

ONE STATION HILL

26.03.24

Pest Management Strategy Report for Planning Authority

Document No: SHRN-GEN-XX-XX-RP-A-0002
Revision: P01

Gensler

**Sir Robert
McALPINE**

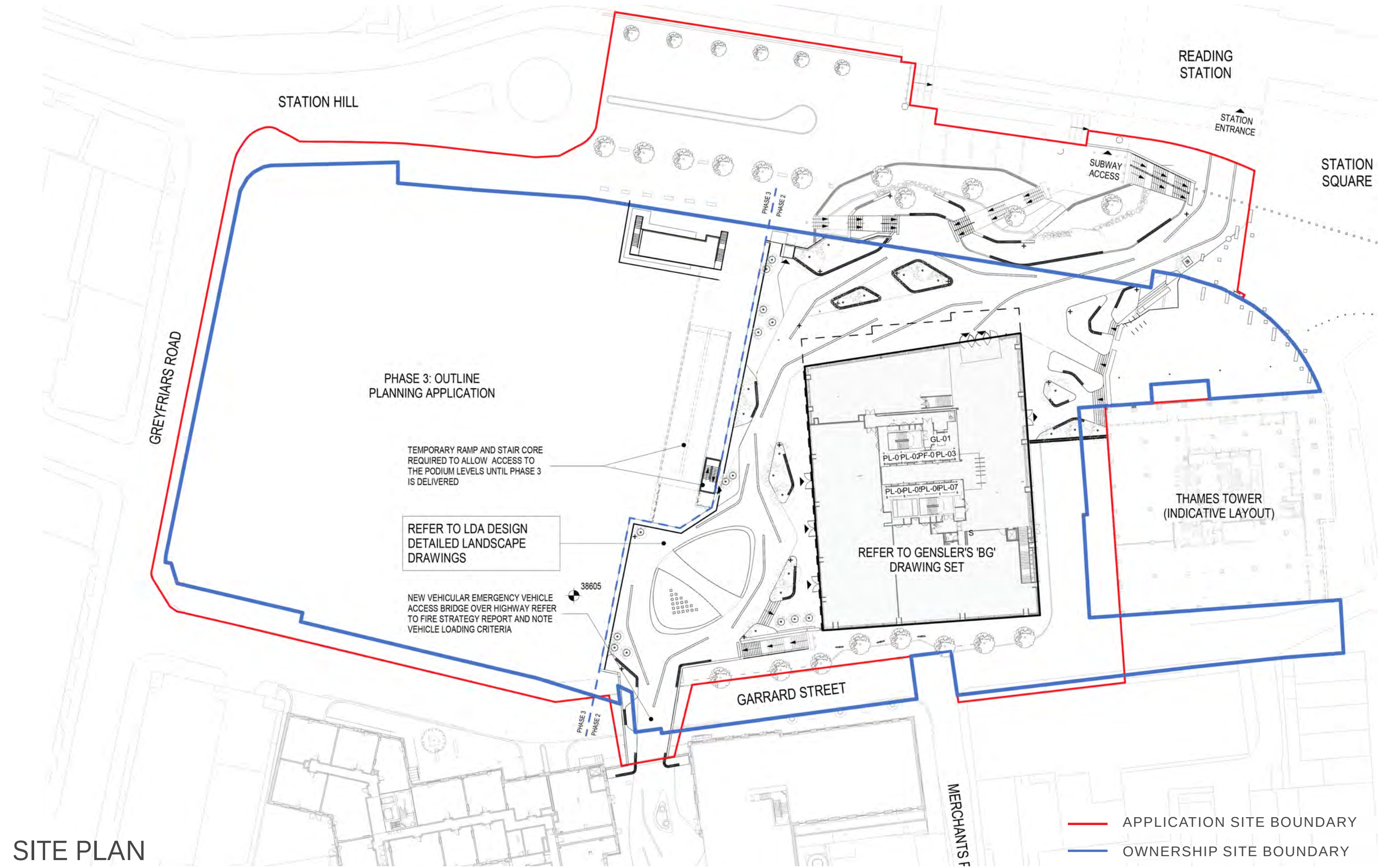
Introduction

Introduction

The report identifies the scope of works for the SHR Phase 2 and has been based upon the report indicated below which was previously developed and agreed with the Client Team.

SHR PH2 EAI 215 REV01 PEST MANAGEMENT

This report outlines agreed solutions for entrances and doors, penetrations, undercroft areas, retail units, link bridge, external amenity areas, ledges and canopies, terraces, scenic lift and service yard.



Introduction

This table briefly outlines ‘high’ risk-rated areas featured in the report. The item reference number refers to the item number in the report

Brief Pest Risk Summary Table

Item Ref	Location	Pest description (Risk)	ACTIONS
1	All ground floor external doors & all plant room and transformer room doors including all external doors in the Yard from the shutter entrance to the bin storage area.	Risk of mouse access through gaps >5mm below the base of the doors.	PAGE 6
3	P2 Tank room & undercroft areas: Uncapped cable and pipe conduits below ground should be sealed.	Risk of rodents using uncapped cable & pipe conduits to follow cable/pipe route ways into the building.	PAGE 15
7-8	P2 Undercroft under slung services	Risk of pigeons alighting on under slung services.	PAGE 21
9	P2 Level P2 Undercroft Under slung service in Thames Tower Road access	Risk of pigeons alighting on under slung services.	PAGE 21
12	Ground floor retail units – especially food retail units.	Risk of mouse access through gaps >5mm below the base of the doors.	PAGE 6
13	Link bridge above the rear parking entrance. Exposed ledge.	Risk of pigeons alighting. Proofing required.	PAGE 24
14	Pocket park/Amenity areas	High risk of foraging rodent activity.	PAGE 6
16	Retail canopy (Western elevation)	Pigeon activity (high tension wiring is required)	PAGE 25
17	Level 8 Terrace platform	Pigeon activity (high tension wiring is required)	PAGE 27
21	Level 15 Terrace platform	Pigeon activity (high tension wiring is required)	PAGE 28
29	Scenic lift	Potential pigeon activity (consider proofing)	PAGE 29
31-34	Service yard	Likely rat & mouse activity. Potential pigeon activity.	PAGE 7 & PAGE 21
38	Electrical cable & data cable intake points	Risk of mice entering via uncapped cable conduits.	PAGE 15

1.0

Entrances & Doors

1.0 Entrances & Doors



Independent Pest Management & Insect Consultancy Ltd
Technical audit report

Doc Ref: SHR P2, Reading Construction Phase Pest Management Assessment

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Inspection Observations & Recommendations								
	Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG
	1	All ground floor areas External doors	As mice can penetrate gaps > 5mm.	Ensure a close fitting door is installed to minimise the gap between the door and the threshold to reduce the risk of mouse access – especially on any retail units to be used as commercial food premises.	Checking & proofing		CAST	
	10	Level P2 Undercroft adjacent to Thames Tower	Louvre panels are present on plant room doors and Transformer room doors. Rodents could potentially enter via louvre panels.	Check louvre panels on all plant room and transformer room doors to ensure a metal screen mesh panel is in place to reduce risk of rodent access.	Inspection and proofing required.	Appendix Table Ref 3	CAST	
	12	Ground floor – Retail units (external area)	Mice can penetrate gaps >5mm. Therefore there is a high risk of rodent ingress for retail units on the ground floor – particularly any food retail units.	Ensure close fitting strips are in place to minimise the gap at the base of external doors.	Proofing is required.	Appendix Table Ref 3	CAST	
	14	Pocket park (external amenity areas)	The open public space located in front of the office block, will have areas of vegetation that will provide harbourage for external rodent activity. Rodents will have free access to enter the pocket park and this will increase the pressure and likelihood of rodent movements around the external perimeter of the office building. Amenity areas in the north and west of the site will provide harbourage for rodent activity.	Ensure external doors close securely. Ensure close fitting strips are in place to minimise the gap at the base of external doors. Also ensure that the integrity of the building fabric is good to prevent direct rodent access via holes or gaps into the fabric of the building.	Inspection & proofing required.	Appendix Table Ref 5	CAST	

ACTIONS

Door threshold details checked, SRM to proof
Lobby revolving door monitoring strategy to be agreed with client

Insect mesh to be applied to MEP louvre and louvred doors, SRM to proof

Door threshold details checked, SRM to proof

Door threshold details checked, SRM to proof

Appendix Table 3. P2 Undercroft next to Thames Tower road access & Ground floor retail units		
		
P2 Undercroft under slung services next to Thames Tower road access. Localised bird netting recommended.	Undercroft Plant rooms next to Thames Tower road access. Check all Louvre panels on all plant rooms /transformer room doors. If necessary install a metal screen mesh panel to reduce the risk of rodent access.	Ground floor retail units: Any retail food units will have a high risk of rodent ingress. Close fitting external doors are required as mice can penetrate gaps >5mm.

Appendix Table 5. Pocket park, External Fascia & Retail canopy (West elevation)		
		
Pocket park: Rodents have free access and vegetation provides harbourage and creates rodent activity around the external perimeter of the building. Ensure closely fitted threshold strips on external doors to prevent rodent access.	Level 1-15 The external fascia is well designed with a smooth exterior devoid of ledges or perch points for pigeons. No bird problems are anticipated.	Retail canopy: There is a high risk of pigeon activity. High tension wiring and regular pest control inspections are recommended.

1.0 Entrances & Doors



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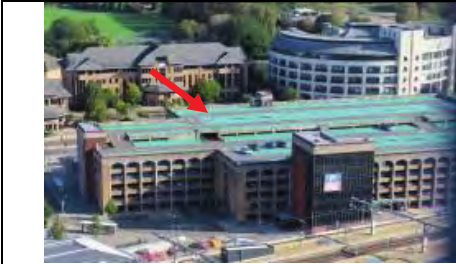
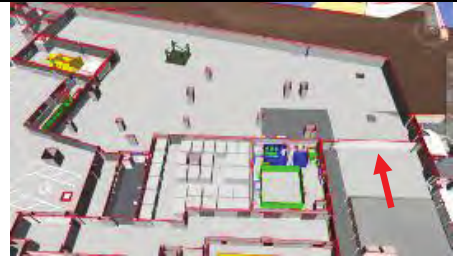
Inspection Observations & Recommendations								
Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG	
31	Service yard	The service yard is a high risk location for introducing/funnelling rats and mice into the site. Mice can access gaps >5mm.	Ensure all external doors close without gaps and the building fabric is secure to resist rodent ingress.	Inspection and proofing is required.	Appendix Table Ref 9	CAST		
32	Service yard	The service yard will be used to provide access to the waste storage / internal bin area. There will be a shutter door as a critical control point at the entrance to the building. Due to the likelihood of external rodent activity this is a very high risk area for P2.	Ensure that the shutter door closes securely without any gaps. Ensure contractors and personnel keep the door securely closed at all times – prior to hand-over.	Check the yard shutter door closes securely. Keep the shutter door closed when not in use.		CAST		
33	Service yard	Post-handover, rat and mouse monitors will need to be deployed to intercept foraging rodents before they enter the waste storage area in search of food.	Post hand-over: rodent monitoring is required in the service yard and entrance to the bin storage area.	Deploy rodent monitors.		PestCo		

ACTIONS

Door threshold details checked, SRM to proof

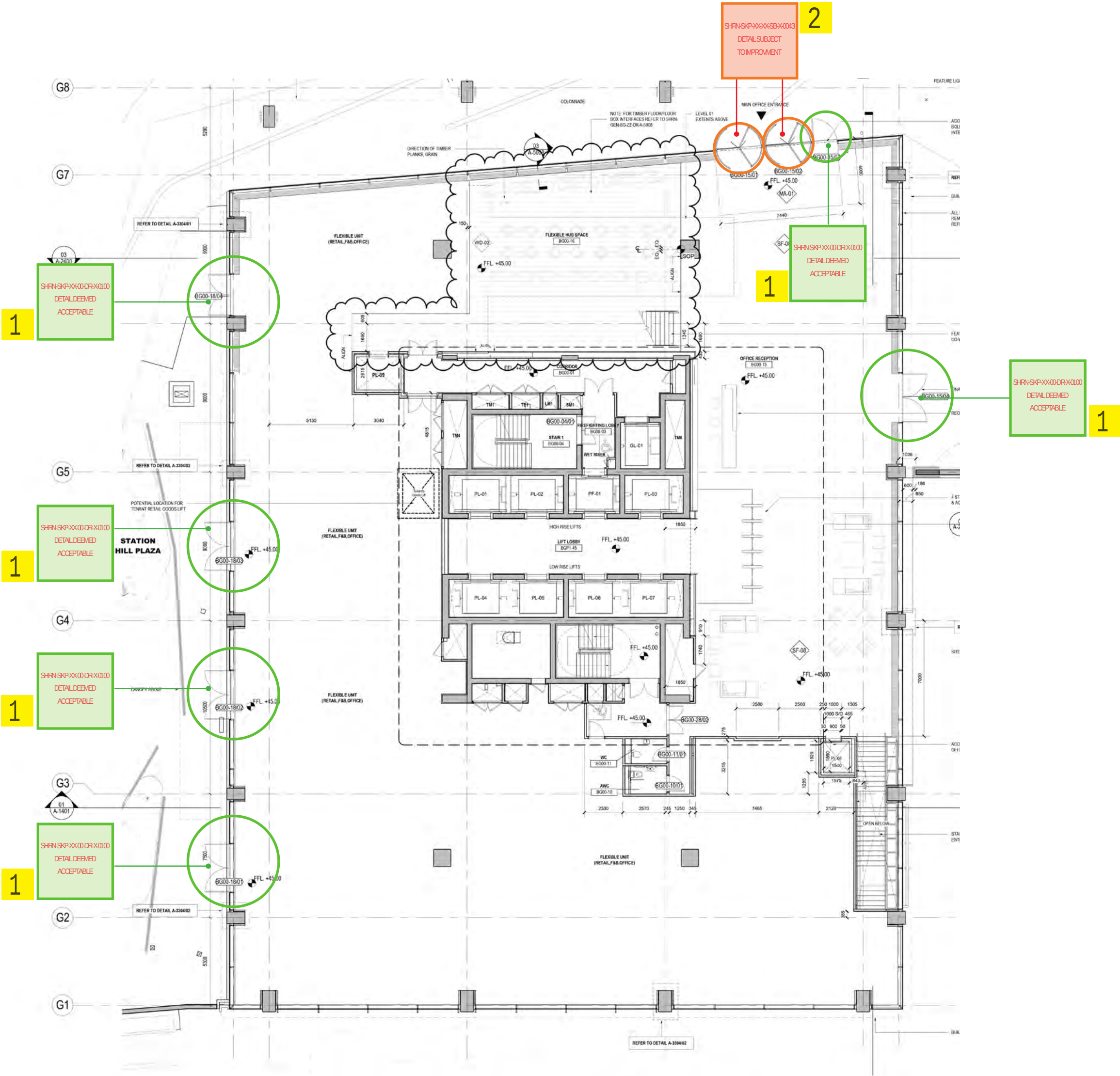
Door threshold details checked, SRM to proof
Shutter Door keep closed when not in use, to be agreed with client

Rodent monitors to be agreed with client

Appendix Table 9 Multi-story car park roof on north east side of the site; service Yard & Entrance to bin storage area		
		
North east side of the site – no pigeons were present on the multi-story car park roof.	Yard access to bin storage area: A shutter door provides access into the yard. This must be secure & kept closed when not in use. External doors must be proofed against rodent access.	HIGH RISK AREA: The external doors connecting the yard with the bin storage area MUST BE SECURE AND KEPT CLOSED WHEN NOT IN USE. Good door discipline is critical in this high risk area.

