
**Report on Preliminary Site
(Contamination) Investigation**

Park Royal Hotel Redevelopment

150 Day Street, Sydney, NSW

**Prepared for Mecone C/- UOL Group
Limited**

Project 231572.01

25 March 2025

Document History

Details

Project No.	231572.01
Document Title	Report on Preliminary Site (Contamination) Investigation
Site Address	150 Day Street, Sydney, NSW
Report Prepared For	Mecone C/- UOL Group Limited
Filename	231572.01.R.001.Rev2

Status and Review

Status	Prepared by	Reviewed by	Date issued
Revision 0	Irha Riaz	Nerilee Edwards	28 November 2024
Revision 1	Irha Riaz	Nerilee Edwards	29 November 2024
Revision 2	Irha Riaz	Nerilee Edwards	25 March 2025

Distribution of Copies

Status	Issued to
Revision 0	Mecone C/- UOL Group Limited
Revision 1	Mecone C/- UOL Group Limited
Revision 2	Mecone C/- UOL Group Limited

The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

Signature

Date

Author



25 March 2025

Reviewer



25 March 2025

Table of Contents

	Page No
1. Introduction.....	1
1.1 Overview	1
1.2 Proposed development	1
2. Scope of work	2
3. Site information.....	3
4. Environmental setting	4
4.1 Topography	4
4.2 Site geology and soil landscape	4
4.3 Acid sulfate soils.....	4
4.4 Surface water and groundwater	4
5. Site history	5
5.1 Historical aerial photography.....	5
5.2 Title deeds.....	7
5.3 Public registers and planning records.....	10
5.4 Site history integrity assessment.....	11
5.5 Summary of site history	11
6. Site walkover	12
7. Preliminary conceptual site model	12
7.1 Summary of potentially complete exposure pathways.....	14
8. Sampling and analysis plan.....	14
8.1 Data quality objectives	14
8.2 Soil sampling and analysis rationale.....	15
8.3 Soil vapour sampling and analysis rationale	15
9. Site assessment criteria	15
10. Results.....	16
10.1 Field work results	16
10.2 Laboratory analytical results.....	17
10.3 Data quality assurance and quality control	17
11. Discussion	17
12. Conclusions and recommendations	17

13.	References	18
14.	Limitations	19

Appendix A: Drawings

Appendix B: About this Report

Appendix C: Site History Information:

C1: Historical Aerial Photographs

C2: Historical Title Deeds

C3: SafeWork Response

C4: Section 10.7 Planning Certificate

Appendix D: Site Photographs

Appendix E: Data Quality Objectives, Quality Assurance and Quality Control

Appendix F: Site Assessment Criteria

Appendix G: Fieldwork Methodology

Appendix H: Field Logs

Appendix I: Summary Results Table

Appendix J: Laboratory Certificate of Analysis, Chain of Custody Documentation, Sample Receipt Advice

Report on Preliminary Site (Contamination) Investigation

Park Royal Hotel Redevelopment

150 Day Street, Sydney, NSW

1. Introduction

1.1 Overview

Douglas Partners Pty Ltd (Douglas) has been engaged by Jack Rixon of Mecone C/- UOL Group Limited to prepare this Preliminary Site (Contamination) Investigation (PSI) undertaken for the Park Royal Hotel Redevelopment for the site at 150 Day Street, Sydney, NSW (referred to as 'the site'). The site is shown on Drawing 1, Appendix A.

The investigation was undertaken in accordance with Douglas' proposal 231572.00.P.001.Rev0 dated 2 September 2024.

The objective of the PSI is to assess the potential for contamination at the site based on past and present land uses and to comment on the need for further investigation and / or management with regard to contamination issues for the proposed development. It is understood that the report will be used to support a development application for the proposed development.

The following key guidelines were consulted in the preparation of this report:

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)* [NEPM] (NEPC, 2013); and
- NSW EPA *Guidelines for Consultants Reporting on Contaminated Land* (NSW EPA, 2020).

