

Kirkby MSCP

DESIGN AND ACCESS STATEMENT

FIRST ISSUE 17.03.23



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1.0 Introduction

1.1 Building Background

The building is an 8 Level Multi-storey concrete car park. It currently provides 349 car parking spaces however they are not compliant with current regulations. Also, the existing top open floors are not in good condition with areas of standing water and general disrepair. These issues have led to the car park being underutilised. All pedestrian access is via the two stair cores to the northern and western elevations. Vehicle entry and exit is on the north facing elevation and the circulation between levels is via ramped access. Externally there are areas of soft and hard landscaping to the perimeter of the site and the vehicle entry & exits are secured by metal gates. The exterior facades are predominately made of pebble dash concrete panels with metal grills between them.

1.2 Location and Context

Kirkby multi-storey car park is located on the fringe of Kirkby Town centre between two major highways (A506 & A5208). It is accessed from the A506 and while two of the sides face the commercial area the other two are visible from the surrounding highway.

1.3 Project Aspirations

The building is recognised as an important part of Knowlsey Council's rejuvenation plan for Kirkby Town Centre and is seen as a gateway for the area. It also sits very close to a number of other recent developments in the area such as Kirkby Retail Park and needs to be upgraded to match these standards.



2.0 Project Brief

2.1 Brief

The project aims to rebrand, reconfigure and reimagine Kirkby Multi-storey car park to create a building that acts as a gateway to the town. This development aims to encourage economic activity in the area. It also ensures that the car park is compliant with newer regulations and requirements such as electric vehicle charging points. In addition, improving the condition of the car park will increase the chances of attracting new tenants to the vacant former office building behind the site.

2.2 General Requirements

- 1. Refurbish the existing internal conditions to improve the legibility of circulation for vehicles and pedestrians.
- 2. Create parking bays which are compliant with the current regulations and to be more generous in sizing where feasible.
- 3. Addressing safety with regards to barrier protection and handrails where appropriate.

2.3 Level Specific Requirements

Level 0 & 1 Internally

Provide facilities for cycle storage and electric vehicles. Increase pedestrian engagement with the building. The existing commercial unit is to be removed and then converted into part of the car park.

Level 2, 3, 4 & 5 Internally

Addressing safety with regards to barrier protection and hand rails. Improving circulation throughout.

Level 6 & 7 (Roof)

New compliant handrail to be installed to the perimeter to improve safety. A new waterproofing surface will be vital to protect the buildings structure in the long term.

2.4 External Treatment

The existing external facades are in need of refurbishment as the current aesthetic does not complement the newer surrounding buildings and is not very welcoming. Therefore the approach is to modernise the external appearance of the car park in line with the nearby buildings. The proposed refurbishment will consider robust and easy to maintain solutions to ensure the car park's longevity.



Photographs of Existing Building

3.0 Surrounding Context

3.1 Context

Kirkby multi-storey car park is located on the fringe of Kirkby Town centre between two major highways (A506 & A5208).

The building is not listed and is not in or close to a conservation area.

3.2 Venacular Language

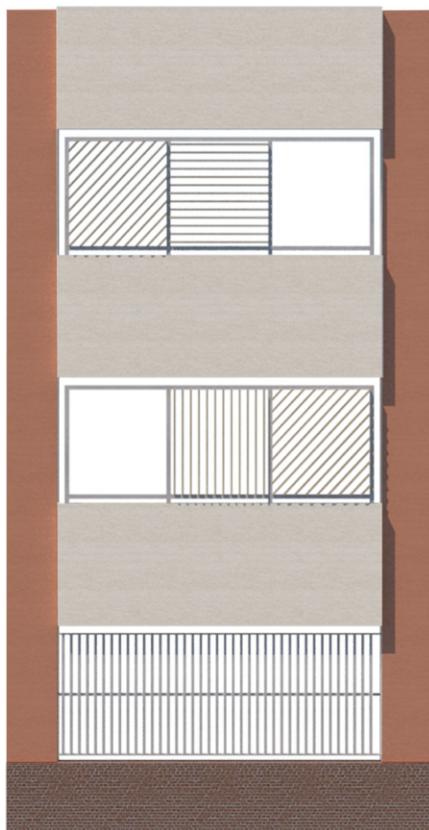
Kirkby multi-storey car park is within Kirkby's new retail park. Most of the retail park buildings use a similar palette of material finishes and colours. Red kalzip metal cladding and both dark and light grey flat metal cladding are used frequently. Therefore, this type of material language has been taken into account to inform our decisions regarding how we will treat the external envelope.