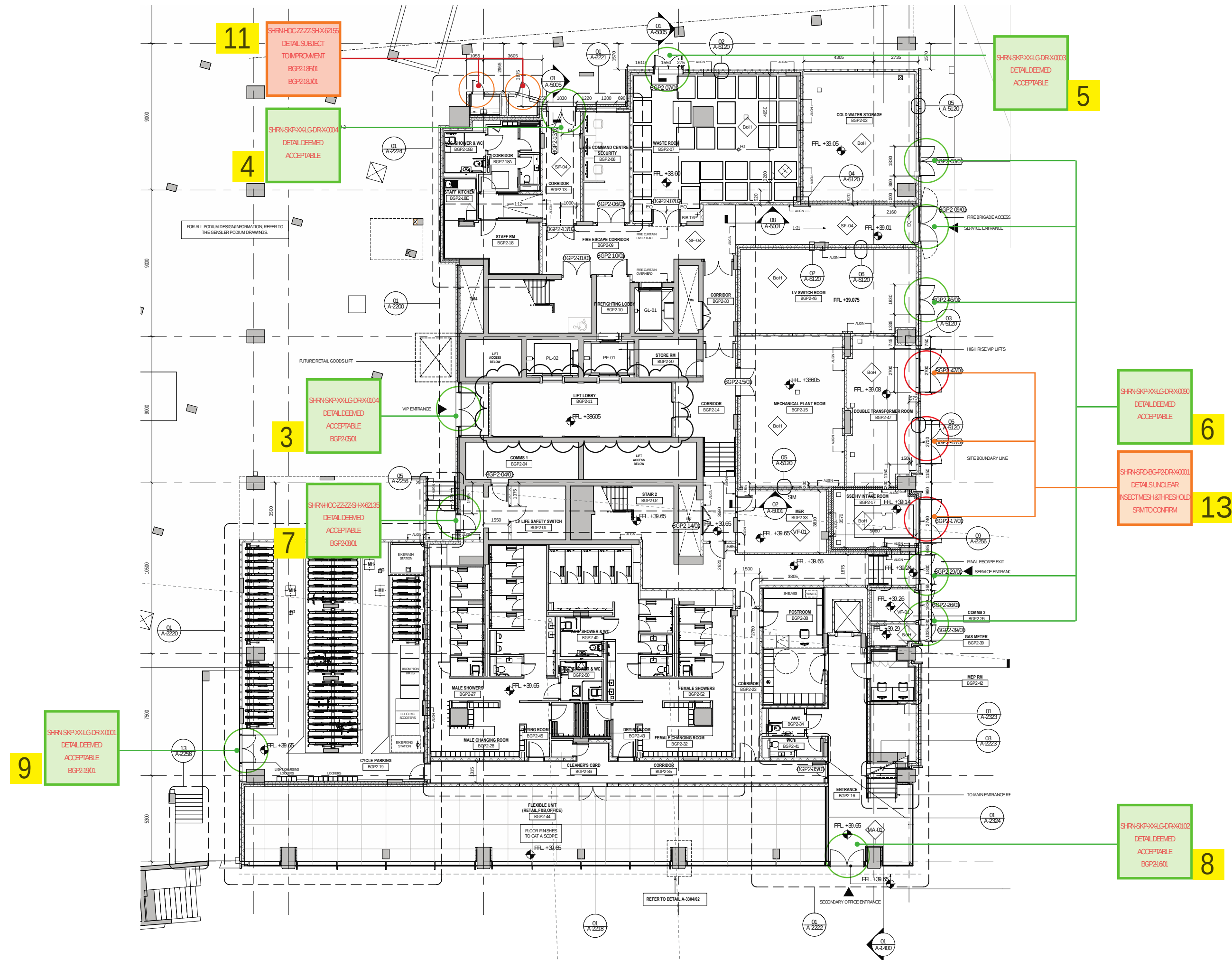
1.0 Entrances & Doors

TOWER GROUND FLOOR

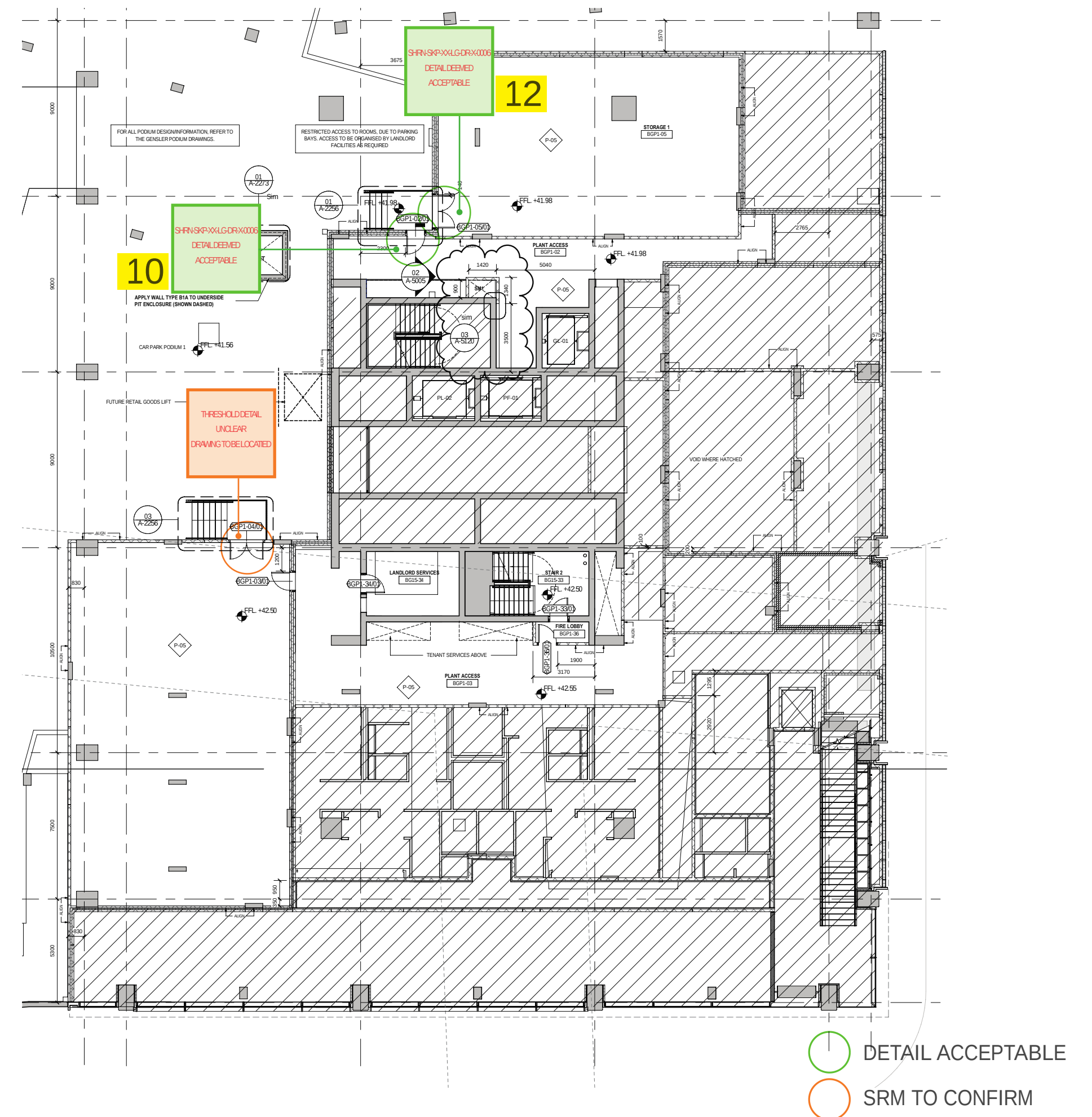


1.0 Entrances & Doors

TOWER LOWER GROUND FLOOR

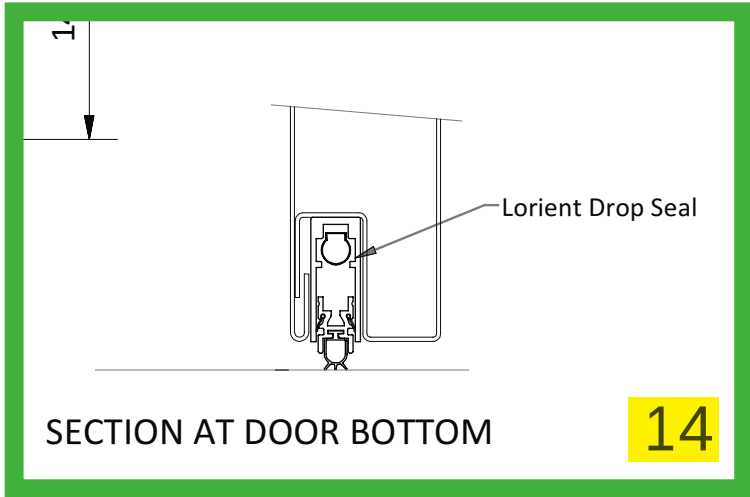


TOWER LOWER GROUND FLOOR

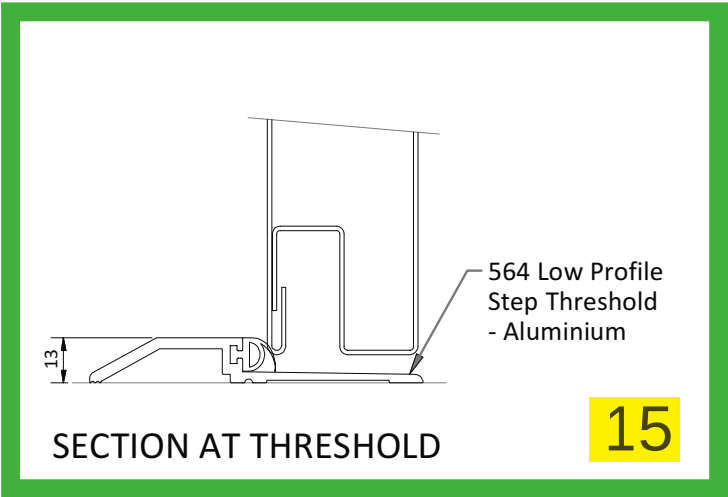


1.0 Entrances & Doors

PODIUM LEVEL P1 DOOR DETAILS

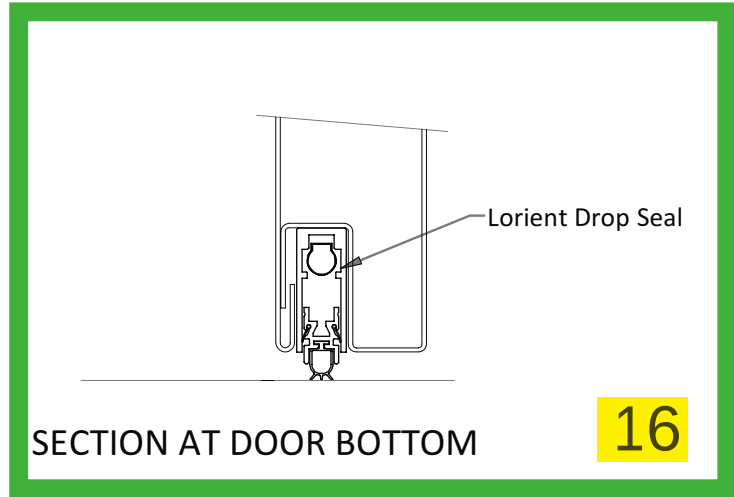


DOOR NO.
PNP1-01/01
PNP1-04/01
PNP1-07/01
PNP1-16/01
PNP1-09/01
SHRN-HOC-ZZ-ZZ-SH-X-62102
SHRN-HOC-ZZ-ZZ-SH-X-62104
SHRN-HOC-ZZ-ZZ-SH-X-62107
SHRN-HOC-ZZ-ZZ-SH-X-62109
SHRN-HOC-ZZ-ZZ-SH-X-62113

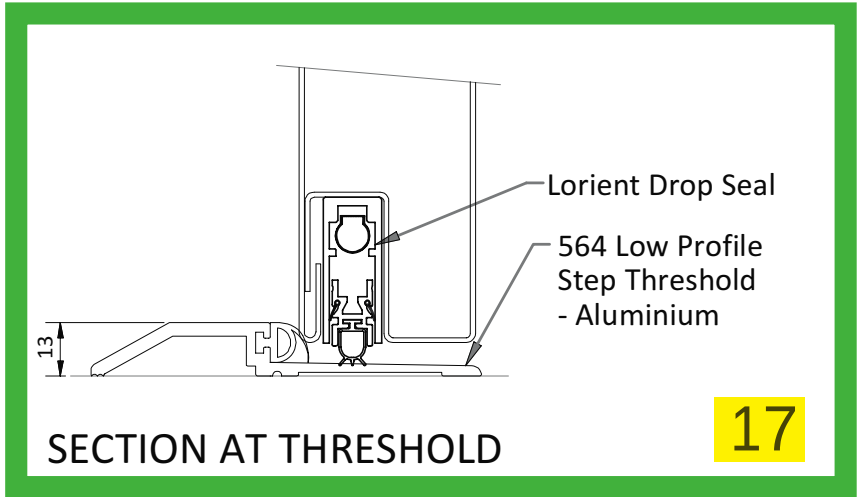


DOOR NO. PNP1-01/01
SHRN-HOC-ZZ-ZZ-SH-X-62101

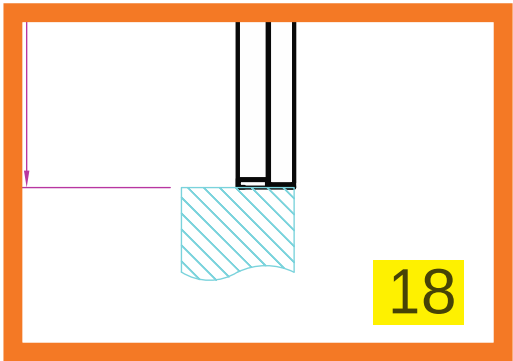
PODIUM LEVEL P2 DOOR DETAILS



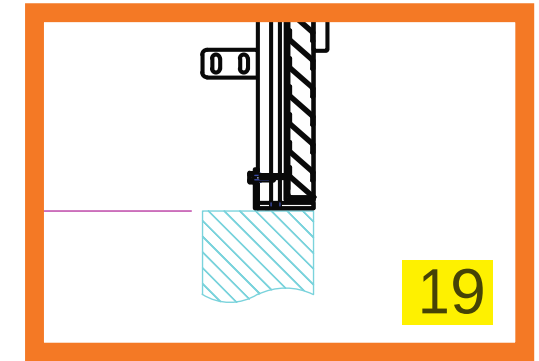
DOOR NO.
PNP2-07/01
PNP2-10/01
PNP2-11/02
PNP2-13/01
PNP2-13/01
PNP2-16/01
PNP2-17/01
PNP2-18/01
SHRN-HOC-ZZ-ZZ-SH-X-62134
SHRN-HOC-ZZ-ZZ-SH-X-62136
SHRN-HOC-ZZ-ZZ-SH-X-62137
SHRN-HOC-ZZ-ZZ-SH-X-62138
SHRN-HOC-ZZ-ZZ-SH-X-62139
SHRN-HOC-ZZ-ZZ-SH-X-62142
SHRN-HOC-ZZ-ZZ-SH-X-62143
SHRN-HOC-ZZ-ZZ-SH-X-62144



DOOR NO. PNP2-07/02
SHRN-HOC-ZZ-ZZ-SH-X-62151



DOOR NO.
PNP2-03/01
PNP2-04/01
PNP2-04/02
SHRN-SRD-PN-P2-DR-X-0001
SHRN-SRD-PN-P2-DR-X-0002
THRESHOLD DETAILS UNCLEAR, SRM TO CONFIRM



DOOR NO.
PNP2-01/01
PNP2-02/01
SHRN-SRD-PN-P2-DR-X-0003
SHRN-SRD-PN-P2-DR-X-0004
INSECT MESH AND THRESHOLD DETAILS UNCLEAR, SRM TO CONFIRM

Door PNP2-01_01

1.0 Entrances & Doors

PODIUM LEVEL P1



- DETAIL ACCEPTABLE
- SRM TO CONFIRM

1.0 Entrances & Doors

PODIUM LEVEL P2



2.0

Penetrations: Pipes, Cables & Ducts

2.0 Penetrations: Pipes, Cables & Ducts



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Inspection Observations & Recommendations								
	Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG
	3	Level P2 Tank rooms	Tank room: There is a large gap around the pipe conduit in the floor. The uncapped conduit could provide a route way for rodents to emerge from the open conduit.	Check all pipe and cable conduits below ground and ensure that they are capped so that rodents cannot use cable or pipe route ways to enter the fabric of the building.	Checking & proofing	Appendix Table Ref1	CAST	
	4	Level P2 Undercroft	During and post construction there will be a risk of rodent access into the undercroft.	Rodent monitors will be required on completion.	Rodent monitoring	Appendix Table Ref 1	PestCo	
	5	Level P2 Electrical substation	If mice are able to emerge into the substation via gaps around electrical cabling, they could pass under the door into the undercroft area.	Seal the gap at the base of the external doors to reduce the risk of rodent egress or ingress.	Proofing	Appendix Table Ref 1	CAST	
	6	Level P2 Electrical substation	Wall-wall junction to the right of the substation: the mortar joint is damaged and could provide a risk of rodent harbourage.	Reinforce the wall joint with mortar or cement.	Proofing is required.	Appendix Table Ref 1	CAST	
	38	Electrical and data cable intake points.	There is a high risk of rodents entering the building via electrical cable and data cable intake points.	When contractors are installing these services, ensure that all cable conduits are capped to prevent mice entering the building via cable route ways.	Inspection & proofing required.		CAST	

ACTIONS

Penetrations, pipes and cable conduits allocated and highlighted on the plan to be sealed and capped. SRM to proof

