall be solely served by mechanical demand controlled means based upon temperature and CO2 sensors.

All extract and supply fans shall be selected to comply with ErP 2016, the Non-Domestic Compliance Guide 2013 and CIBSE Guidelines.

2.4 DOMESTIC SERVICES

The domestic services and hot water generation equipment shall be determined based upon commercial domestic water usage benchmarks.

Equipment efficiencies and safety elements of design shall comply with the Building Services Non-Domestic Compliance Guide 2013 and Building Regulation Part G.

3.0 ELECTRICAL SERVICES

3.1 NEW INCOMING DNO SERVICES

A new incoming 800kVA Sub-station is proposed due to existing loads being near capacity via a new 630 Amp Three Phase (TP&N) DNO supply, which will be procured from UK Power Networks and provide the client with a BNO (Building Network Operators) electrical service.

3.2 MAINS DISTRIBUTION AND SMALL POWER SYSTEMS

The buildings existing 400 Amp service will be replaced as part of the works, with a new Low Voltage switchroom being provided adjacent to the sub-station in a separate enclosure. A dedicated MCCB Panel will serve new panel boards and distribution boards located within each block to serve the local lighting and small power requirements. All distribution boards will include metering to meet current Building Regulation and TM39 requirements.

It is understood that the existing building is to remain with minor adaptations and services will be provided by both internal and buried services routes within the internal courtyard areas.

Small Power system shall comprise of standard and cleaners socket outlets, fused spurs and isolators throughout each building to serve the requirements on a room by room basis.

All outlets and services will be installed to comply with current DDA requirements including Contrast and heights to ensure accessibility.

3.3 LIGHTING SYSTEMS

The lighting throughout the existing building comprises of a mixture of LED and Fluorescent luminaires to provide the existing levels of illumination.

It is proposed to replace areas of lighting that have not already been included as part of a recent upgraded to meet the client's expectations, together with balancing the need to meet Building Regulations and BREEAM compliance requirements. Lighting controls are to be reviewed in any affected / non-compliant areas to ensure minimum energy is expended throughout the building.

The external façade lighting is minimal with street lighting providing the majority of this illuminance. Within the internal courtyard a number of high level floodlights are to be retained, however low-level bulkheads will be upgraded where they have not recently been replaced together with upgraded lighting controls to both systems.

3.4 SAFETY SYSTEMS (FIRE ALARM)

The existing fire alarm system has recently been replaced with a new wireless system as manufactured by EMS to protection level L3 in line with the current Fire Risk Assessment and report and BS 5839. Minor modification are to be carried out to this system to accommodate internal layout revisions and the addition of the West Plantroom area.

3.5 IT SYSTEMS (DATA / VOICE / AUDIO VISUAL / INTERCOM)

The existing IT systems are being retained with upgrades of equipment due to the reconfiguration of services. New containment and small power supplies are to the provided to allow the client to carry out the fit out of the modified IT services.

3.6 SECURITY SYSTEMS (INTRUDER ALARM / CCTV / ACCESS CONTROL)

The existing security systems are being retained with upgrades of equipment and access points due to the reconfiguration of the existing layouts and access arrangements. New containment and small power supplies are to the provided to allow the client to carry out the fit out of the modified access and security services.

APPENDIX A: PHOTOVOLTAIC PROPOSAL

Enlightened Solar

Science and Nature in Harmony

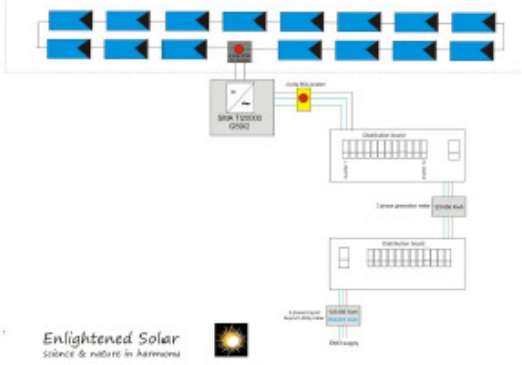
Pi Consult Ltd
Unit 6
Whiffens Farm
Clement Street
Hextable
Kent
BR8 7PQ
2017

30th June

Ref: Photovoltaic modules on Holmes road

The most logical and cost effective solution is install a single 20kw array that is connected to the 3 phase land lords supply under G59 regulations. A G59 application will be required by the DNO.

The modules would be fitted to a self ballasted mounting array similar to the picture on the below. The inverter can be located on the roof and connected to the landlords 3 phase supply via a solar generation meter.



Crabtree Farm
The Warren, Crowborough
East Sussex, TN6 1UB
www.EnlightenedSolar.co.uk
01892 667611
Registered in England: 7841229

Enlightened Solar

Science and Nature in Harmony

Using the MCS output calculator, the annual generation is estimated at 8,230 kWh per year. The FITs and electricity saved by the system should amount to about £2,400 per year.

Survey Input	
Project:	Holmes Road
Postcode	NW5 3AA
Measured Angle	10 Degrees
Measured Orientation	60 Degrees
Array Size	20.30 Kwp
No. of shaded segments	0
Angle (rounded)	10
Orientation (rounded)	60
Zone	1
Kk Value	860
Shade Factor	1
Annual AC output	**17,458 kWh / PA**

The total area occupied by the modules is 160m^2 and there are a number of different layouts that the roof can accommodate.

Regards

G Fox

Geoff Fox

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