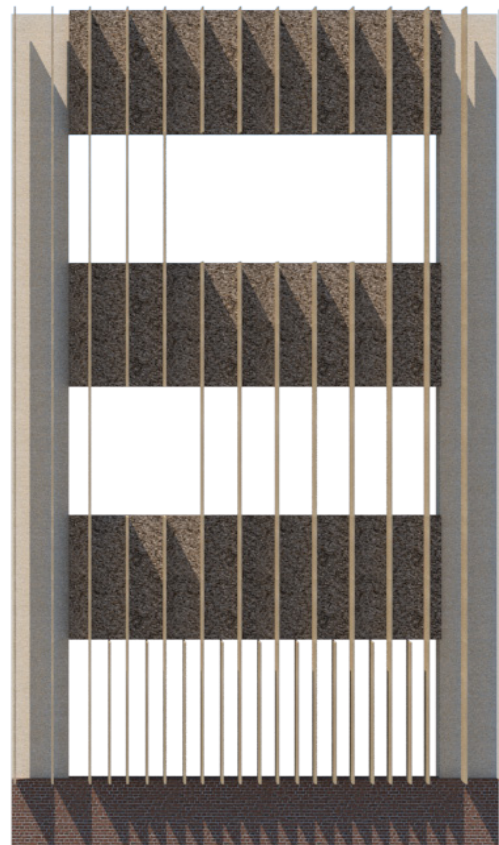
4.0 Initial Ideas

4.1 Iterative process

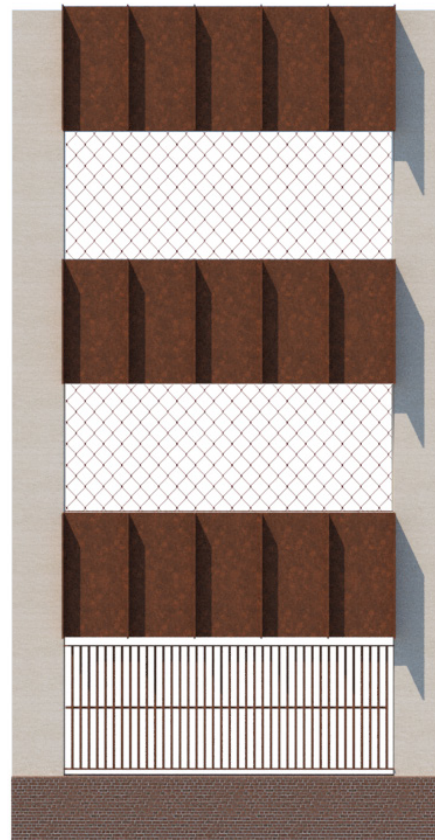
One of the key decisions for this proposal is the re-design of the facade. We explored and tested numerous options in 3D to allow all the parties to visualise different design approaches and narrow down a preferred route. The options varied widely in appearance however, this was vital in helping to determine what we collectively deemed would and would not be appropriate from an aesthetic and maintainance point of view.



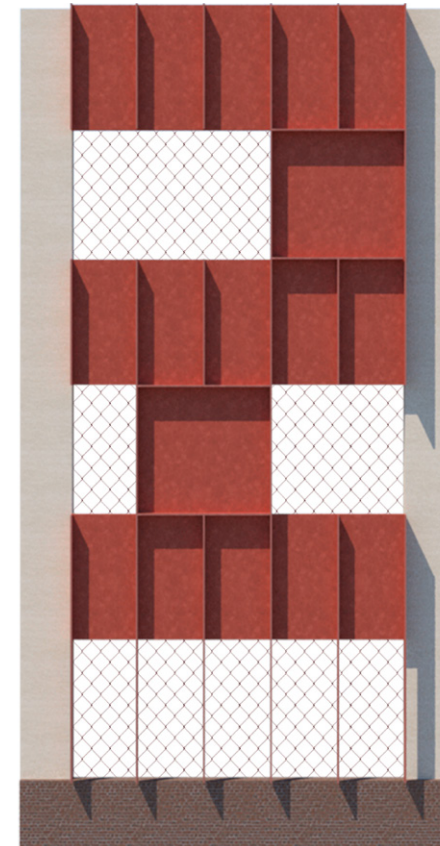
Initial Option 1
Render & new timber grills



Initial Option 2
Timber or metal fins



Initial Option 3
Metal / Fibre cement cladding



Initial Option 4
Cement bonded particle board



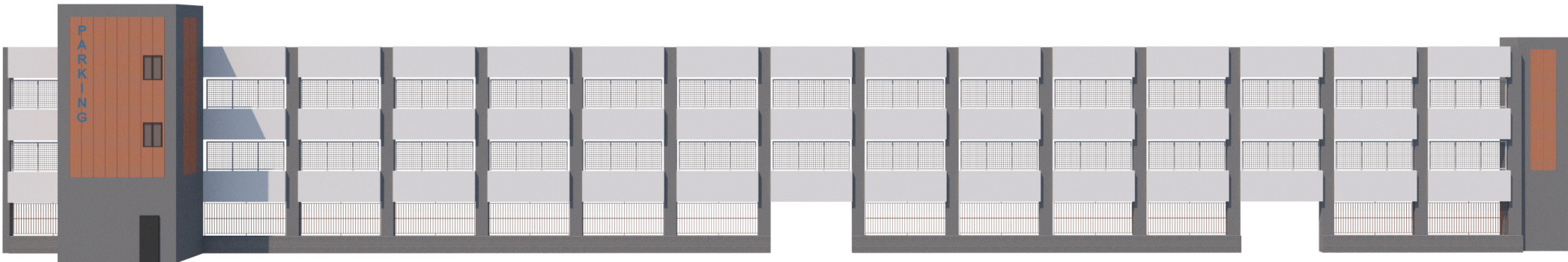
Initial Option 5
Planters

4.2 Preferred Approach

In consultation with the client it became clear that they preferred an approach that is in keeping with the apperance of the new surrounding buildings. Futher more detailed variations of this approach were then developed as highlighted below until a final option was agreed.

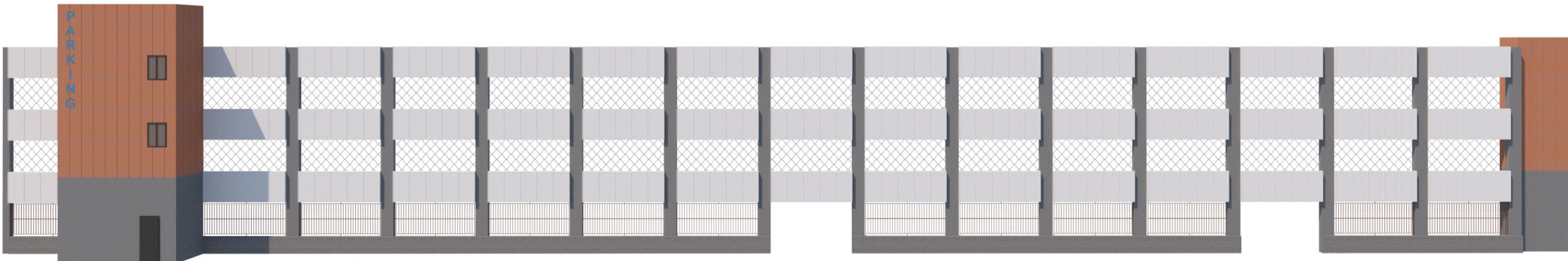
Revised Option 1

Referring to the colour scheme and materials used in the new neighbouring buildings, this option retains the existing metal grills and fencing whilst re-cladding the existing stair-core with copper and grey cladding with light grey cladding to the pebble dash panels.



Revised Option 2

Option 2 was similar to option 1, however it was proposed to remove the existing metal grills and replace them with new mesh.