This report must be read in conjunction with all appendices including the notes provided in Appendix B. The fieldwork for this PSI was undertaken concurrently with a geotechnical investigation reported separately.

1.2 Proposed development

It is understood that the proposed redevelopment includes extending the existing 11-storey building with an additional 11 storeys plus a rooftop plant room, whilst maintaining similar setbacks to the existing structure. The proposed redevelopment aims to retain as much of the existing structure as possible. As part of the redevelopment, loads on existing footings will increase and may double at some locations.

Key elements of the site-specific development control plan and reference design include (as provided by the client):

- *'Renovation of existing 2-level basement and existing 11-storey hotel, with the addition of a new 11 storey hotel above (including a transfer floor between the two structures), and a rooftop plant floor resulting:*
 - o *Two hotel brand offerings – Park Royal Hotel (3.5 star) and Pan Pacific Hotel (5 star).*
 - o *490-540 hotel keys with gross floor area of ~30,000 m².*

- o Upgrade existing infrastructure and services (including new lift core).
 - o New and upgraded hotel facilities (including lobby, dining areas, meeting rooms, ball room, gymnasium, bar and restaurants, and pool).
 - o Removal existing Porte Cochere and exit ramp resulting in single vehicle entry / exit ramp from Day Street to be used by valet only.
- Ground floor public domain, public art and landscaping design; and
- Significant greening and landscaping of western façade.

As part of this redevelopment, it is expected that the existing building footings will need to be strengthened where loads are increased beyond their existing allowable bearing capacity. Localised excavation may also be required for new footings, lift pits and services. It is understood that no bulk excavation is proposed.

2. Scope of work

The scope of work comprised:

- A review of information provided by the client, including:
 - o Documents and plans supplied as part of the brief package;
 - o Information on the site's current and former use(s); and
 - o Details of the proposed development.
- A review of geological, topographic, soil, acid sulfate soil and hydrogeological published information to assess and document the site's environmental setting;
- A review of readily available site history, including:
 - o Historical and recent aerial photographs;
 - o Historical title deeds to identify previous owners that may indicate potentially contaminating activities;
 - o NSW EPA public registers for notices and licences issued under the Contaminated Land Management Act 1997 (CLM Act) and the Protection of the Environment Operations Act 1997 (POEO Act);
 - o SafeWork NSW records for schedule 11 hazardous chemicals stored on the premises;
 - o Section 10.7 (2) and (5) Planning Certificates; and
 - o Council records.
- Conducted a site walkover to observe signs or indicators of potential contamination;
- Sampling from six geotechnical boreholes, and three soil vapour pins; and
- Preparation of this report.

3. Site information

Site address	150 Day Street, Sydney, NSW, 2000
Legal description	Lot 20 Deposited Plan 1046870
Approximate area	3272 m ² (provided by client)
Zoning	Zone SP5 – Metropolitan Centre
Local council area	City of Sydney
Current use	Commercial – Park Royal Hotel



Figure 1: Site location and boundary

4. Environmental setting

4.1 Topography

The site is relatively flat, with a slight fall of about 3 meters from the south-east corner towards the north-west, leading toward Darling Harbour. The site elevation is approximately 5 meters AHD (Australian Height Datum).

4.2 Site geology and soil landscape

Reference to the Geoscience NSW Seamless Geology data indicates that the site is underlain by Hawkesbury Sandstone, a Triassic age medium to coarse grained quartz sandstone unit with minor shale and laminite bands or lenses. Rock is anticipated to be at shallow depth. The site is also underlain by a fault line.

It is also noted that approximately 50 m to 100 m to the north and west of the site, the geology is mapped as 'Anthropogenic deposits - reclaimed estuarine areas', described as 'natural surface elevation raised by placement of fill over former estuarine swamps and subaqueous estuarine margins (supratidal to subtidal zone); estuarine banks and islands formed from dredge spoil'.