Client to confirm

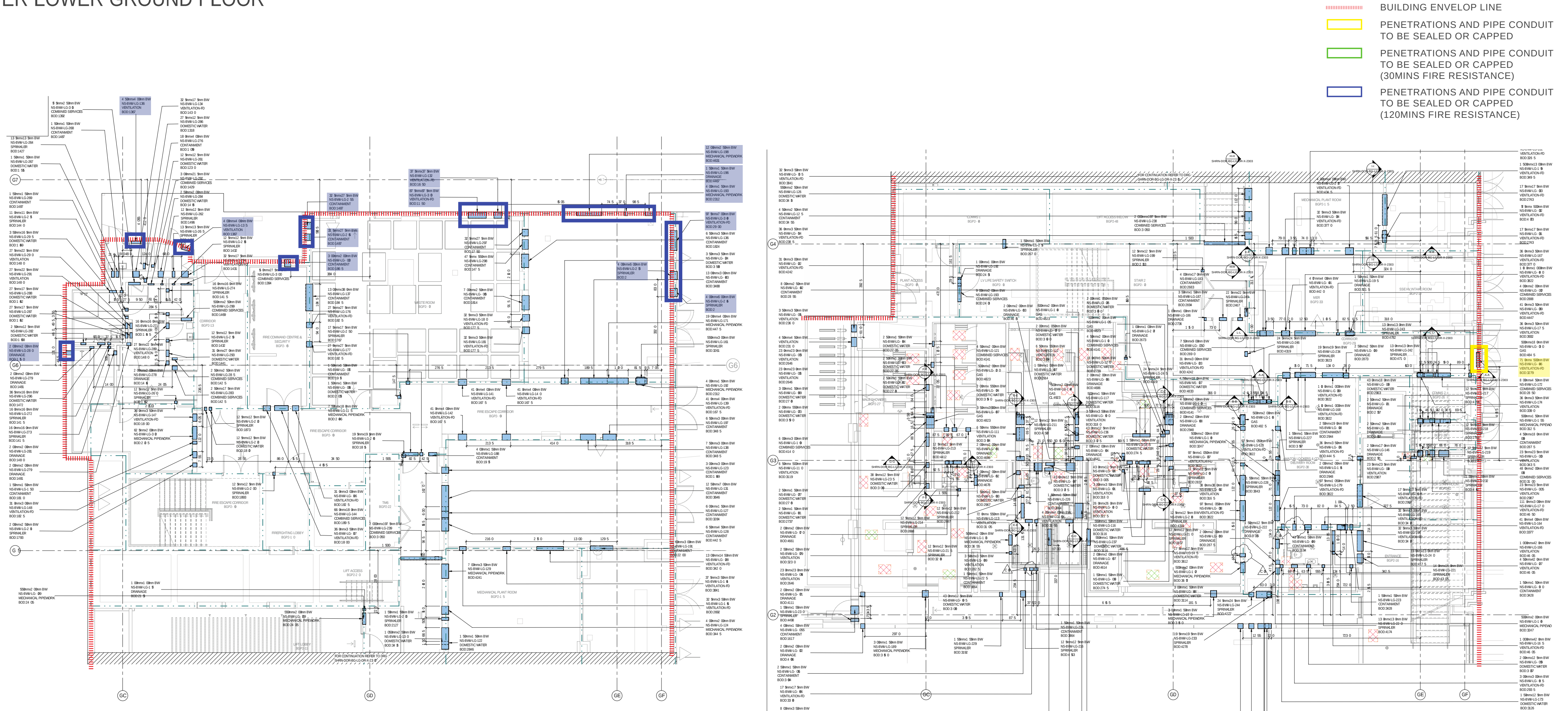
SRM to proof

SRM to proof

Penetrations, pipes and cable conduits allocated and highlighted on the plan to be sealed and capped. SRM to proof

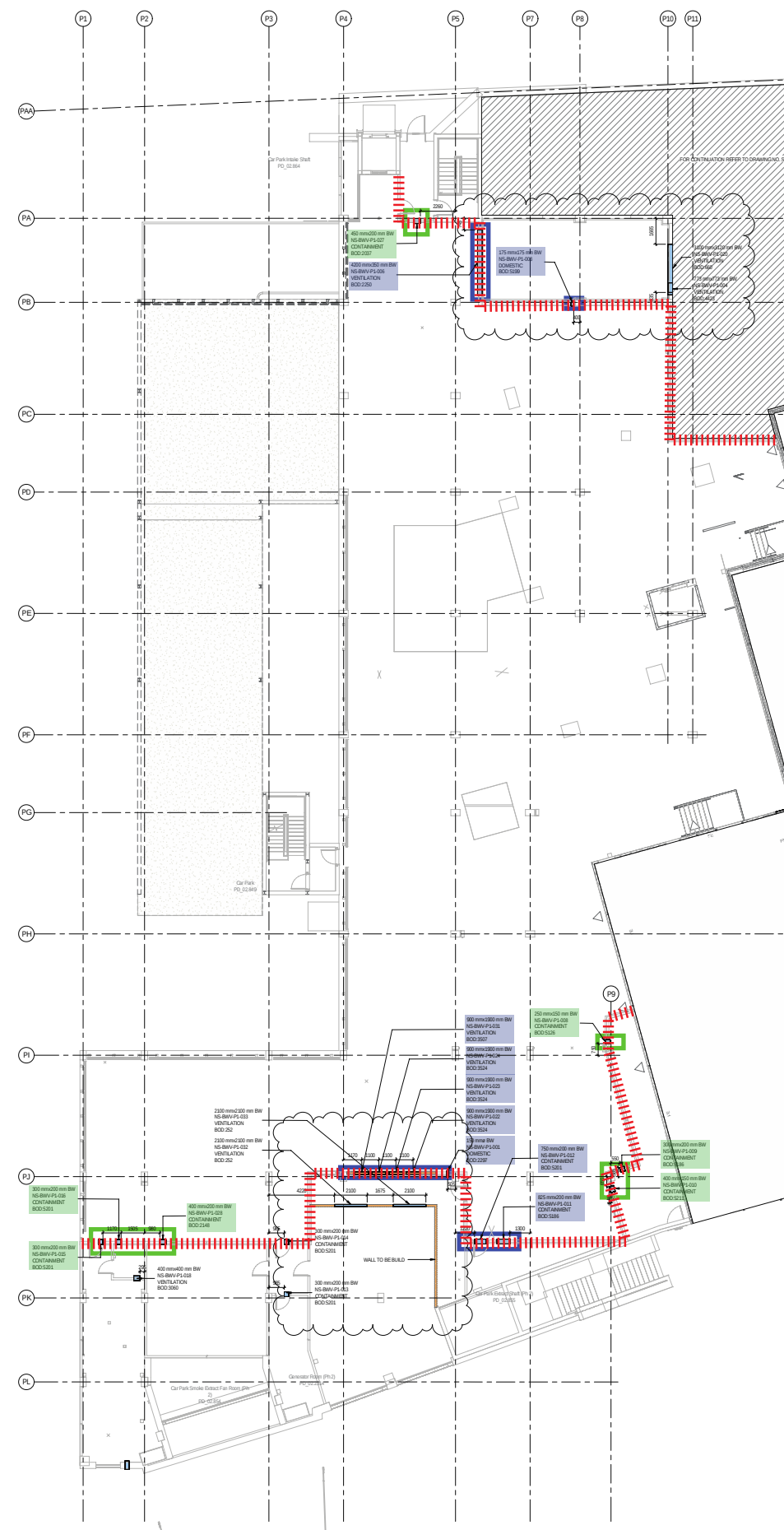
Appendix Table 1. P2 Tank room, P2 Undercroft & P2 Electrical Substation		
		
Check cable/pipe entry points & seal gaps around any open-ended conduits to prevent risk of rodent access.	P2 Undercroft during and post construction there will be a risk of rodent access into the undercroft. Rodent monitors will be required on completion.	P2 Electrical substation – ensure the base of the doors are adequately proofed to prevent rodent egress or ingress.
		
P2 Electrical substation – there are gaps in the wall-wall mortar joint. Reinforce the joint to reduce the risk of rodent harbourage.		

TOWER LOWER GROUND FLOOR

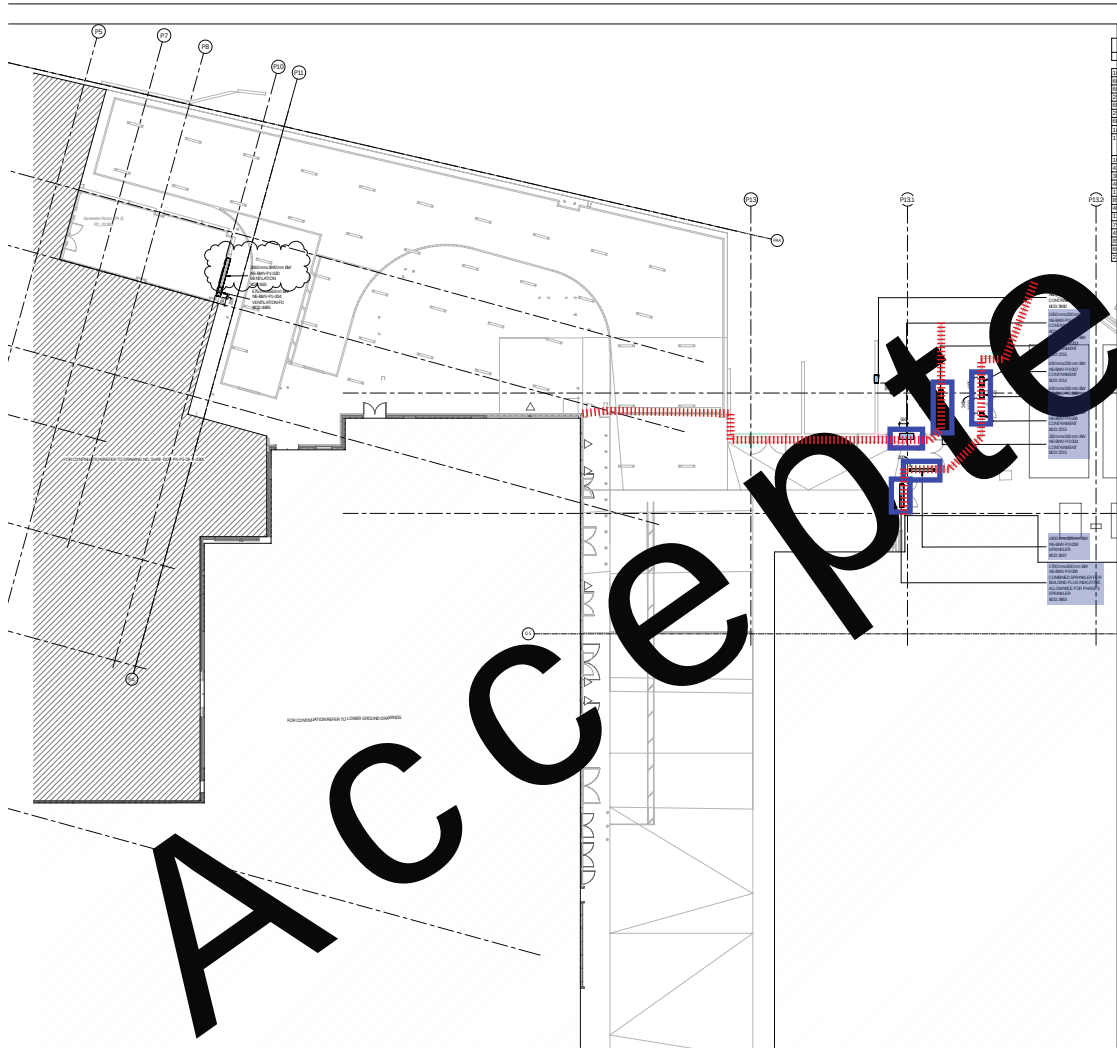
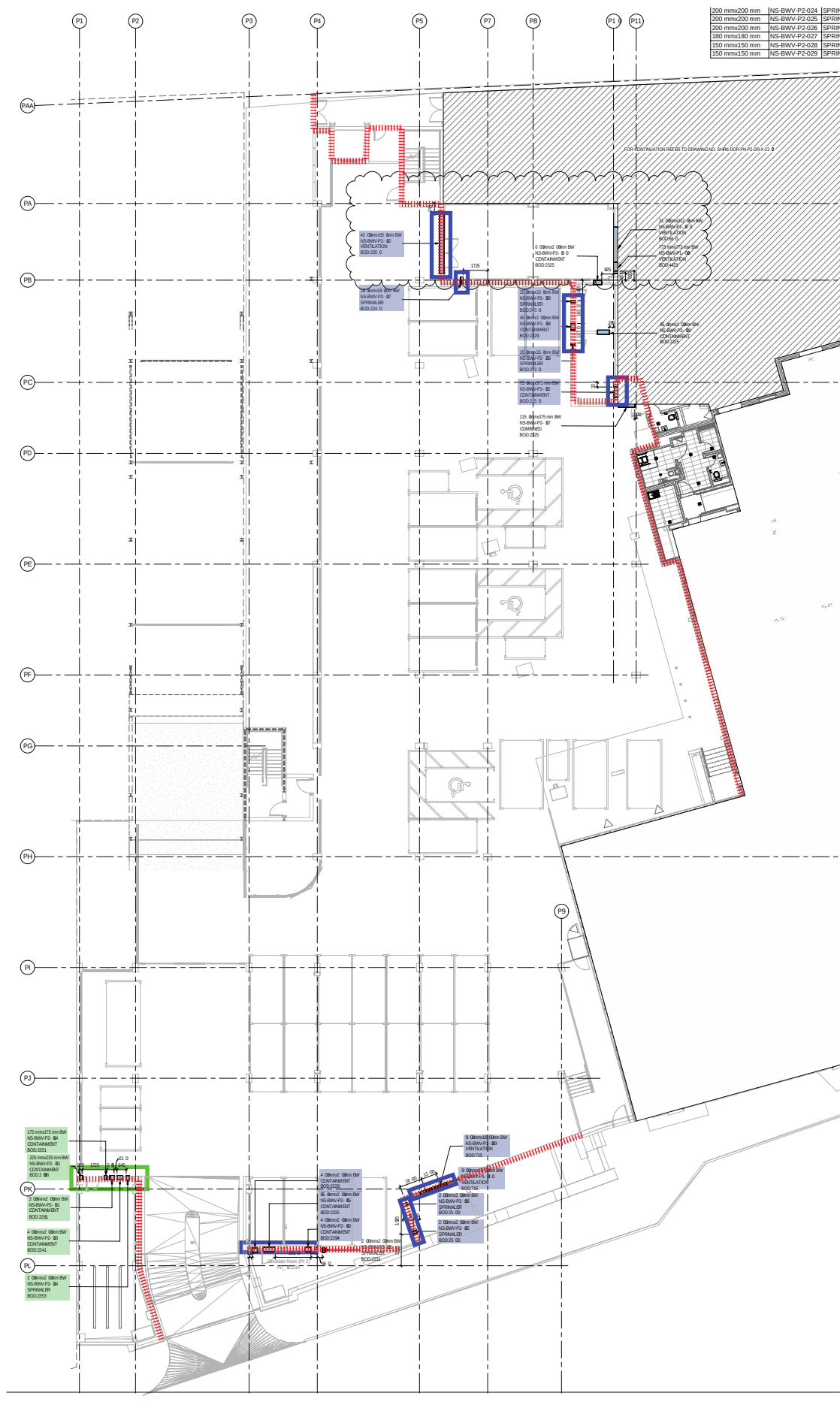