Revised Option 3 - Final Option

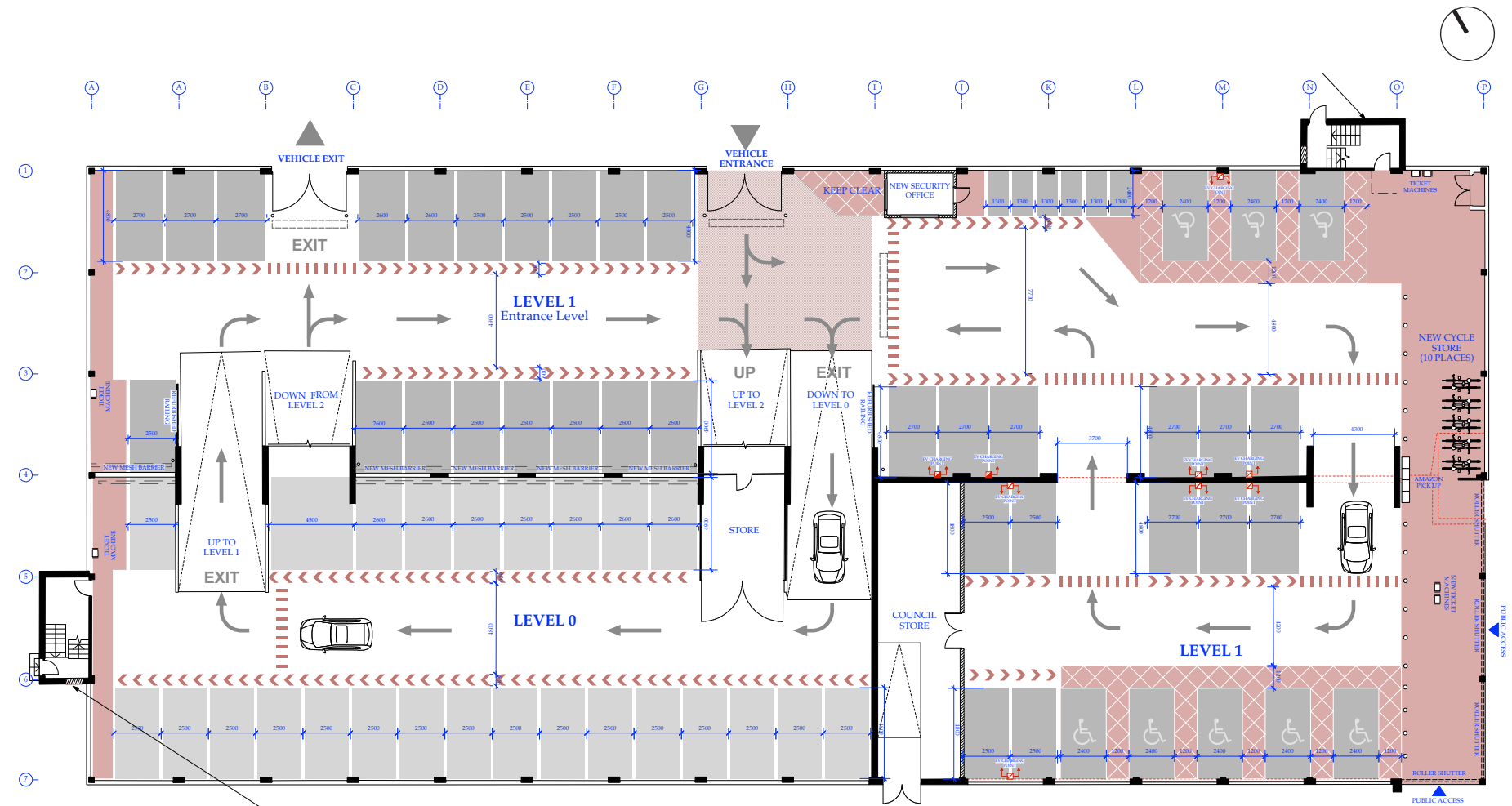
This final option proposed to galvanise the existing metal grills and fencing, clad the existing stair cores with light / dark grey cladding and clad the pebble dash panels with the ‘copper’ colour used on surrounding buildings. This approach was the preferred option as it is more similar to the surrounding retail buildings and provides a robust and easy to maintain facade.



5.0 Design

5.1 Issues / Constraints / Opportunities

- The location of the site is very central within Kirkby and is within easy walking distance of the town centre. Therefore, there is potential for this car park to be well used if refurbished appropriately.
- The building is also close to the existing office building which could be very beneficial to attract new tenants into this large vacant building.
- The existing internal conditions are rather poor which is a likely contributing factor as to why the car park is currently under utilised. Especially the top open floors which are currently not in use.
- There is currently no provision for electric vehicles and cycle storage therefore introducing this could encourage a wider variety of users.
- Current circulation and car park spaces are not compliant.
- The current lighting conditions internally and externally are poor. Therefore, if this were to be improved the car park would feel safer thus encouraging more utilisation.