Reference to the Sydney 1:100,000 scale Soil Landscape Series sheet indicates that the site is mapped as comprising erosional soils of the GyMEA landscape, which typically comprises shallow to moderately deep yellow earths and earthy sands, shallow siliceous sands and localised podzolic soils and yellow podzolic sands on shale lenses.

4.3 Acid sulfate soils

Reference to the NSW Department of Environment and Climate Change 1:25 000 Acid Sulfate Soil Risk Mapping indicates that the site is located in an area of disturbed terrain. Sediments in Cockle Bay located approximately 160 m north-west of the site are mapped as having a high probability of acid sulfate soils occurrence.

4.4 Surface water and groundwater

The closest surface water body is Cockle Bay which is located approximately 160 m north-west of the site. Based on topographic contours, groundwater underlying the site is expected to flow toward Cockle Bay, part of Sydney Harbour.

Based on the site and surrounding topography, it is anticipated that surface water (including roof runoff) would be intercepted by the stormwater collection system, and ultimately discharge into Cockle Bay, located approximately 160 m north-west of the site.

A search of the publicly available registered groundwater bore database indicated that there are twelve registered groundwater bores within 1 km of the site; the five closest ones are as summarised in Table 1.

Table 1: Summary of available information from nearby registered groundwater bores

Bore ID, authorised purpose, completion year and status	Location relative to site	Final depth (m)	Standing water level (m bgl)
GW109085 Monitoring bore 2008 Unknown	830 m north	5.68	Unknown
GW109086 Monitoring bore 2008 Unknown	830 m north	5.68	Unknown
GW109087 Monitoring bore 2008 Unknown	830 m north	8.5	Unknown
GW111331 Monitoring bore 2010 Equipped	1000 m west	6.0	Unknown
GW111330 Monitoring bore 2010 Equipped	1000 m west	4.0	Unknown

No potential beneficial uses of groundwater were identified or expected given the urban setting and proximity to Sydney Harbour.

5. Site history

5.1 Historical aerial photography

Several historical aerial photographs were obtained from public databases. Extracts of the aerial photographs are included in Appendix C1. A summary of key features observed for the site and surrounding land is presented in Table 2.

Table 2: Summary of historical aerial photographs

Year	Site	Surrounding land use
1930 and 1943	The site appears to be occupied by large buildings, possibly commercial / industrial in use.	The surrounding area consisted of a mix of possibly commercial / industrial buildings.

Year	Site	Surrounding land use
	The central portion of the site may not have been built upon.	Industrial wharves (Cockle Bay Wharf) were present to the west of site and extended further south than the current alignment of Cockle Bay. Rail yards can be seen to the west and southwest of site, possibly servicing the wharves.
1951	The site appears to be mostly unchanged when compared to the 1943 image, with an additional building located in the centre of the site.	The land use of the surrounding areas appears to be similar to the 1943 historical aerial.
1961	The site appears to be mostly unchanged when compared to the 1951 image. Additional modifications were apparent in the central portion of the site, with apparent storage or vehicle parking on the roof, indicating changes to the roof, or entire building, in this area.	The land use of the surrounding areas appears to be similar to the 1951 historical aerial. There appears to be a newly built road which runs next to Cockle Bay Wharf.
1978	The building in the northern part of the site appears to have demolished and replaced by a ground level car park. No storage or parking was obvious on the roof in the southern portion of the site.	Buildings immediately north and northeast of site appear to have been demolished. Major earthworks can be observed to the immediate west of the site including active construction of the Western Distributor.
1982	The site appears to be mostly unchanged when compared to the 1978 image. The car park in the northern portion of the site appears to be paved.	The newly built Western Distributor ramps can be observed to the west of the site. Some of the large buildings located to the north-west and south-west of the site, under and adjacent to the Western Distributor, had been demolished and replaced with parkland / soft landscaping. Some minor active construction can be seen to the east of the site.
1991	The site appears to have undergone redevelopment. The previous buildings appear to have been replaced by a new commercial building (Park Royal Hotel). There appears to be an overpass stretching above	The surrounding development and construction appear to be completed, with the Darling Quarter, Sydney Convention & Exhibition Centre and Tumbalong Park present. Minor changes had occurred to the surroundings roads.