2.0 Penetrations: Pipes, Cables & Ducts

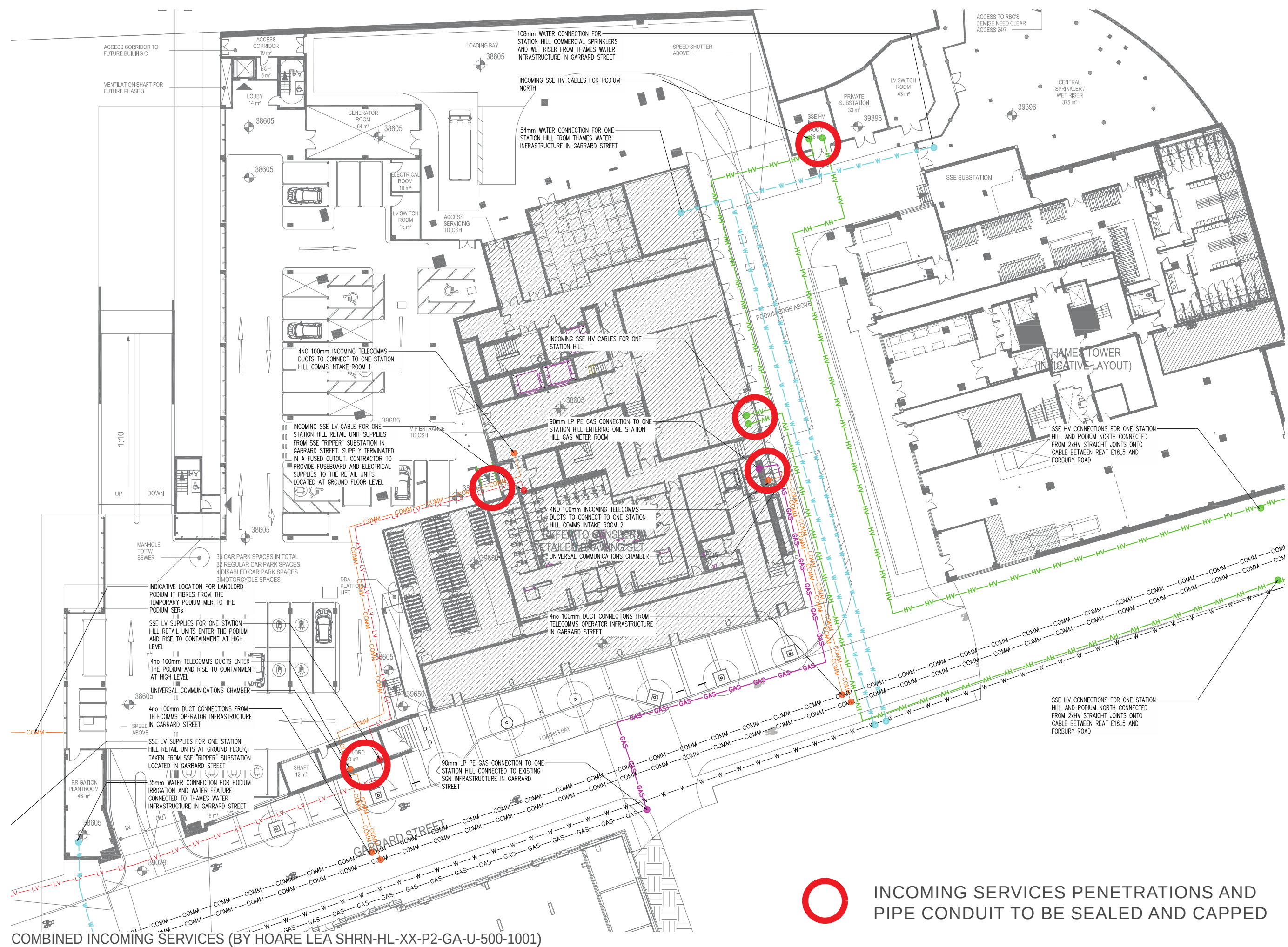
PODIUM LEVEL P1



PODIUM LEVEL P2



PODIUM LEVEL P2



2.0 Penetrations: Pipes, Cables & Ducts

PRODUCTS

Figure 2.1
NOFIRNO Cable Duct Sealing System

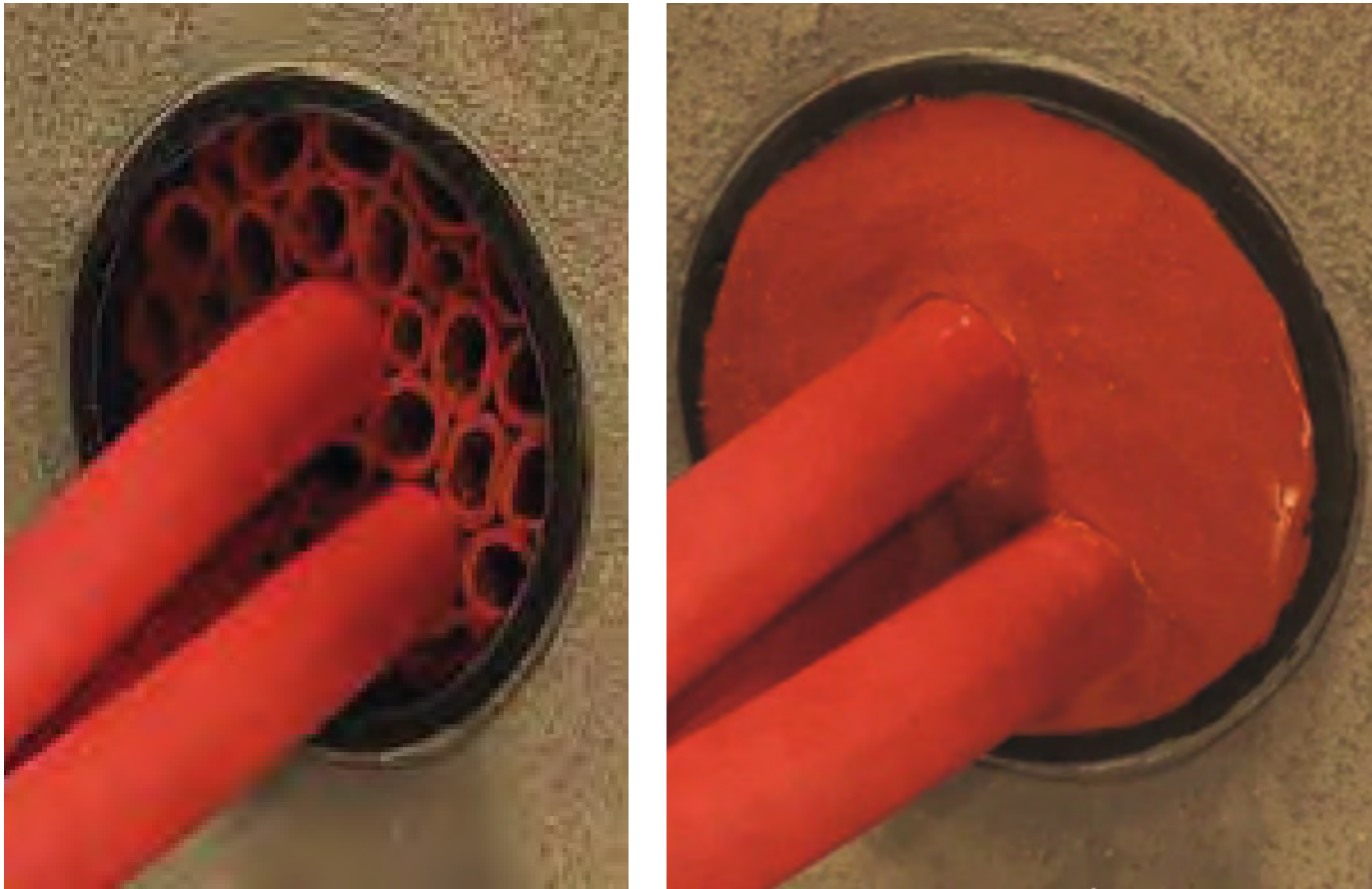


Figure 2.2
Gasket insert: Curaflex

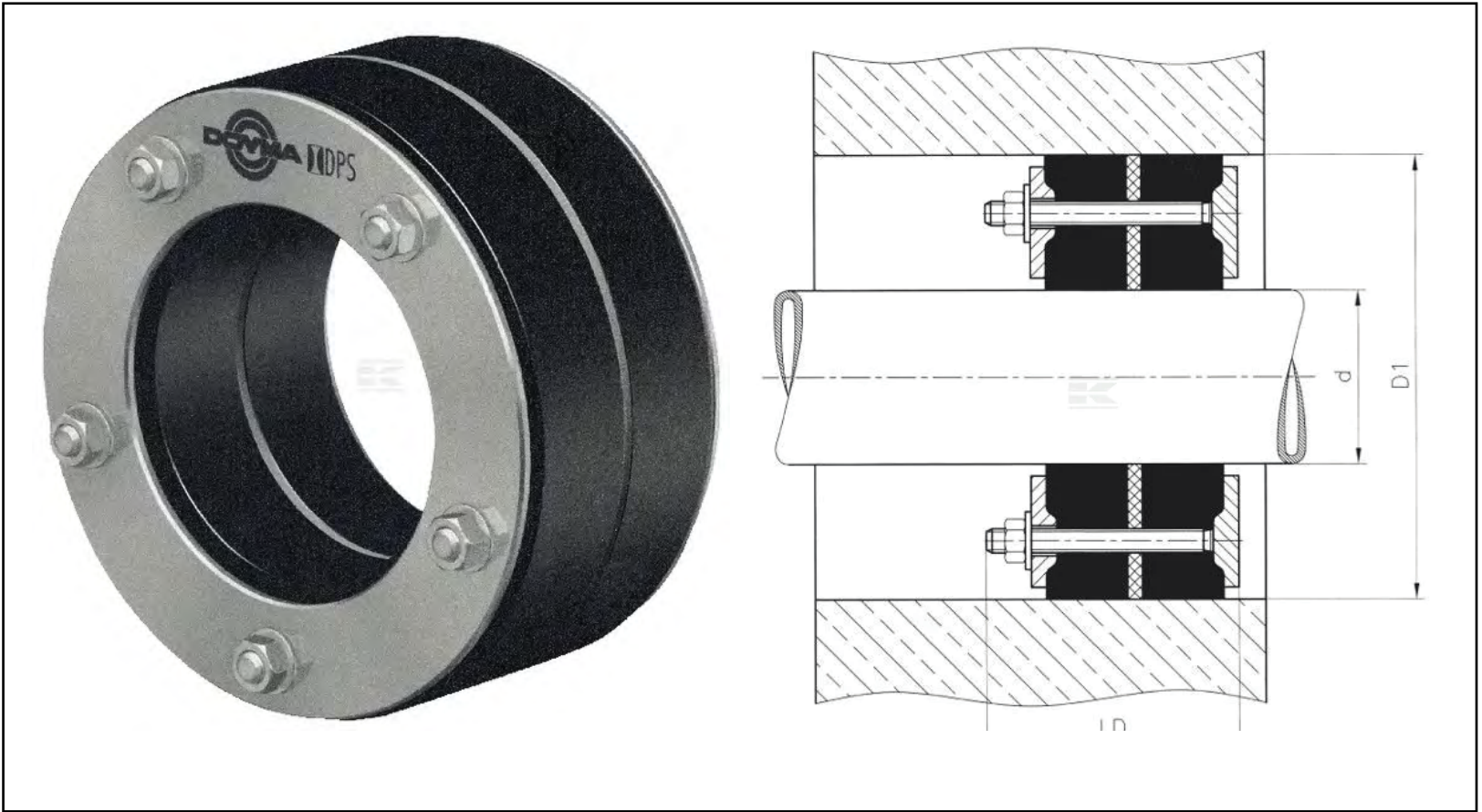
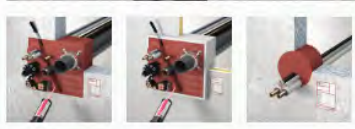


Figure 2.3
Netex Nordisk Rat Blocker or equally approved



Figure 2.4
Mixed penetration seal or equally approved



ZZ® M30

Mixed penetration seal or cable penetration seal up to EI 120 for rigid walls, rigid floors and flexible walls. Through penetration firestop system for electrical cables, telecommunication cables and optical fibre cables, conduits, as well as combustible and non-combustible pipes.

System information

Test norm	EN 1366-3
Approval Number	ETA-11-0206
Fire resistance class	E, EI
Fire resistance duration [min]	60, 90, 120
Seal type	Mixed penetration seal, Cable penetration seal, Pipe penetration seal
Seal opening	angular, round, unregular
approved components	flexible wall, rigid wall, rigid floor

3.0

Undercroft & Under Slung Areas

3.0 Undercroft & Under Slung Areas



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Inspection Observations & Recommendations								
	Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG
	7	Level P2 Under slung services	Pigeons could enter the building from the car park and alight on overhead ledges, cable trays and under slung services.	Localised proofing of under slung services is recommended.	Bird netting is recommended.	Appendix Table Ref 2	CAST	
	8	Level P2 Undercroft Under slung services next to car park entrance	Pigeons gaining access via the car park entrance way could penetrate deeper into the building and harbour/perch on under slung services in the darker, more secluded areas by the Tank rooms.	Localised proofing overhead horizontal cable and pipe route (under slung services) is recommended to prevent pigeons from alighting or harbouring here. Alternatively a decision on proofing under slug services this could be made post-handover – depending on the occurrence of bird activity.	Bird netting is recommended.	Appendix Table Ref 2	CAST	
	9	Level P2 Undercroft Under slung service in Thames Tower Road access	There is a high risk of pigeons alighting, roosting or nesting on under slung services.	Localised proofing of under slung services is recommended.	Bird netting is recommended.	Appendix Table Ref 3	CAST	
	34	Service yard	The entrance to the service yard is in Garrard Street. This area experiences the highest level of pigeon activity next to the site.	If pigeons access the service yard a review of overhead services will need to be carried out to see if localised bird proofing measures are required.	Pre handover – review the presence of bird activity and consider additional proofing measures for horizontal surfaces (light fixtures etc).		CAST	

ACTIONS

Bird netting and brid spikes installation highlighted on the plans, SRM to proof

Bird netting and brid spikes installation highlighted on the plans, SRM to proof

Area to be monitored to determine if the localised bird spikes are required to sprinklr pipes

Bird netting and brid spikes installation highlighted on the plans, SRM to proof

Area to be monitored to determine if the additional localised bird proofing measures are required during the building operation

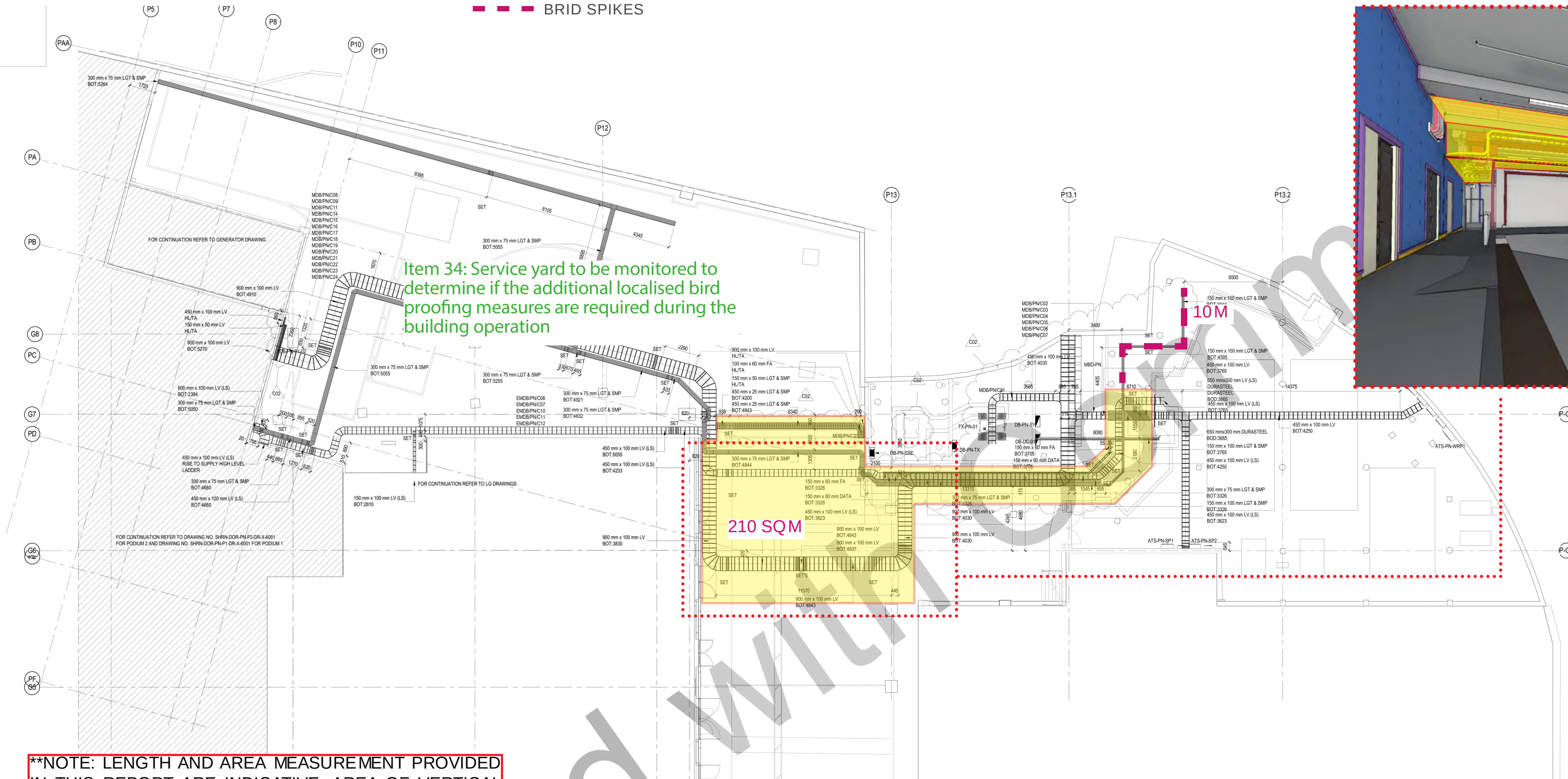
Appendix Table 2. P2 Undercroft, P2 Undercroft next to car park entrance, P2 Under slung services in darker, secluded areas.		
P2 Undercroft: Pigeons could enter and alight on under slung services. Localised bird netting is recommended.	Pigeons may gain access via the car park entrance way could harbour/perch on under slung services or overhead ledges. Localised bird netting recommended.	Pigeons may access via the car park entrance and penetrate deeper into the building alighting, roosting or nesting on under slung services in secluded areas. Localised bird netting is recommended.
Appendix Table 3. P2 Undercroft next to Thames Tower road access & Ground floor retail units		
P2 Undercroft under slung services next to Thames Tower road access. Localised bird netting recommended.	Undercroft Plant rooms next to Thames Tower road access. Check all Louvre panels on all plant rooms /transformer room doors. If necessary install a metal screen mesh panel to reduce the risk of rodent access.	Ground floor retail units: Any retail food units will have a high risk of rodent ingress. Close fitting external doors are required as mice can penetrate gaps >5mm.