5.2 Internal

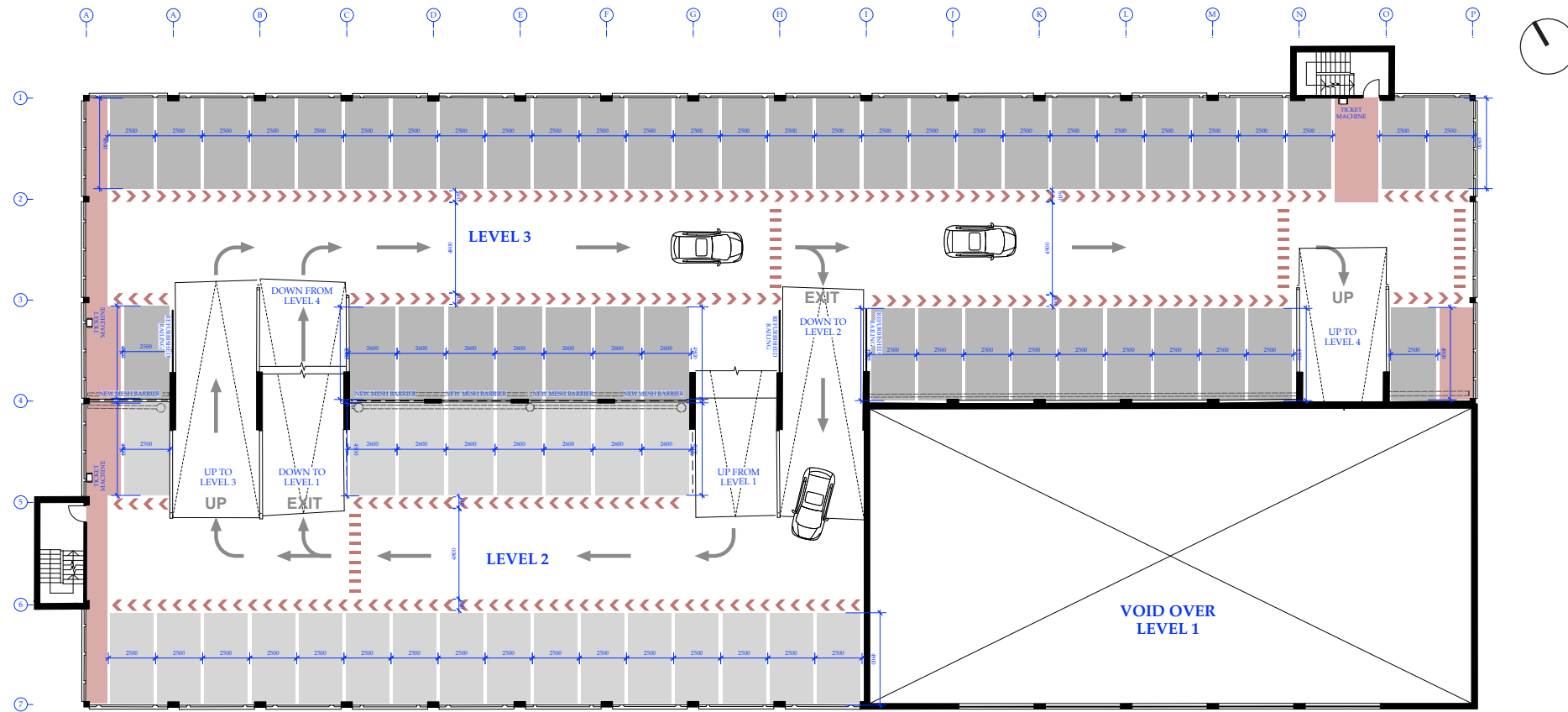
General Requirements

As mentioned in section 2.2, for all levels of the car park the aims are to;

- Refurbish the internal conditions to improve the legibility of circulation and wayfinding
- Create parking bays which are compliant with current regulations
- New safety barrier protection and handrails to be installed where required to ensure users safety

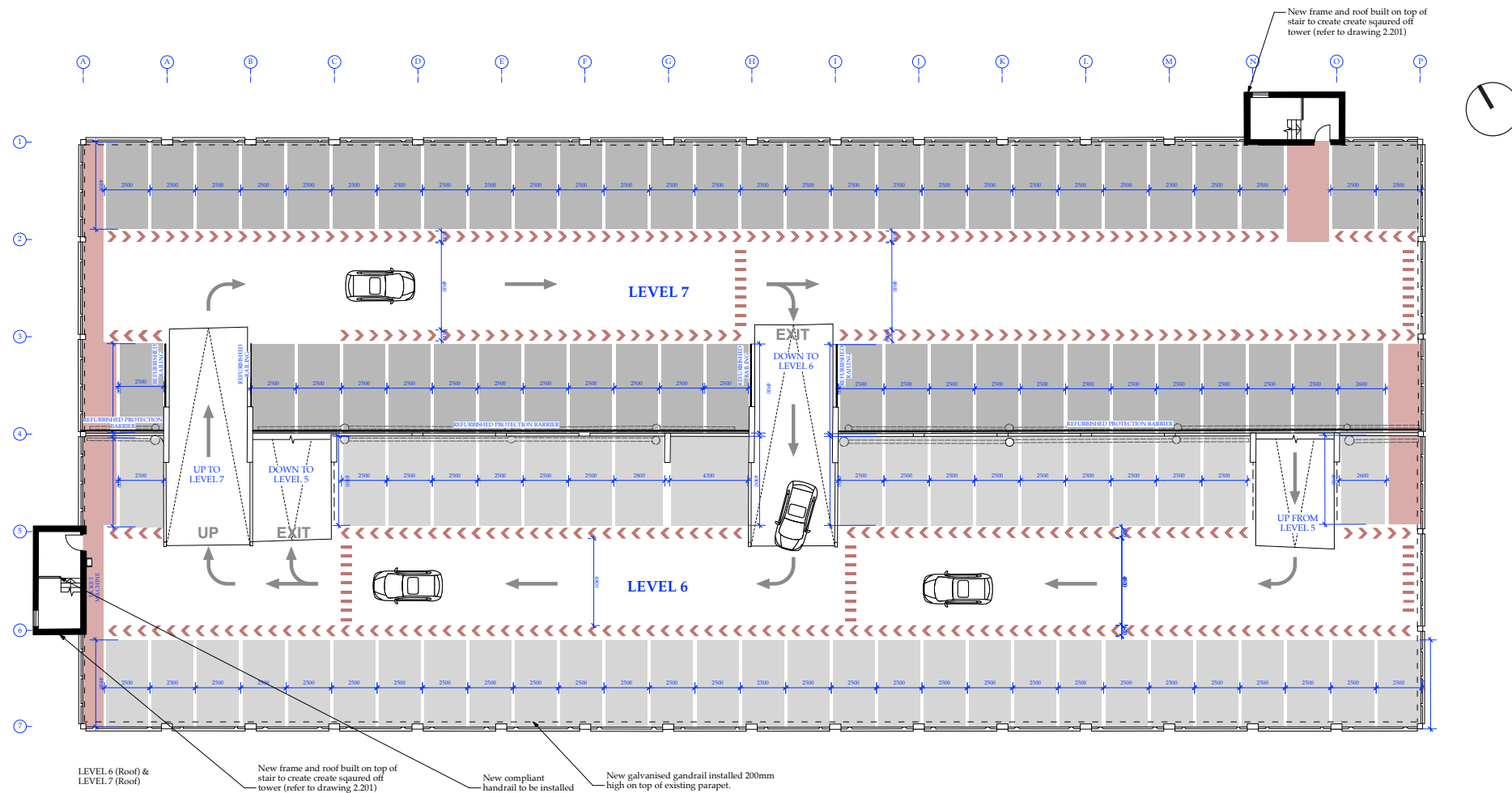
Proposed Level 0 & Level 1 Plan

New facilities for cycle storage and 15 electric vehicles to be provided to help to encourage more users to the car park whilst also providing a positive sustainable impact. The additional new opening through the former unit 10 will help increase pedestrian interaction with the building.