Year	Site	Surrounding land use
	Day Street to the west from the hotel. The site appears to be similar to its current configuration.	The previous industrial wharves had been removed from Cockle Bay, and the bay was generally consistent with its current configuration.
2000	The site appears to be mostly unchanged when compared to the 1991 image. The overpass above Day Street had been demolished.	There was a new road and roundabout to the immediate west of the site. There were new commercial buildings present to the south of the site. Some construction work / roadworks was occurring to the south-west of the site. To the north of the site a high-rise commercial building had been built. A new boat mooring had been constructed in Cockle Bay.
2014	The site appears to be mostly unchanged when compared to the 2000 image.	The land use in the surrounding areas appear to have been similar to the 2000 image, with the exception of increased commercial development.
2020	The site appears to be mostly unchanged when compared to the 2014 image.	An active construction site was present to the east of the site (W Hotel site).
2024	The site appears to be mostly unchanged when compared to the 2020 image.	The W Hotel buildings appear to be complete. Land use in the remaining surrounding areas appear to be mostly unchanged.

5.2 Title deeds

A historical title deeds search was used to obtain ownership and occupancy information including company names and the occupations of individuals. The title information can assist in the identification of previous land uses and can, therefore, assist in establishing whether there were potentially contaminating activities occurring at the site. The results of the title deed search are provided in Appendix C2.