3.0 Undercroft & Under Slung Areas

SERVICE YARD

 BRID NETTING

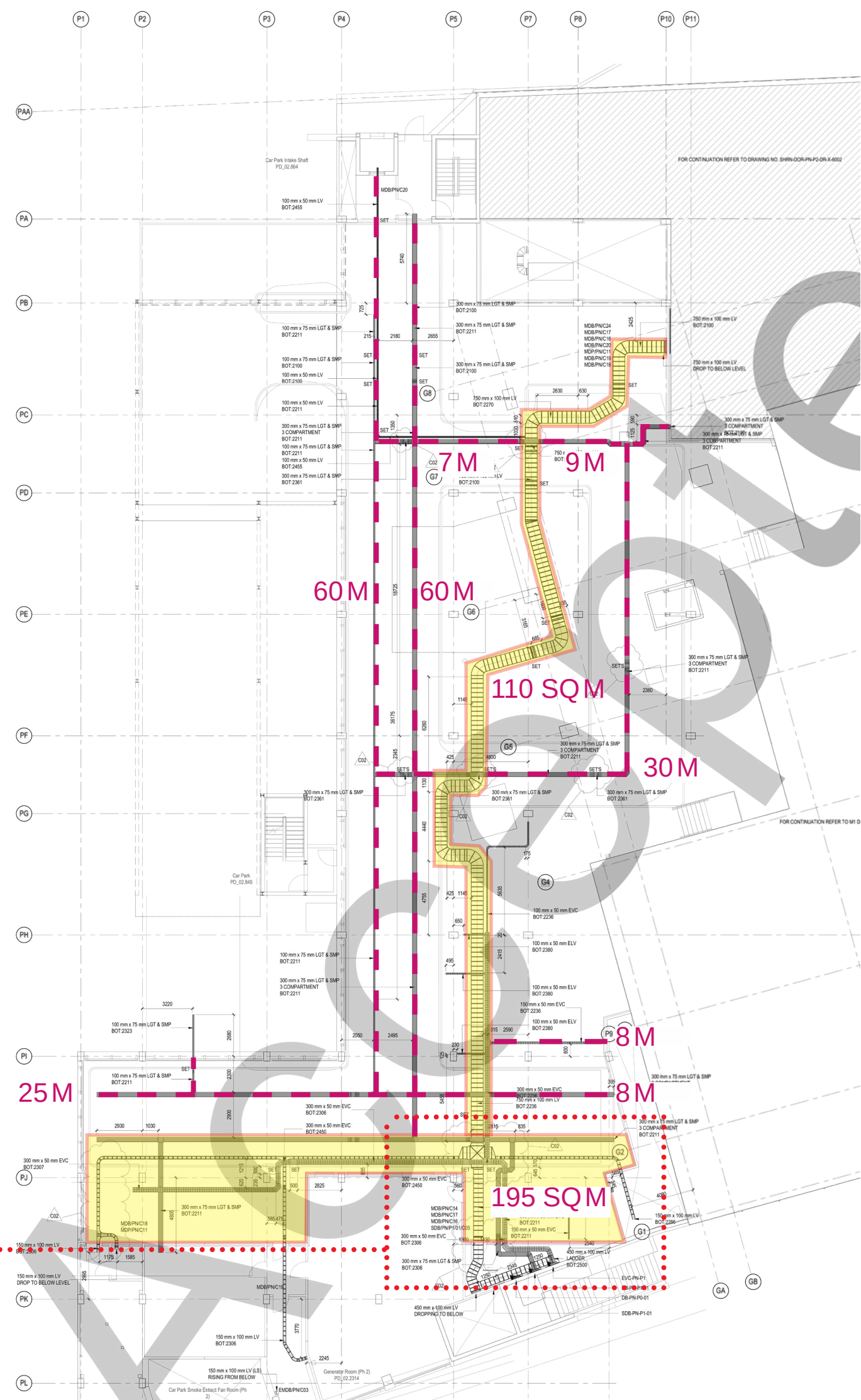
 BRID SPIKES



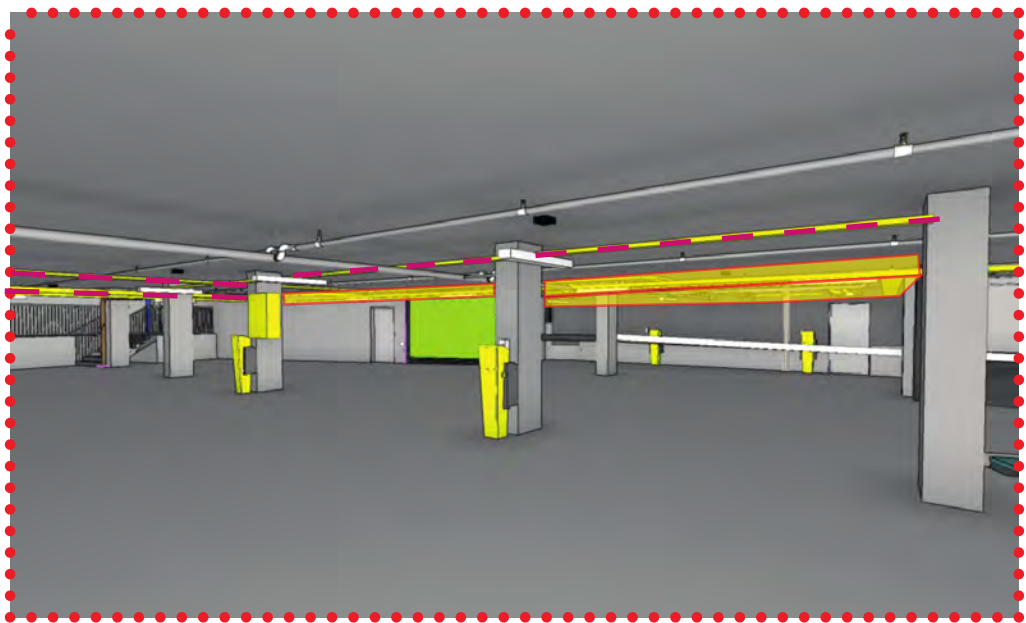
P2 Undercroft under slung services next to Thames Tower road access. Localised bird netting recommended.

****NOTE: LENGTH AND AREA MEASUREMENT PROVIDED IN THIS REPORT ARE INDICATIVE. AREA OF VERTICAL SURFACE IS NOT INCLUDED. SUB-CONTRACTOR TO CONFIRM THE MEASUREMENT ON SITE.**

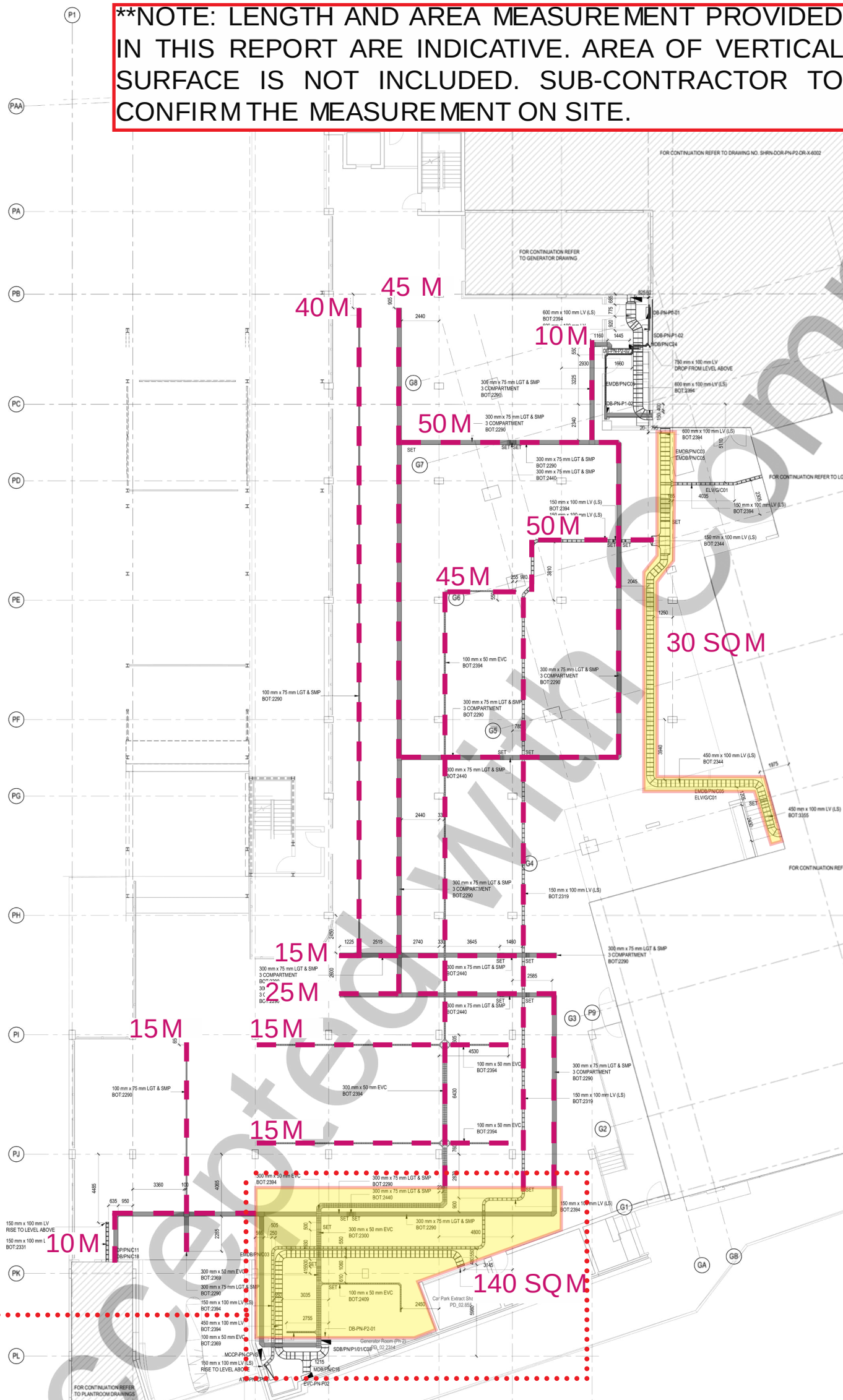
CARPARK P1



CARPARK P2



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3.0 Undercroft & Under Slung Areas

LINK BRIDGE

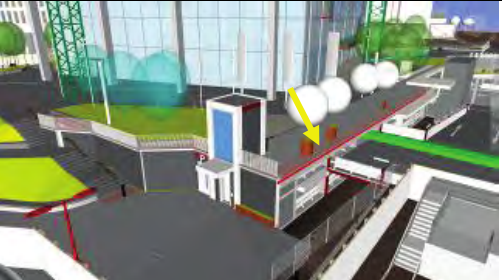
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Inspection Observations & Recommendations								
Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG	
13	Link bridge above the rear parking entrance	An exposed beam on the bridge above the rear parking entrance could provide a perching point or roosting point for pigeons.	Proofing is required. High tension wiring could be considered.	Bird proofing required.	Appendix Table Ref 4	CAST		

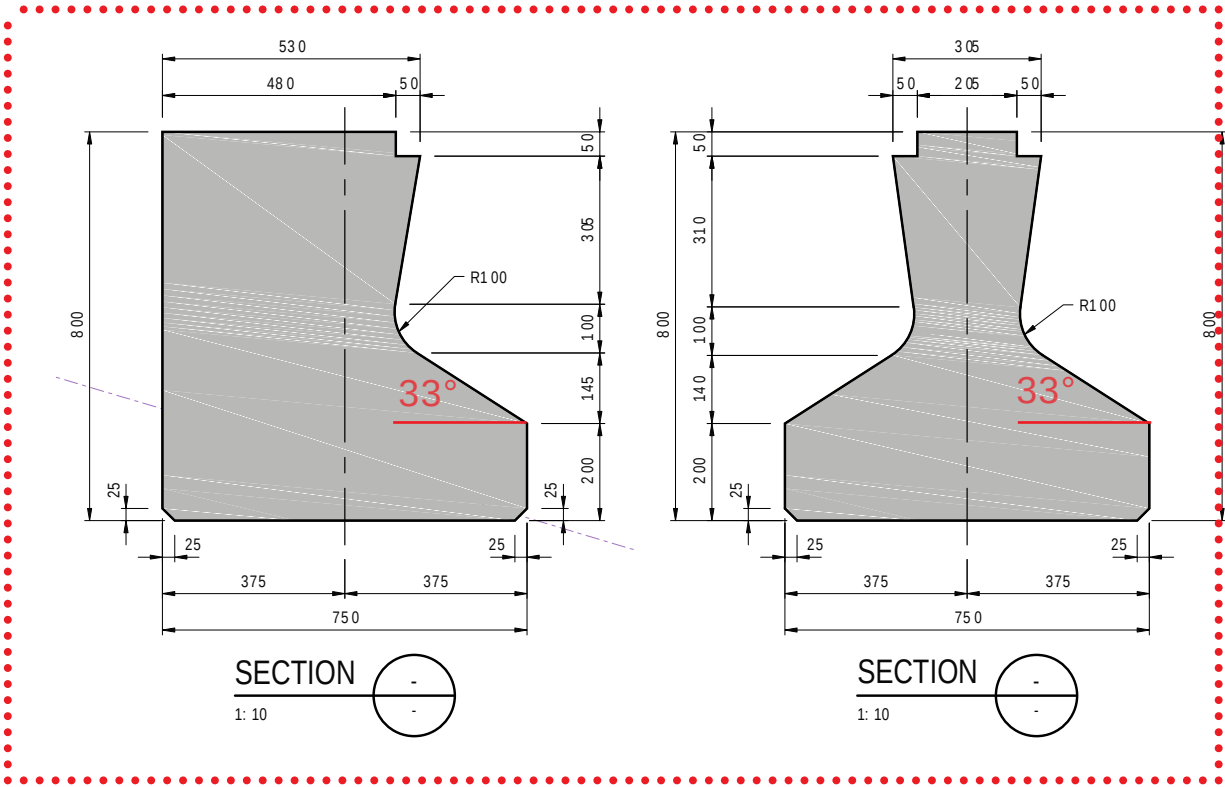
Research indicated 33 degree to the concrete beam ledge will prevent pigeon activity on the concrete beam ledges. Specialist to confirm

Appendix Table 4. Bridge above the rear car park entrance



The exposed beam above the rear car park entrance could provide harbourage or perching points for pigeons. Proofing with high tension wiring is recommended.