Proposed Level 2 & 3 Plan

New mesh protection barriers and refurbished railings to be installed to improve vehicle and pedestrian safety. New wayfinding through painted walls, floors and signage throughout.



Proposed Level 6 & 7 Roof Plans

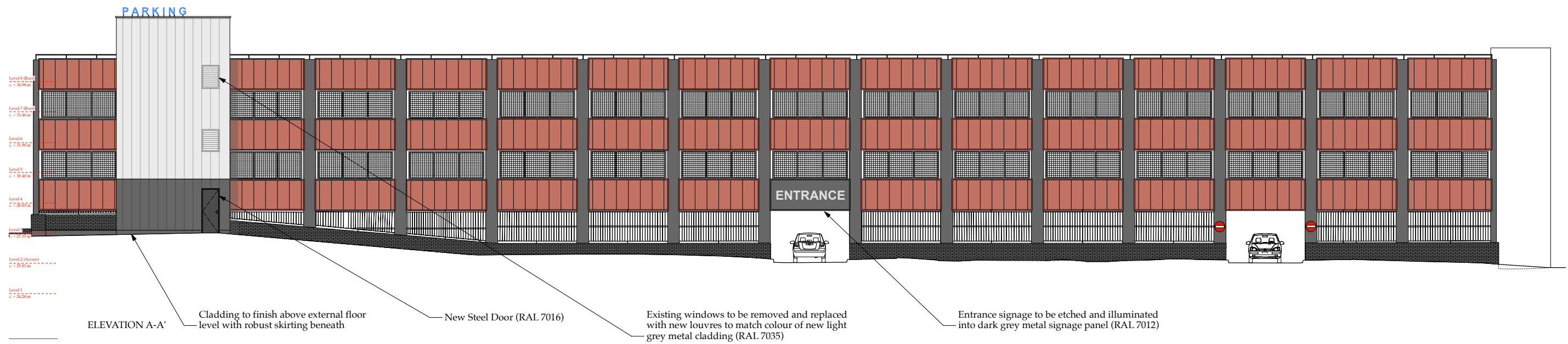
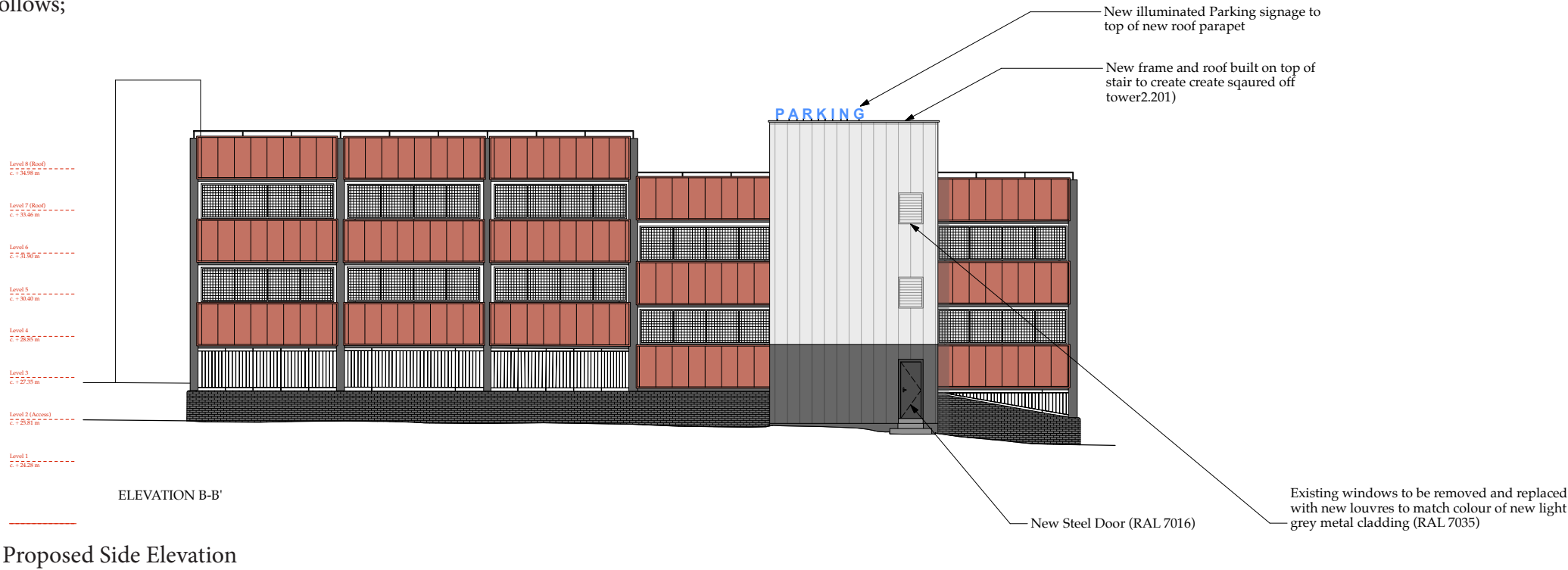
New compliant handrail to the perimeter to be installed. Also, new waterproofing surface to be applied which will reduce issues regarding stagnant water and water damage. New wayfinding through painted walls, floors and signage throughout.