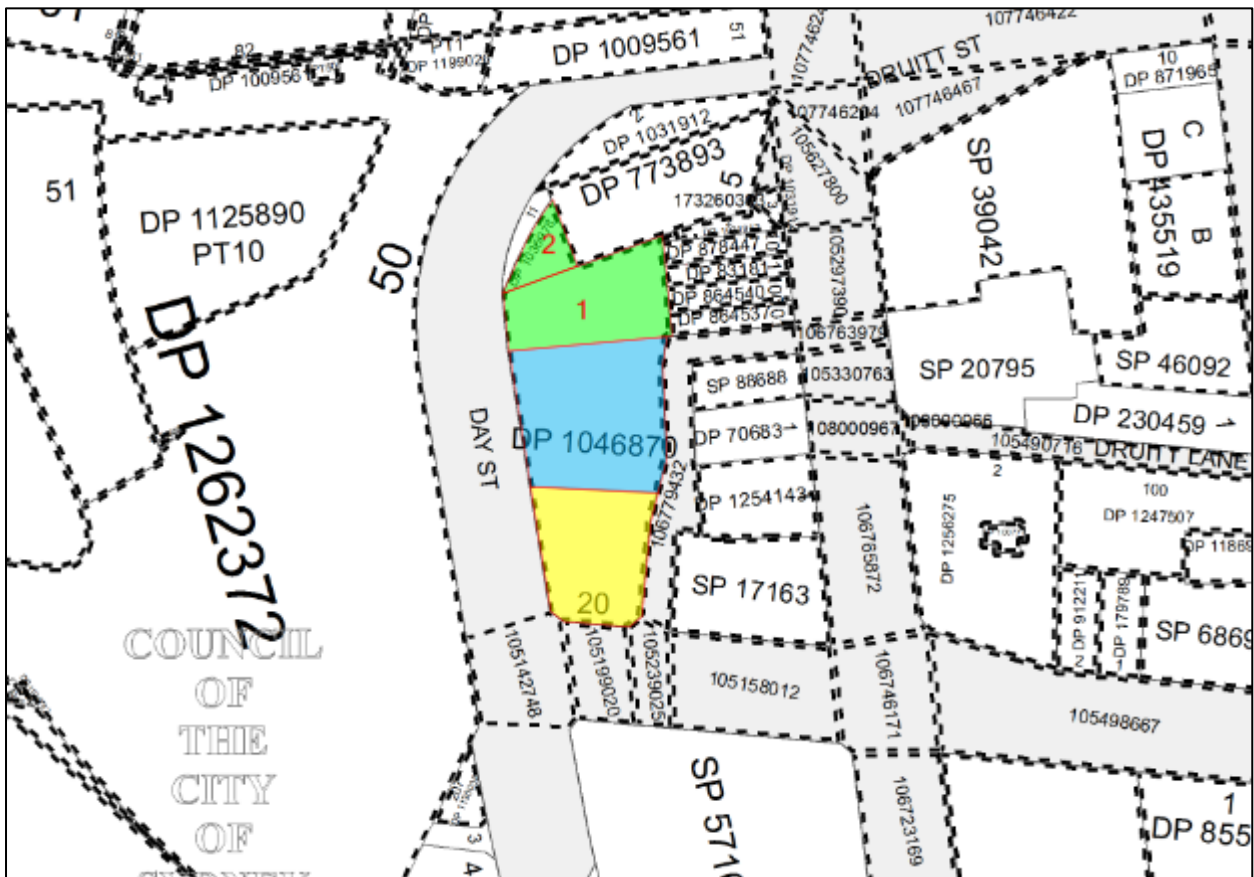


Figure 2: Cadastral records parts map

The title deed records indicate that the site previously comprised four land parcels, as per Figure 2. A summary of the title deeds and possible land uses (with reference to the aerial photographs and other historical searches) is presented in Table 3 - 6. The title deed search results included a survey plan from 1988 which recorded '3-storey brick office' on the blue and yellow shaded parts of the site, as per Figure 2.

Table 3: Historical title deeds (as regards to the part shaded yellow on Figure 2)

Date of acquisition and term held	Registered proprietor(s) / occupations	Inferred land use
03.12.1925 (1925-1926)	The Municipal Council of Sydney	Commercial
08.03.1926 (1926-1936)	John Sands Limited	Games / printing company
13.03.1936 (1936-1979)	Geo. H Martin & Co. Pty Limited	Commercial

Date of acquisition and term held	Registered proprietor(s) / occupations	Inferred land use
06.12.1979 (1979=1982)	Bruttso Pty Limited	Commercial
31.08.1982 (1982-1988)	Tabma Properties Pty Limited	Commercial (possibly offices for timber manufacturing company, noting survey plan showing office building on this part of the site as above)
02.12.1988 (1988-1994)	Skydane Pty Limited	Commercial (possibly shops and takeaway)
12.01.1994 (1994 to date)	Success Venture Pty Limited	Commercial (Park Royal Hotel)

Table 4: Historical title deeds (as regards to the part shaded green and numbered 1 on Figure 2)

Date of acquisition and term held	Registered proprietor(s) / occupations	Inferred land use
16.05.1923 (1923-1968)	John Sands Limited	Games / printing company
06.09.1968 (1968-1996)	The Commissioner for Main Roads Now Roads & Traffic Authority of New South Wales	Road reserve / construction
06.09.1996 (1996 to date)	Success Venture Pty Limited	Commercial (Park Royal Hotel)

Table 5: Historical title deeds (as regards to the part shaded green and numbered 2 on Figure 2)

Date of acquisition and term held	Registered proprietor(s) / occupations	Inferred land use
16.05.1923 (1923-1968)	John Sands Limited	Games / printing company
06.09.1968 (1968-1988)	The Commissioner for Main Roads Now Roads & Traffic Authority of New South Wales	Road reserve / construction
22.07.1988 (1988-1994)	Skydane Pty Limited	Commercial (shops / takeaway)
12.01.1994 (1996 to date)	Success Venture Pty Limited	Commercial (Park Royal Hotel)

Table 6: Historical title deeds (as regards to the part shaded blue on Figure 2)

Date of acquisition and term held	Registered proprietor(s) / occupations	Inferred land use
17.01.1923 (1923-1968)	John Sands Limited	Games / printing company
28.06.1968 (1968-1988)	The Commissioner for Main Roads Now Roads & Traffic Authority of New South Wales	Road reserve / construction
22.07.1988 (1988-1994)	Skydane Pty Limited	Commercial (possibly shops / takeaway)
12.01.1994 (1994 to date)	Success Venture Pty Limited	Commercial (Park Royal Hotel)