Checked
No action required



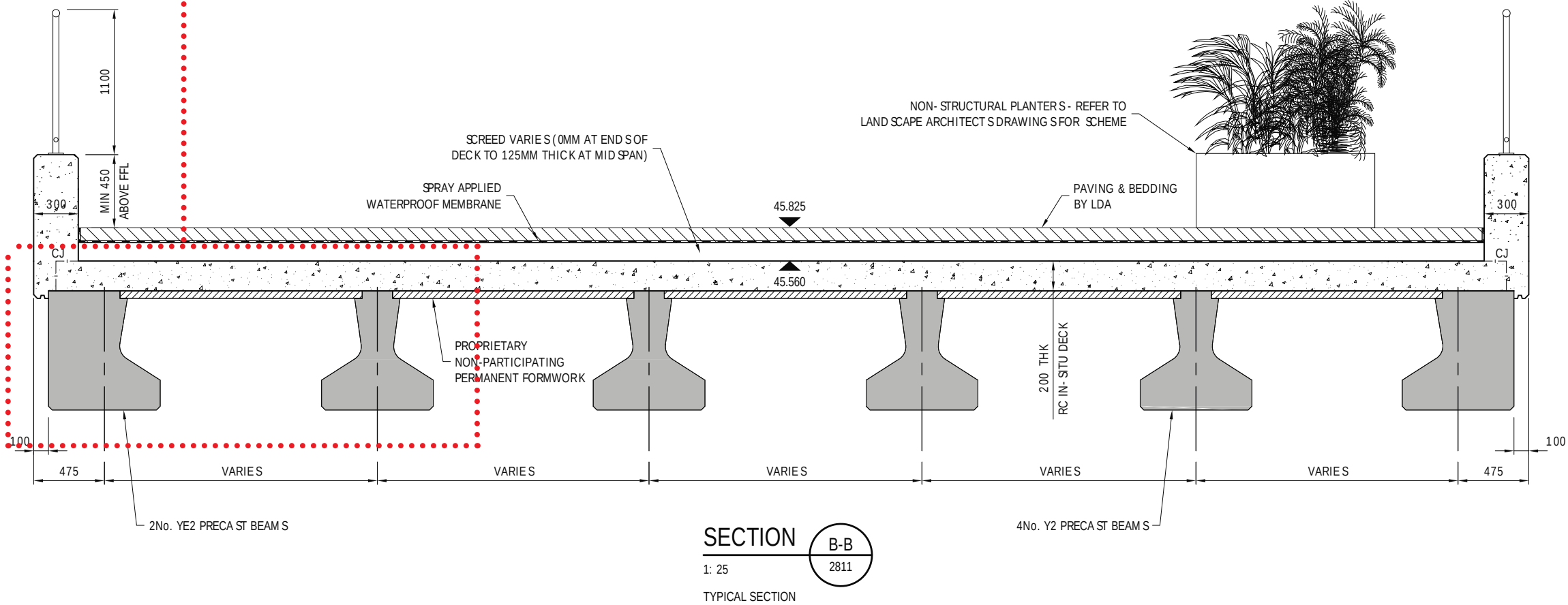
Angle of inclination	Tinplate	Plywood	Concrete	Sandstone
15°	1 ^a pos			
20°	5 neg	1 pos	1 pos	
25°		1 pos	1 pos	
30°		5 neg	5 neg	1 pos
35°		5 neg	5 neg	1 pos
40°				1 pos
45°				5 neg

^a Number of experiments performed in an occupied breeding box, pos (positive) = pigeon is able to sit for >1 s, neg (negative) = pigeon slips off. The italicized part of the table designates the angles of the respective materials a feral pigeon is not able to sit on.

of the angle of inclination of a slope a feral pigeon is able to sit on depending on different construction materials

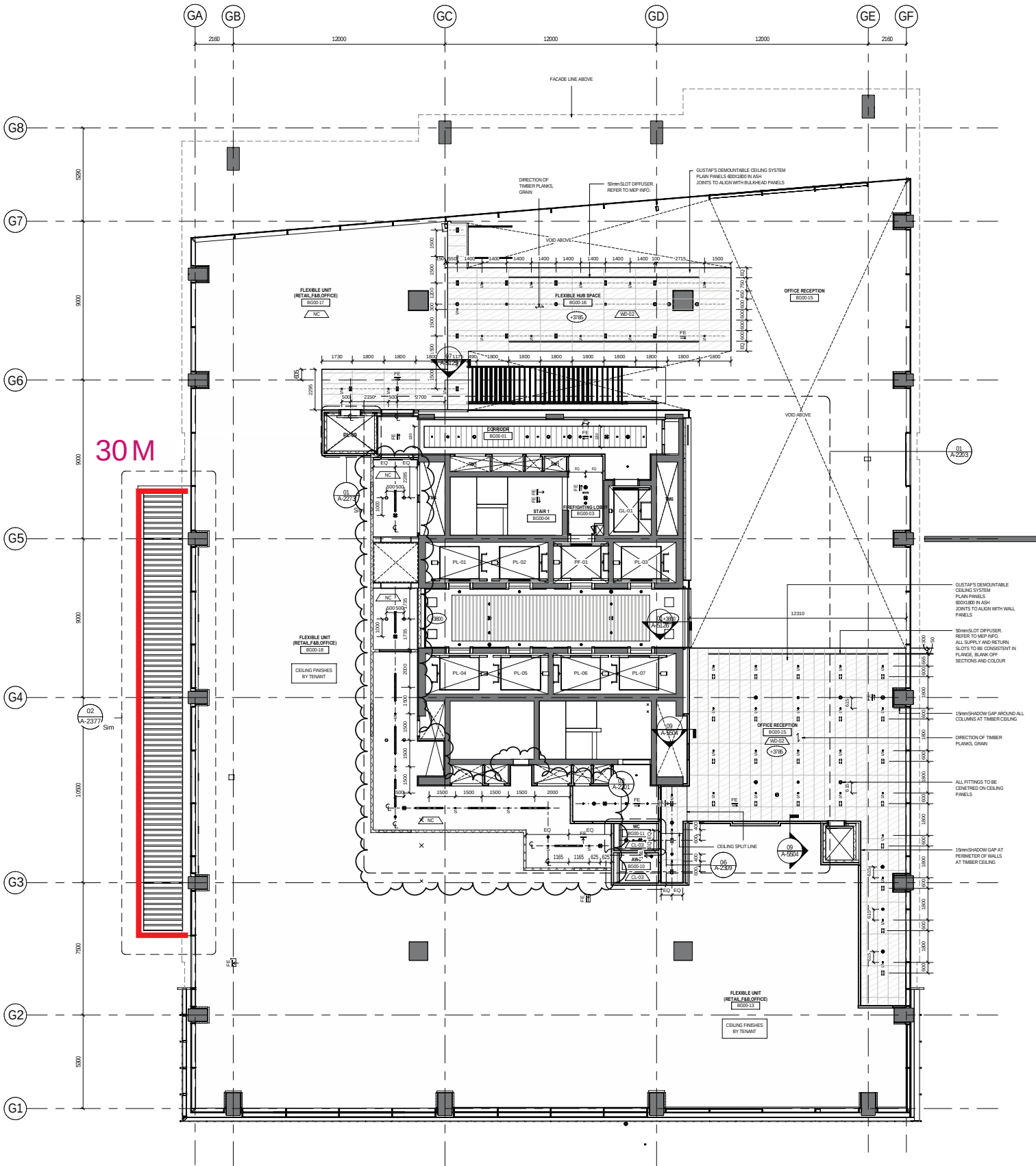


The few recommendations in the literature indicate angles of inclined slopes for feral pigeons without respect to the texture of the material. Andelt and Burnham (1993) and Kern (2007) recommended angles exceeding 45°, and >55° was recommended by the German Landesamt für Arbeitsschutz (2000). We found that the ability of a feral pigeon to sit on an inclined slope depends on the construction material and on the angle of inclination of the respective materials. Accordingly, the rough and grainy surface of sandstone needs a steeper inclination (45°) than the slippery tinplate (20°) to prevent pigeons from sitting on it. All construction materials experience weathering and seasonal variation in temperature that can lead to erosion and increases the roughness of the surface. Additionally, we observed that pigeons with dirty feet deposited this material, mostly droppings, on the surface of the slope when trying to land. This led to improved foothold over time, allowing pigeons to sit on steeper slopes. Hence, we recommend adding a safety addition of 5° to our experimental data and to regularly clean smooth inclined surfaces intended to keep pigeons away. Field observations showed that feral pigeons are not able to use ledges with angles >50° for more than a few seconds even if the material is heavily structured. Further studies should test other materials, including the aspects of erosion. New construction materials with slippery coatings will offer new options in making buildings and other structures inaccessible to pigeons.



3.0 Undercroft & Under Slung Areas

RETAIL CANOPY



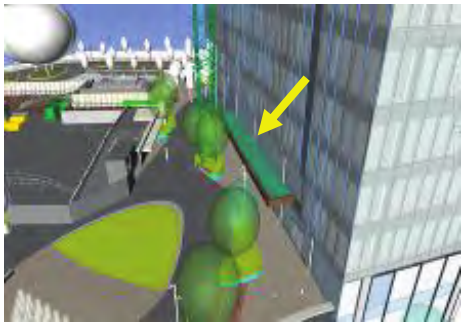
HIGH TENSION WIRING

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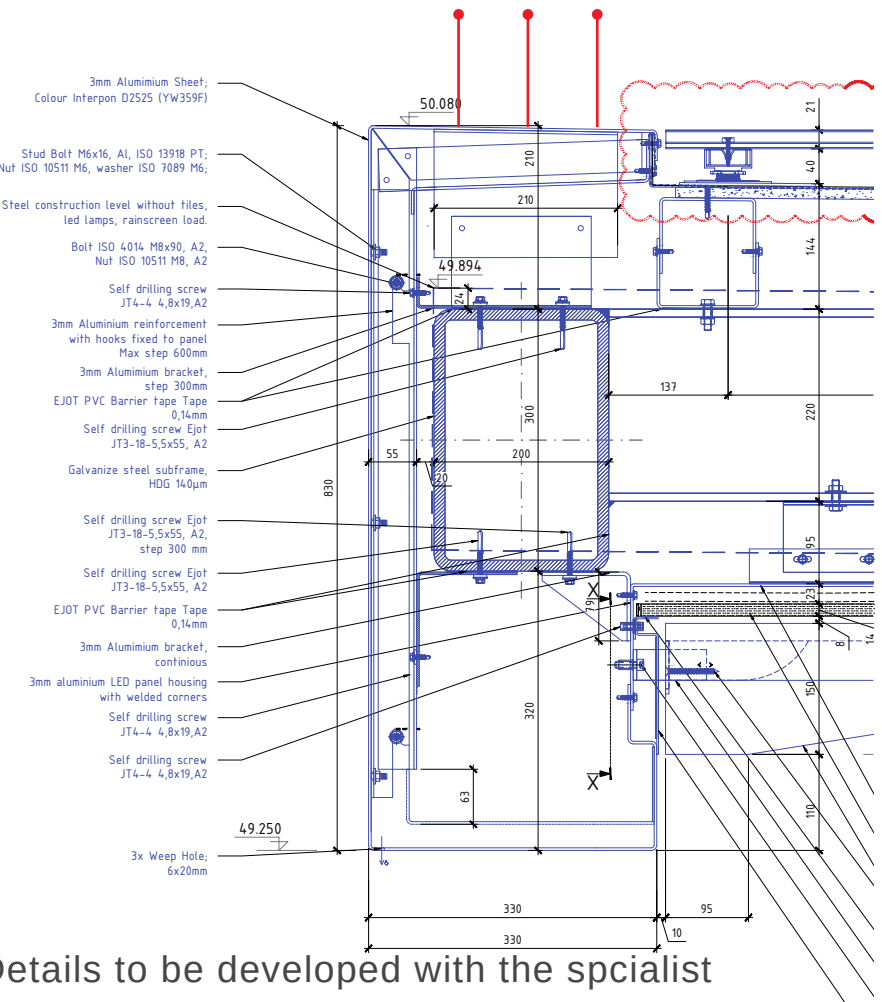
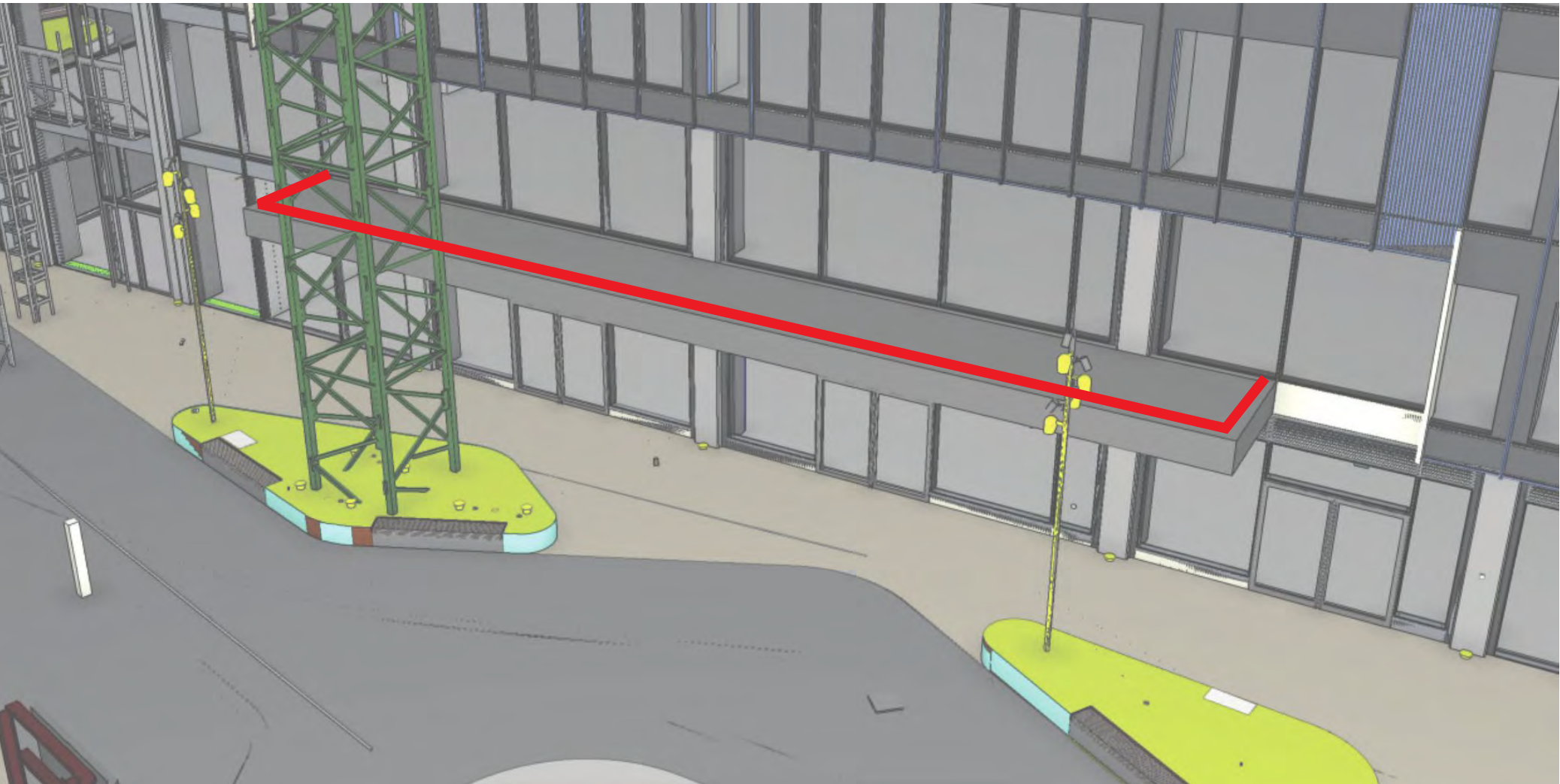
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Inspection Observations & Recommendations

Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG
16	Retail canopy (Western elevation)	There is a high risk of pigeon activity.	High tension wiring and post handover, regular pest control inspections are recommended.	Proofing & Inspections	Appendix Table Ref 5	CAST & PestCo	



Retail canopy: There is a high risk of pigeon activity. High tension wiring and regular pest control inspections are recommended.



Details to be developed with the specialist

ACTIONS

High tension wiring to the retail canopy ledges, SRM to proof

3.0 Undercroft & Under Slung Areas

LEVEL 8 TERRACE & CANOPY



Independent Pest Management & Insect Consultancy Ltd
Technical audit report

Doc Ref: SHR P2, Reading Construction Phase Pest Management Assessment

Version 1 26.10.23

Inspection Observations & Recommendations								
	Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG
	17	Level 8 Terrace platform	There will be a glass balustrade around the edge of the terrace. However the edge of the coping along the outer edge will likely perch points for pigeons.	Install high-tension wiring along the edge of the coping to deter pigeons.	Proof edge of coping with high tension wiring.	Appendix Table Ref 6	CAST	
	18	Level 8 Terrace platform	Wall ledges below windows on P1 will provide harbourage for pigeons in close proximity to P2 & to Level 8. This will increase the risk of bird activity at Level 8.			Appendix Table Ref 6		
	19	Level 8 Terrace platform	This is a south facing terrace and it overlooks Garrard Street where a high level of pigeon activity was noted. Bird activity on the south side of P2 is likely to be higher because adjacent buildings and roof tops are lower than P2 and more sheltered.	X 14 pigeons were noted on the green roof top opposite. X 30 pigeons were present on	Due to high pigeon activity on the south side of P2 there is a risk of pigeons using perch points on the south facing side of P2. Vigilance is required and possible localised proofing.	Appendix Table Ref 6 & Ref 7		
	20	Level 8 Terrace platform	The presence of unprotected solar panels on the roof of P1 presents a significant risk of pigeon harbourage. This increases the risk of birds alighting on perch points on Level 8 and on the south side of P2.			Appendix Table Ref 8		