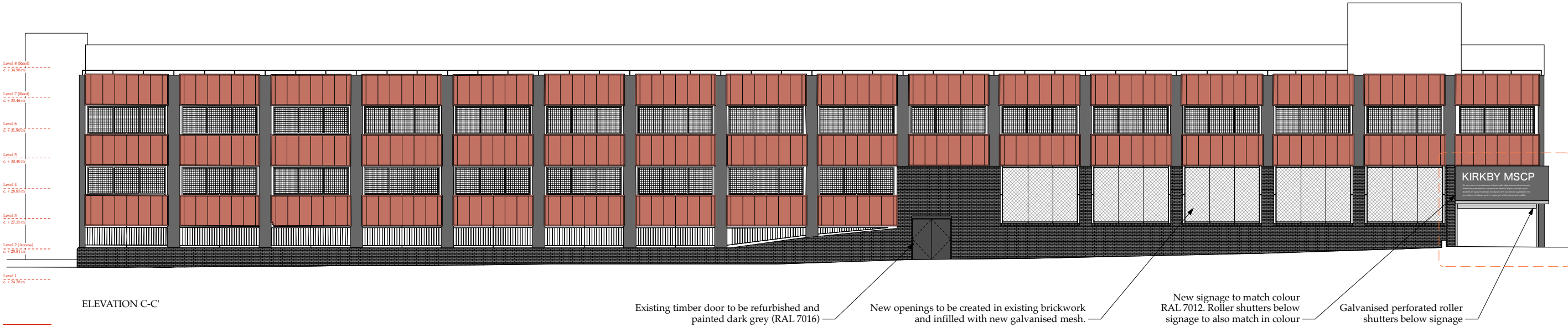
5.3 External

As discussed in Section 2.4, the existing external facades are in need of refurbishment. Therefore, the approach is to clad and re-paint the exterior where necessary to improve the external appearance of the car park and use robust materials that will be easy to maintain over time. The areas of refurbishment are as follows;

Pedestrian Stair Core

The existing stair core will be clad with flat dark grey metal cladding to the base and light grey flat metal cladding above to roof level. They will also be 'squared' off to make a more prominent contemporary tower.





Proposed Rear Elevation

Exterior Pebble Dash Concrete Panels

The existing concrete panels will be clad in red Kalzip vertical standing seam metal cladding which matches the colour and finish of the cladding used in the neighbouring buildings.

Metal Grills & Railings

The existing metal grills and railings are to be galvanized and re-instated to improve their longevity and give the exterior a cleaner appearance.

5.4 Signage

There will be new external signage to the top of both of the staircores and the vehicle entrance point. It is also proposed to have new signage above the new opening facing the retail area and highlighting the main pedestrian access.(ref to Elevations CC & DD).



Proposed Side Elevation

6.0 Materiality

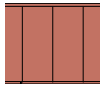
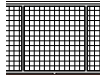
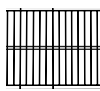
6.1 Appearance & Justifications

Using materials that are robust and also follow the visual language of the surrounding area are two important factors in ensuring that this proposal stands the test of time.

For example, opting to use metal cladding throughout instead of a render or timber will massively reduce the requirements for upkeep and cleaning over time. Also, as dicussed in Section 3.2, the material appearance follows the language of the neighbouring buildings ensuring that the proposal sits well within its context.



Park Elevation (Proposed Front)

MATERIALS KEY	
Existing Columns refurbished Existing columns to be painted grey (RAL 7012) with appropriate external paint	
Existing Brickwork refurbished Existing brickwork at base to be painted grey (RAL 7012) with appropriate external masonry paint	
New Red metal cladding Existing pebble dash concrete panels clad in Kalzip 65/400 flat vertical standing seam cladding RAL 8029 copper metallic or equal approved. Cladding edging to enclose sides. Edging to match cladding finish	
Existing Grills refurbished Remove existing 'artwork' additions to existing grills. Then existing grills to be galvanised and reinstated	
Existing Railing refurbished Existing red railing above brickwork at base to be galvanised and reinstated	
New Grey metal cladding New dark grey flat faced Aluminium cladding (RAL 7012) or equal approved to base of existing staircore.	
New light Grey metal cladding New light grey flat faced Aluminium cladding metal cladding (RAL 7035) or equal approved to existing staircore up to roof level.	
New Louvres Light Grey Louvres in existing window openings to match new light grey metal cladding (RAL 7035).	
New Handrail New galvanised handrail to be installed 200mm high on top of existing parapet.	

7.0 Access

7.1 Highways

The building is easily accessible by road. The main vehicular access road is off Telegraph Way. Which is connected to the A506 which intern links to the M57 making the site easily accessible from other areas of Merseyside and beyond.

We are proposing to retain all external roads and pathways as existing.

7.2 Parking

The proposal will provide 308 car parking bays, 8 accessible bays and 15 electric vehicle charging bays totaling 329 spaces. All of the bays will be compliant with the latest bay size regulations with a minimum size of 2500 x 4800mm. The proposal will also have improved pedestrian markings and saftey railings / barriers to improve the saftey of users.

In addition to Level 1 (Ground Floor) it is proposed to have a generous accessible parking area with large areas of level access to the retail park and town centre making is easier for accessible users to enter and exit the building.

7.3 Cycle Parking

Secure cycle parking will be provided within the car park at level 1. As is the case with the accessible parking spaces, the cycle parking has level access to the retail park and pathway to the town centre making it easy for the user to access this facility. There is also motorcycle parking provision.

9.0 Sustainability

Sustainability has been well considered throughout the design process and will have a large emphasis in the proposal.

The following summarises the proposed measures that will be included in the development:

- Refurbishment of existing car park

Given that this building already has large amounts of embodied carbon, by refurbishing it instead of proposing to build a new car park or demolish the existing will avoid producing a significant amount of carbon emissions during the construction phase.

- Electric Vehicle Charging points

By providing 15 electric vehicle charging spaces, the proposal encourages more renewable vehicles to use the car park therefore helping to contribute positively to the UK's net zero objectives.

- Cycle Storage Facilities

The provision of cycle storage in the car park again encourages sustainable methods of transport to be used in the area. Also, with secure observation and good lighting the users can use the building in confidence knowing that their property will be safe.

- Repairing / protecting top floors

Due to being exposed to the external elements, the top two floors of the car park are more susceptible to damage when compared to the other floors. Therefore, by ensuring that these floors are protected and repaired we will help to improve the longevity of the car park.

- Facade materials

The cladding materials proposed are mainly made of an aluminium alloy that has an approximate 75% recycled content. In addition, it can be recycled again at the end of its life on this site making aluminium cladding a sustainable choice.

Appendix

LIGHTING STRATEGY

KIRKBY MULTI STOREY CAR PARK EXTERNAL LIGHTING PROPOSALS

Overview

The external street lighting in and around the existing car park is of a good level covering all adjacent roadways and pathways. To the main and side elevations the lighting would appear to have been upgraded as part of the ongoing regeneration works as it is all relatively new and of the LED type light source. To the rear the columns would appear to be more aged, but modifications have been made to them to change the lamp source to LED.