5.3 Public registers and planning records

EPA Notices available under Section 58 of the Contaminated Land Management Act (CLM Act) Database searched 8 October 2024	There were no records of notices for the site or any other properties within the suburb of Sydney.
Sites notified to EPA under Section 60 of the CLM Act Database searched 19 November 2024	The site was not listed as a notified contaminated site. However, the following property within the vicinity of the site was listed as notified contaminated site: Interpro House (OSP 46581) - 447 Kent Street, Sydney located 200 m north-east - Regulation not required under CLM Act. However, this is not considered to be of significant concern as regulation for these properties was not required under the CLM Act.
Licences listed under Section 308 of the Protection of the Environment Operations Act 1997 (POEO Act) Database searched 19 November 2024	There were no licenses issues for the site or any neighbouring properties in the vicinity of the site.

PFAS Investigation Sites listed on the EPA website	The site was not listed or adjacent to a site listed under: • NSW EPA PFAS Investigation Program; • Defence PFAS Investigation Program; • Defence PFAS Management Program; and • Airservices Australia National PFAS Management Program.
SafeWork NSW	A search of the records held by SafeWork NSW did not locate any records pertaining to the site. The search result is attached in Appendix C3.
Planning Certificate(s)	The planning certificate for the site (dated 22 November 2024) indicates that the council is not aware of the land being affected by any matters as prescribed by Section 59 (2) of the Contaminated Land Management Act 1997 and Contaminated Land Management Act 2008. The planning certificate is attached in Appendix C4.
Council Records	Council records were made available to Douglas through an informal Government Information Public Access Act (GIPAA) process. Review of the available online records indicated that several development proposals and approvals have been made at the site. The applications were mainly related to the commercial hotel use comprising internal layout changes, signage changes, internal fit out to suites, refurbishments, office alternations and so on. No records were found relating to environmental matters.

5.4 Site history integrity assessment

The information used to establish the history of the site was sourced from reputable and reliable reference documents, many of which were official records held by Government departments / agencies. The databases maintained by various Government agencies potentially can contain high quality information, but some of these do not contain any data at all.

In particular, aerial photographs can provide high quality information that is generally independent of memory or documentation. They are only available at intervals of several years, so some gaps exist in the information from this source. The observed site features are open to different interpretations and can be affected by the time of day and / or year at which they were taken, as well as specific events, such as flooding. Care has been taken to consider different possible interpretations of aerial photographs and to consider them in conjunction with other lines of evidence.

5.5 Summary of site history

Information on historical aerial photographs and historical leases suggest the site was used as a hotel since at least 1991 and acquired by the current owner in 1994. Previously, the land was owned by multiple owners and was used for commercial / industrial purposes since at least 1930, potentially including printing, timber manufacturing, retail and / or distribution or offices associated with companies involved in these activities. It is also noted that parts of the site were owned by Roads & Traffic Authority of New South Wales from the 1960s to the 1980s, prior to its

redevelopment into Park Royal Hotel, possibly as road reserve. No contamination was identified on site and adjacent properties in EPA regulatory notices search.

6. Site walkover

A site walkover was undertaken by an environmental scientist on 30 August 2024. The site topography was consistent with that described in Section 4.1. The site layout appears to be consistent with the 1991 aerial photograph. The following key site features pertinent to the PSI were observed (refer to photographs in Appendix D).

At the time of the site walkover, the building was occupied by the Park Royal Hotel. Ground level to level 10 were used as the hotel lobby, amenities and guest rooms and suites, with a rooftop plant room. The general façade of the building is shown in Photograph 1, Appendix D.

There were two basement levels; the lower ground level was used as a car park and the lower basement was used as staff amenities, offices, laundry and other services.