ACTIONS

High-tension wiring installation highlighted on the plans, SRM to proof

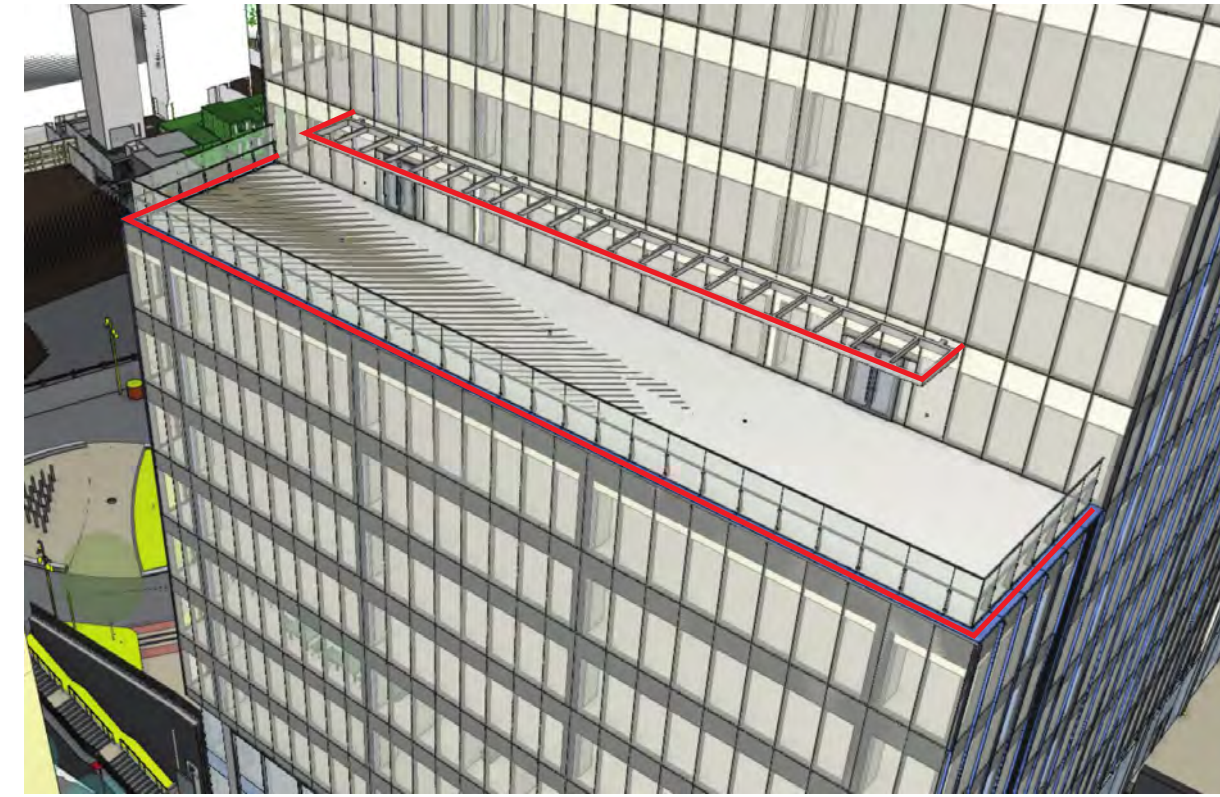
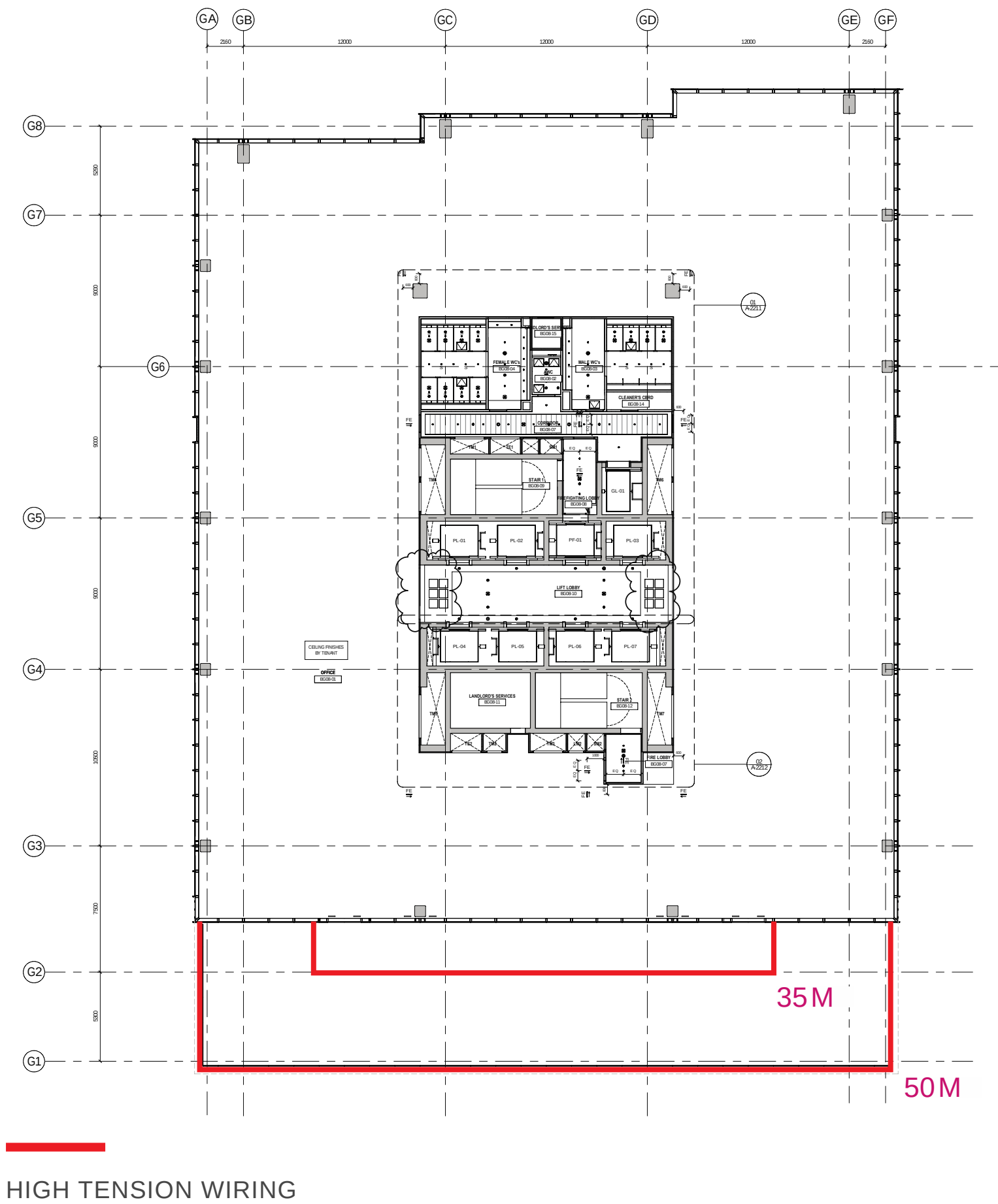
Area to be monitored to determine if the additional localised bird proofing measures are required during the building operation

Appendix Table 6. Level 8 Terrace & pigeon perch points in close proximity in P1		
		
Outer coping ledge could provide a perching point for pigeons. The installation of high tension wiring is recommended on the outer ledge.	High risk of pigeon activity occurring on L8. Ledges below windows in P1 will provide pigeon perch points opposite Level 8 on the south side of P2.	

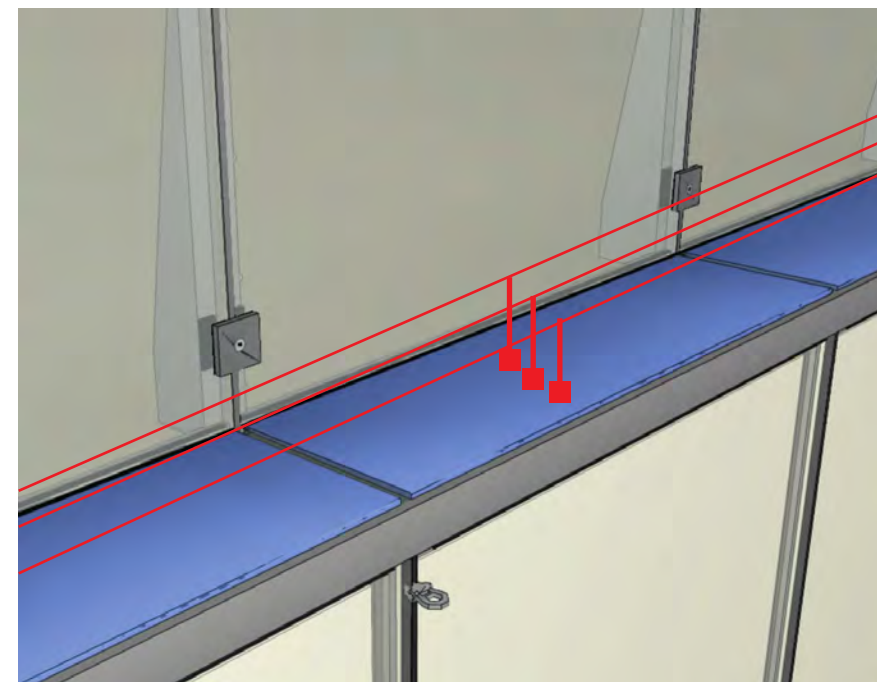
Appendix Table 7. Level 8 Terrace & high numbers of pigeons on the green roof opposite and adjacent roof top		
		
High risk of pigeons alighting on available surfaces on the south side of P2. Opposite Level 8 x 14 pigeons were present on the 'Green' roof. Upper ledges on that building provide potential perch points for birds.	South side of P2 x 30 pigeons were present on a lower, adjacent roof top. Lower roofs provide better shelter for pigeons. Close proximity to level 8 increases the risk of bird activity at P2.	Pigeons alighted on coping edges on an adjacent building opposite P2 (south side). These birds are located in the area of the right-hand arrow in the previous photo.