Existing Front elevation



Existing Rear elevation



Existing East elevation



Existing West elevation



As such the new lighting that is proposed to be introduced as part of the Car Park upgrade works will generally be aesthetic only to offer feature to the structure. This will be supplemented with Security Lighting to the rear elevation to provide a better level illumination to the pathway that links from Norwich Way to the main pedestrian thoroughfare from the Hall Lane Car Park to the main Town Centre Shopping Area & Market.

Proposals

Please refer to drawing – NECO 390/EXT/01

Front Elevation

To the front elevation the proposal is to illuminate the structural columns that form the main element of the external façade. Fitting types will be of the 10° narrow beam floodlight type that will be located to the top of the structural beam. These will illuminate the beams down to ground floor level. The selection of the narrow beam optics will ensure that it is just the structural columns that are illuminated.

Wall mounted feature bulkhead luminaire types will be mounted above the external escape door to the main staircase. These will be of type used on other elevations to provide the same aesthetic look to the complete building. They will be complete with integral emergency conversion packs to ensure safe egress in the event of a mains failure situation. They will also operate as part of the overall external lighting controls.

Rear Elevation

As described above, to the rear elevation the proposal is to afford additional illumination to the pathway that links from Norwich Way to the main pedestrian thoroughfare from the Hall Lane Car Park to the main Town Centre Shopping Area & Market.

This is proposed to be achieved by using wall mounted feature bulkhead luminaire types mounted to the main structural beams evenly along the whole of the rear façade.

Illumination is already provided by the adjacent Lighting columns, but these new fitting types will be designed to provide a lighting level to the pathway of 5 lux. These wall lights will be of the pure downward illumination.

East Elevation

Proposals for the east elevation is as per that for the front elevation.

This elevation faces the main A506 Hall Lane roadway and as such the ambition is create a visual effect rather than provide utility lighting which is already in place.

Again, the objective will be to illuminate the structural columns that form the main element of the external façade. Fitting types will be of the 10° narrow beam floodlight type that will be located to the top of the structural beam. These will illuminate the beams down to ground floor level. The selection of the narrow beam optics will ensure that it is just the Structural columns that are illuminated.



Wall mounted feature bulkhead luminaire types will be mounted above the external escape door to the main staircase. These will be of type used on other elevations to provide the same aesthetic look to the complete building. They will be complete with integral emergency conversion packs to ensure safe egress in the event of a mains failure situation. They will also operate as part of the overall external lighting controls.

West Elevation

The pedestrian thoroughfare adjacent to the west elevation has been illuminated as part of the main regeneration works using feature twin head column mounted lanterns located centrally to the walkway.

As such no additional external lighting is proposed to this elevation.

The only additional lighting will be in the form of a Wall mounted feature bulkhead luminaire mounted above the external escape door to the main staircase. This will be of type used on other elevations to provide the same aesthetic look to the complete building. It will be complete with integral emergency conversion pack to ensure safe egress in the event of a mains failure situation. It will also operate as part of the overall external lighting controls.

Controls

Control of the external lighting to all elevations will be through a managed time & photo electric cell arrangement. This will enable the lighting to be operated through time sequences or in line with available daylight.

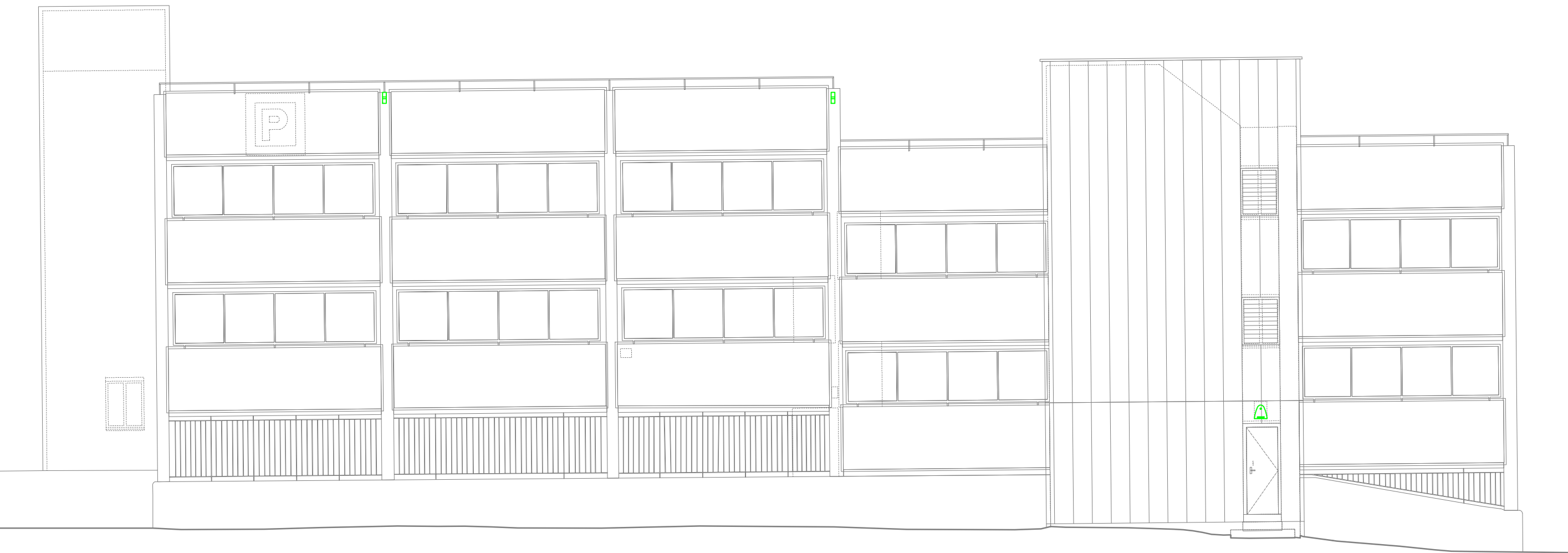
The lighting will be sequenced in groups to enable feature lighting to be operated separate from functional lighting.



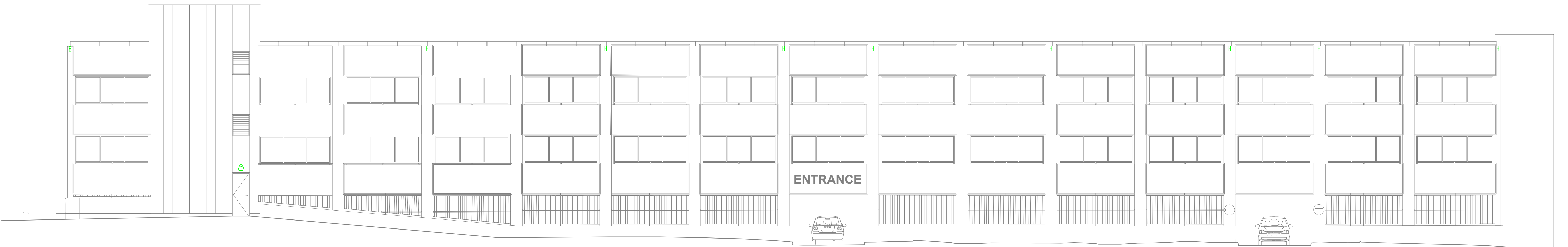
WEST ELEVATION



REAR ELEVATION



EAST ELEVATION



FRONT ELEVATION

INSTALLATION NOTES	
1.	ALL WORKS INCLUDING BONDING, TESTING & CERTIFICATION ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT EDITION OF THE RELEVANT REGULATIONS BS7671 AND ALL OTHER RELEVANT STANDARDS AND REGULATIONS.
2.	LIGHTING TO CAR PARK AND PLANT AREAS SHALL BE CARRIED OUT IN LSH SINGLE CORE CABLES CONTAINED WITHIN GALVANISED TRUNKING AND STEEL CONDUIT.
3.	CABLING TO EXTERNAL LIGHT FITTINGS SHALL BE ROUTED INTERNALLY AND SHALL ENTER THE FITTINGS REAR ENTRY. NO CONTAMINANT CABLING OR SUPPORTS SHALL BE ROUTED ON OR ACROSS THE EXTERNAL FACADE OF THE BUILDING.
4.	THE ELECTRICAL CONTRACTOR SHALL ENSURE THAT ALL CABLES ARE PULLED IN AND ARRANGED IN A UNIFORM FASHION AND ARE TIED IN NEATLY WITH METAL CABLE TIES.
5.	EXTERNAL LIGHTING SHALL BE CONTROLLED THROUGH A CONTACTOR VIA A PHOTOCELL/TIMELOCK ARRANGEMENT. REFER TO EXTERNAL LIGHTING CONTROL DETAIL.
6.	THE ELECTRICAL CONTRACTOR SHALL PROVIDE A SAMPLE BOARD TO DEMO THE PROPOSED FITTINGS TO THE CLIENT AND PROJECT ARCHITECT.
7.	ALL LIGHT FITTINGS ARE TO BE APPROVED BY THE CLIENT AND PROJECT ARCHITECT PRIOR TO ORDERING BY THE ELECTRICAL CONTRACTOR.
8.	ALL THE RELEVANT CERTIFICATION IN LINE WITH BS7671 SHALL BE PROVIDED ON COMPLETION AND SHALL BE INCLUDED WITHIN THE DAM MANUAL TOGETHER WITH THE AS FITTED DRAWINGS & LIGHTING MANUFACTURERS LITERATURE.

GDM NOTES	
1.	WORKING FROM HEIGHT – USE OF SAFE WORKING PLATFORMS TO BE USED.
2.	WORKING AT HEIGHT – RISK OF TOOLS OR EQUIPMENT BEING DROPPED ONTO OPERATIVES BELOW – RESTRICT ACCESS TO AREAS DIRECTLY BELOW WHERE WORKS ARE BEING CARRIED OUT.
3.	USE OF HAZARDOUS MATERIALS – HAZARDOUS MATERIALS HAVE NOT BEEN SPECIFIED IN THE NEW WORKS. COSHH SHEETS TO BE PROVIDED WHERE APPLICABLE AND SUITABLE PPE TO BE USED BY STAFF.
4.	MANUAL HANDLING OF PLANT AND EQUIPMENT – EQUIPMENT IS GENERALLY SMALL ENOUGH TO BE SUITABLE FOR MANUAL HANDLING. MECHANICAL MEANS TO BE USED TO LIFT LARGER ITEMS.
5.	CUTTING, DRILLING ETC. OF METALWORKS SUCH AS TRAY CONDUIT TRUNKING ETC. – NORMAL SAFETY PROCEDURES TO BE USED, PROVIDE PROTECTIVE CLOTHING, GOGGLES ETC.



IPRO WALL MOUNTED NARROW BEAM WALL MOUNTED FLOODLIGHT

- Technical data
- Im system: 1638
 - W system: 175
 - Im source: 2100
 - W source: 18
 - Luminous efficiency (lm/W, real value): 92
 - Total light flux at or above an angle of 90° (lm): 10
 - Light Output Ratio (L.O.R.): 78
 - Beam angle [°]: 10°
 - CRI (minimum): 80
 - Colour temperature [K]: 4000



DEXTRA 'OPUS WALLPACK'

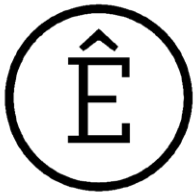
- Technical data
- Part L2 compliant
 - SCGM Three stage Macadam ellipse
 - TM21: L90 at 60,000 operating hours
 - Up to 123 luminaire lumens per circuit Watt.
 - Colour temperature [K]: 4000

P1	Preliminary issue	14.04.23	C.A.
rev	Description	Date	CHK/APP
NECO			
Unit 14, Tapton Way, Waverline Business Village, Liverpool, L13 1DA Tel: 0151 220 5495 Email: info@neconcedesign.co.uk Web: www.neconcedesign.co.uk			
CLIENT: Knowsley MBC			
Kirkby Multi Storey Car Park Knowsley			
Proposed External Lighting Layout Elevations			
Date	APR '23	Des.	M.P.
Scale	1:100 @ A0	Chk.	C.A.
Drawn by	PRELIMINARY		
Project	390/EXT/01		
Rev	P1		



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