3.0 Undercroft & Under Slung Areas

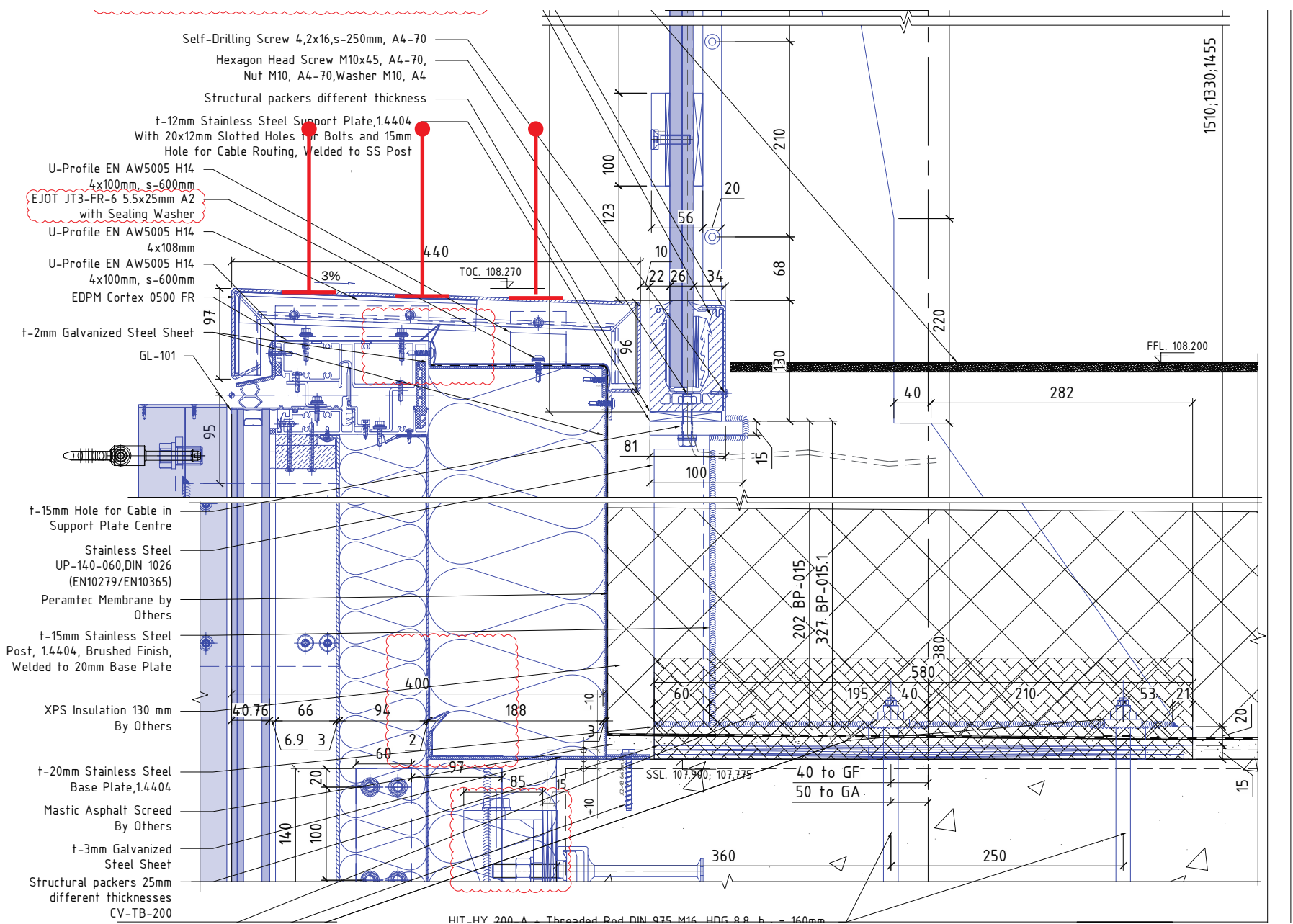
LEVEL 8 TERRACE & CANOPY



HIGH TENSION WIRING TO THE TERRACE AND CANOPY LEDGES

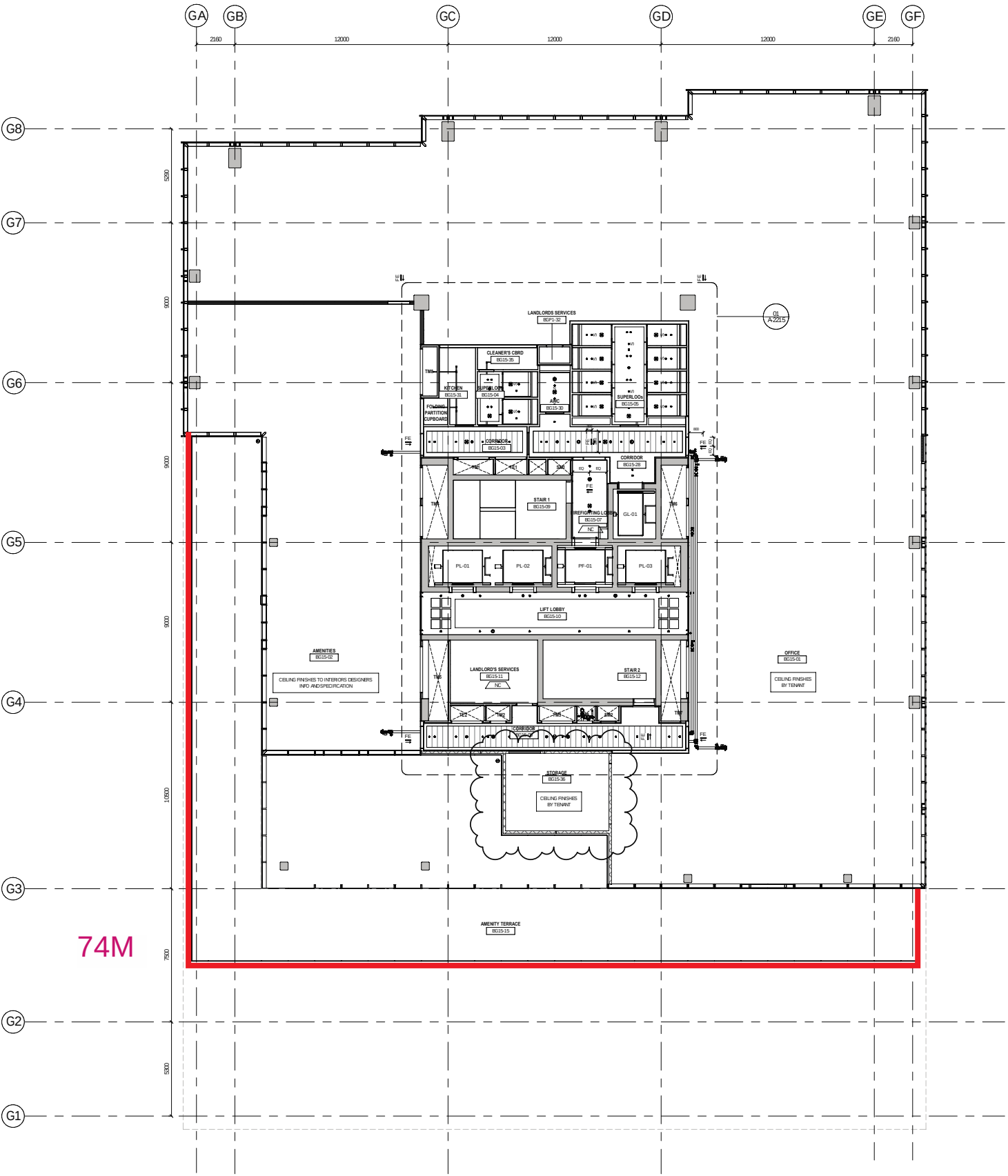


Details to be developed with the specialist



3.0 Undercroft & Under Slung Areas

LEVEL 15 TERRACE



HIGH TENSION WIRING

Doc Ref: SHR P2, Reading Construction Phase Pest Management Assessment

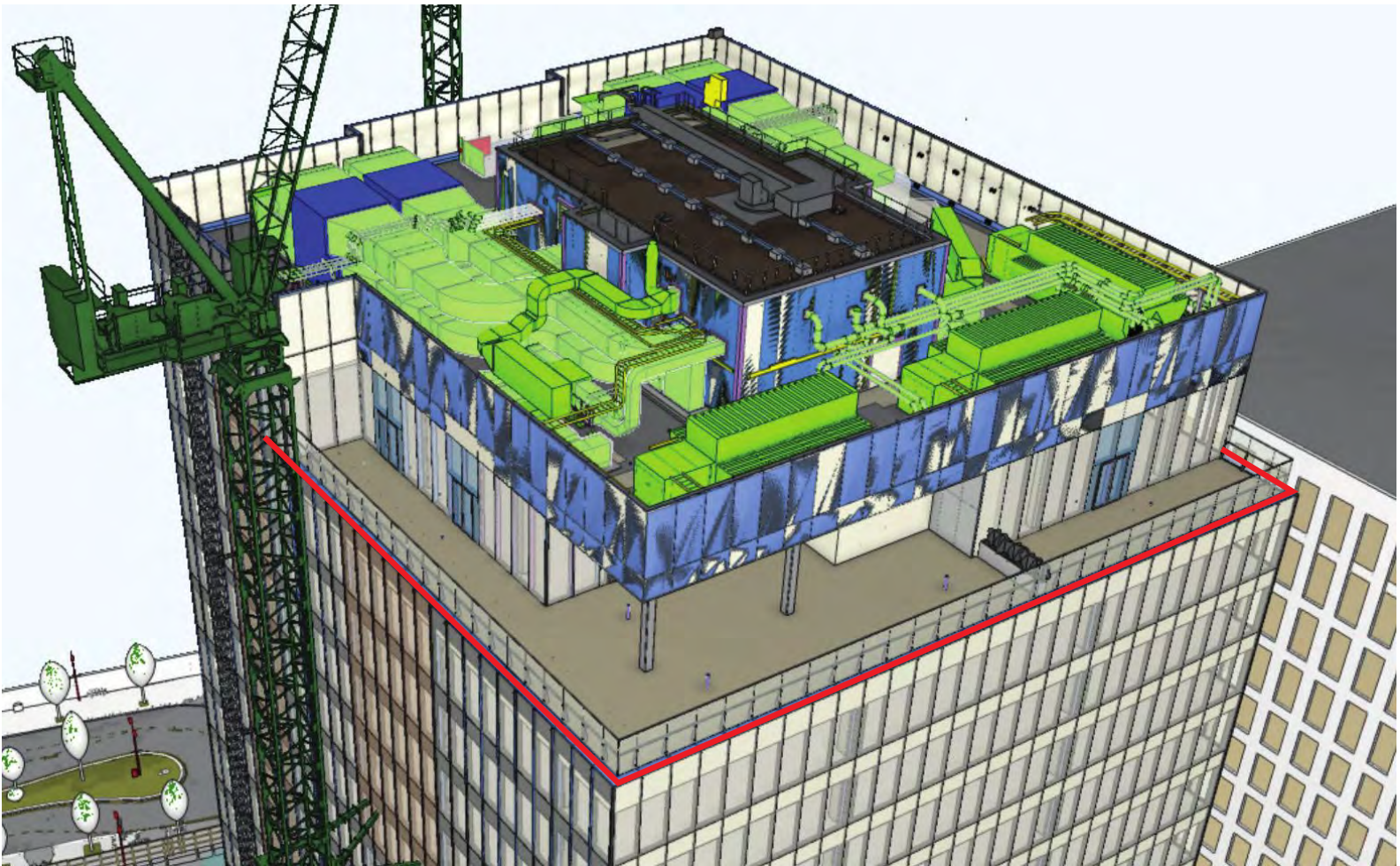
Version 1 26.10.23

Inspection Observations & Recommendations							
Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG
21	Level 15 Terrace platform	For all of the reasons highlighted above regarding high pigeon activity on roof tops to the south of P2, there is a high risk of pigeons using coping edges on the south west side of L15 as perch points.	Installation of high tension wiring along the coping edges is recommended.	Proofing with high tension wiring on coping edges.		CAST	
22	Level 15 Terrace platform	This area will be fitted with a kitchen and cooking facilities. Food consumption and food waste is likely to attract pigeon activity. There will be a south & south west Terrace cladding overlay.	Check for perch points on the cladding and also on installations such as lighting or other horizontal surfaces. Localised proofing measures might have to be considered.	Possible proofing of cladding edges and overhead horizontal surfaces might be required.		CAST	

ACTIONS

High tension wiring to the retail canopy ledges, SRM to proof

Area to be monitored to determine if the additional localised bird proofing measures are required during the building operation



HIGH TENSION WIRING TO THE TERRACE LEDGES

3.0 Undercroft & Undersung Areas

TEMPORARY STAIRCASE

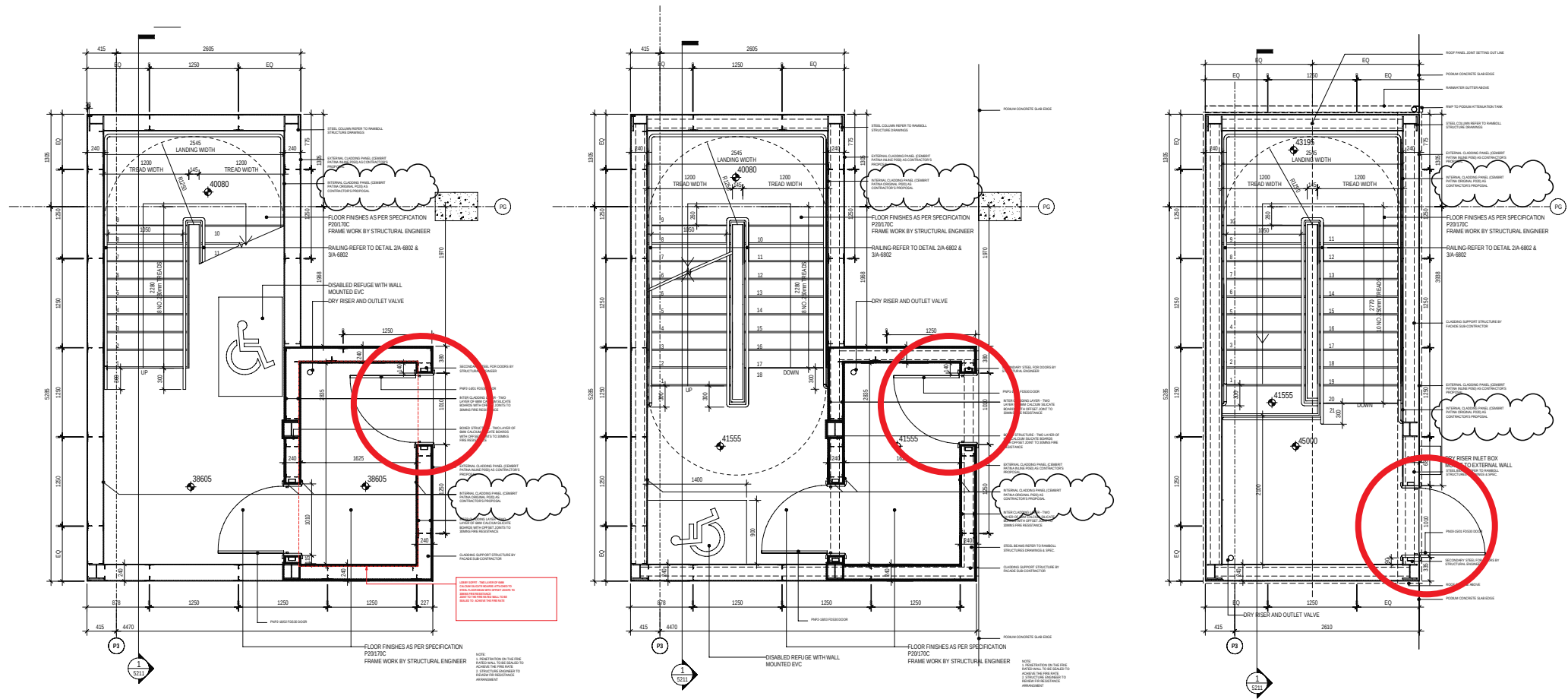
Doc Ref: SHR P2, Reading Construction Phase Pest Management Assessment

Version 1 26.10.23

Inspection Observations & Recommendations								
Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG	
28	Temporary staircase West elevation Next to the temporary ramp	There is a risk of pigeon access.	Consider proofing/bird netting in this area.	Proofing		CAST		

Temporary staircase enclosed by highlighted doors

Checked
No action required



TEMPORARY STAIRCASE PLANS

SCENIC LIFT

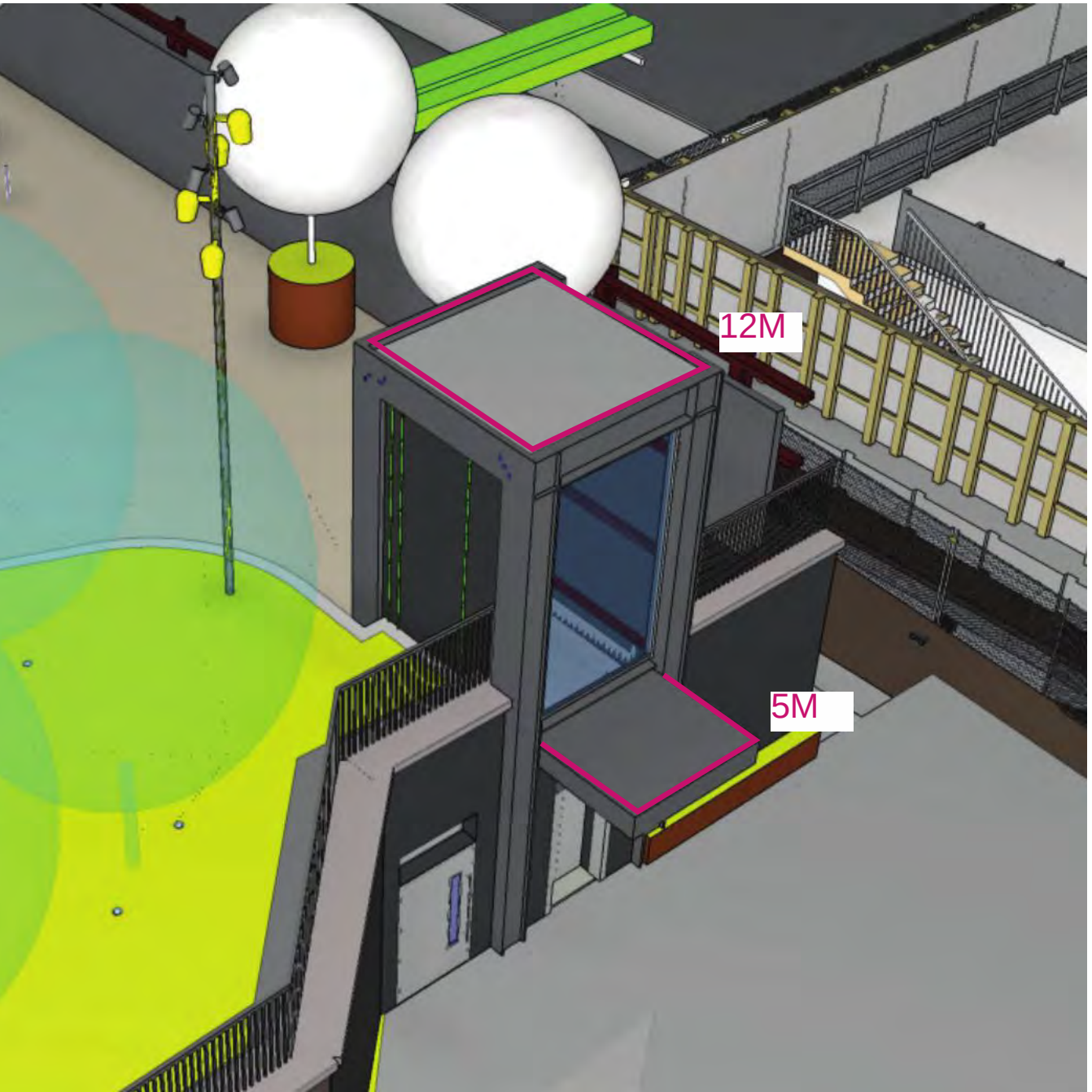
Doc Ref: SHR P2, Reading Construction Phase Pest Management Assessment

Version 1 26.10.23

Inspection Observations & Recommendations								
	Item No	Location	IPMIC Comment	Recommendation	Issue	Reference	Owner	RAG
	29	Scenic lift	There is a risk of perch points for pigeons.	Consider proofing/high tension wiring or ecopic spikes in this area.	Consider bird proofing measures		CAST	

ACTIONS

High tension wiring to the scenic lift roof and canopy ledges, SRM to proof



HIGH TENSION WIRING

3.0 Undercroft & Undersung Areas

PRODUCTS

Bird Netting





Eco Environmental Services Limited
3 Mary Seacole Road The Millfields
Plymouth Devon PL1 3JY
Email: info@ecoltd.net
Phone: 01752 669009

Specification of Materials – Bird Net System

Properties	Description
Material	High density ultra-violet stabilised knotted 12/6 polyethylene
Breaking strain of cord	14kg
Mesh Size	Gull 75mm or 100mm Pigeon 50mm Starling 28mm Sparrow 19mm
Weight	19mm: 15m ² per 1kg
Ultraviolet Light Treatment	To 320kY
Warranty	10 year limited manufacturer's warranty against failure due to UV degradation
Softening point	In the region of 120 degrees centigrade
Melting point	Melting point 130 degrees centigrade
Effects of low temperature	Polyethylene retains its flexibility at freezing temperatures
Chemical Properties	Chemically Inert, resistant to most acids and alkalis
Electrical Properties	Outstanding Electrical Insulator
Water Absorption	Does not absorb water
Straining Wire	2mm, 7x7 stainless steel core filament wire rope with a breaking strain of 240kg, a diameter tolerance of 1.98mm to 2.14mm and a weight 1.7kg/100m
Masonry fixings	Stainless steel M6 eyebolts, split pins, net spikes etc.
Cladding fixings	Bimetallic self-drive screws and stainless steel angle brackets.
Turnbuckles	M5 or M6 or M8 Stainless steel hook / eye.
Hog rings	Stainless steel.
Wire rope ferrules	Seamless copper ferrules designed for use on ropes between 2.00mm and 2.40mm in diameter.



Eco Environmental Services Limited
3 Mary Seacole Road The Millfields
Plymouth Devon PL1 3JY
Email: info@ecoltd.net
Phone: 01752 669009

Specification of Materials – Bird Spike System

General Description

Bird Spike is an effective and robust point system

Target Species: Pigeons and Gulls

NBS Code 45-35-22/305 Bird Deterrent Spikes

NBS clause: N16 Bird and Vermin Control Systems: 340 Roost Inhibitor

Technical Specification

Stainless Steel range

Product	Pin Height	Width Protected	Species	Pin Material	Pin Base Material
BPS1	112mm	100mm	Pigeon	304 stainless steel	UV stabilised Polycarbonate
BPS2	112mm	200mm	Pigeon	304 stainless steel	UV stabilised Polycarbonate
BPS3	112mm	300mm	Pigeon	304 stainless steel	UV stabilised Polycarbonate
BPSG	150mm	275mm	Gull and Pigeon	304 stainless steel	UV stabilised Polycarbonate
BPSRIDGE	150mm	275mm	Gull and Pigeon	304 stainless steel	UV stabilised Polycarbonate

Polycarbonate range

Product	Pin Height	Width Protected	Species	Pin Material	Pin Base Material
BPP1	112mm	100mm	Pigeon	UV stabilised Polycarbonate	UV stabilised Polycarbonate
BPP2	112mm	200mm	Pigeon	UV stabilised Polycarbonate	UV stabilised Polycarbonate

Fixing

Adhesive fix to most surfaces with neutral curing silicon adhesives or MS Polymer adhesives. Bird Spike can also be mechanically fixed.

McCann Worldgroup | Pest Management Strategy | 26.03.2024

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Accepted with Comments 04/04/2024

Gensler

3.0 Undercroft & Undersung Areas

PRODUCTS

Bird Wire



Eco Environmental Services Limited
3 Mary Seacole Road The Millfields
Plymouth Devon PL1 3JY
Email: info@ecoltd.net
Phone: 01752 669009

Specification of Materials – Bird Wire System

General Description

Bird Wire is an effective spring-tensioned stainless steel wire system.

Target Species: Pigeons and Gulls

NBS Code: 45-35-22/350 sprung tension wire bird deterrents

NBS clause: N16 Bird and Vermin Control Systems: 340 Roost Inhibitor
Technical Specification

Stainless Steel Range

Posts

Species	Post Size	Diameter
Pigeon	90mm	4mm
Pigeon	115mm	4mm
Pigeon / gull	150mm	4mm
Gull	180mm	4mm

Other Products

Product	Size	Breaking Strain
Wire	0.45 and 0.9mm	22kgs
Springs	25mm x 0.36mm	26.5kg
Anchor Rivets	6.5mm Diameter (Grey Nylon)	N/A
Stick on bases	40mm x40mm	N/A
Bird Wire Rail Clamps	95mm	N/A
Gutter Clamp	95mm	N/A
Ridge Brackets	175mm	N/A
Drilled rods for horizontal ledges	Ø 6mm, in a variety of lengths	N/A

Note

Pigeons may overcome this system when used in some areas such as night roosting and nesting places.



THANKS