A sprinkler tank / pump room was located on the lower basement level and contained an above-ground diesel tank (Photograph 2). The tank was elevated above the ground, and no signs of staining were observed on the floor around the tank. Site personnel confirmed that the on-site laundry was not used for dry-cleaning and all dry-cleaning was done off-site. Some cleaning chemicals were stored within the laundry area (Photographs 3 and 4). The lower basement also comprised an engineering room used for storage of tools, a work bench and some chemical storage (Photograph 5). The stored chemicals were noted to be in small containers, with no indicators of leaks / spills.

A grease trap was located on the lower ground level (Photograph 6).

Douglas was also advised that above-ground diesel tanks were present in roof top plant room(s). However, these areas were not accessed during the site inspection.

An asbestos building register was not available on-site. However, given the age of the building some hazardous building materials may be present.

7. Preliminary conceptual site model

A conceptual site model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying how the site became contaminated and how potential receptors may be exposed to contamination either in the present or the future i.e. it enables an assessment of the potential source – pathway – receptor linkages (complete pathways).

Based on the current investigation, the following potential sources of contamination and associated contaminants of potential concern (CoPC) have been identified and summarised in Table 7.

Table 7: Summary of potential sources

Potential sources and associated CoPC
On site sources
S1: Fill: Associated with levelling and demolition of former buildings on the site CoPC include metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), organochlorine pesticides (OCP), phenols and asbestos S2: Above-ground diesel storage tanks CoPC include metal, TRH, BTEX, PAH, volatile organic compounds (VOC), phenols S3: Current and former land use: commercial use, including hotel, offices and potential warehousing / distribution and / or printing or manufacture of games (noting current basement levels may have been excavated following previous potential manufacturing uses) CoPC include metal, TRH, BTEX, VOC, OCP S4: Current and Former buildings CoPC include asbestos, synthetic mineral fibres (SMF), lead (in paint) and PCB

The following potential human and environmental receptors, along with relevant potential pathways, have been identified and summarised in Table 8. Note terrestrial ecology is not considered to be a receptor for the site given the site is fully paved with basement levels.

Table 8: Summary of potential receptors and pathways

Potential human receptors
HR1: Current users [commercial] HR2: Construction and maintenance workers HR3: End users [commercial] HR4: Adjacent site users [commercial / residential]
Potential environmental receptors
ER1: Surface water [Darling harbour] ER2: Groundwater
Potential pathways to human receptors
HP1: Ingestion and dermal contact HP2: Inhalation of dust and / or vapours
Potential pathways to environmental receptors
EP1: Surface water run-off EP2: Leaching of contaminants and vertical migration into groundwater EP3: Lateral migration of groundwater providing base flow to water bodies

7.1 Summary of potentially complete exposure pathways

A 'source–pathway–receptor' approach has been used to assess the potential risks of harm being caused to human or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways (potential complete pathways). The possible pathways between the above sources (S1 to S4) and receptors are provided in below Table 9.

Table 9: Summary of potentially complete exposure pathways

Source and CoPC	Exposure pathway	Receptor	Risk management action
S1: Fill: metals, PFAS, TRH, BTEX, PAH, PCB, OCP, phenols and asbestos S2: Aboveground diesel storage tank: metals, TRH, BTEX, PAH, phenols and VOC S3: Current and former land use: metals, TRH, BTEX, PAH, and VOC	HP1: Ingestion and dermal contact HP2: Inhalation of dust and / or vapours	HR1: Current users [Commercial] HR2: Construction and maintenance workers HR3: End users [Commercial]	An intrusive investigation is recommended to assess possible contamination including testing of the soils. Depending on the results of the soil investigation, further investigation (e.g. of groundwater) may be required.
	HP2: Inhalation of dust and / or vapours	HR4: Adjacent site users [commercial / residential]	
	EP1: Surface water run-off EP3: Lateral migration of groundwater providing base flow to water bodies	ER1: Surface water	
	EP2: Leaching of contaminants and vertical migration into groundwater	ER2: Groundwater	
S4: Former and current buildings: asbestos, synthetic mineral fibres (SMF), lead (in paint) and PCB	HP1: Ingestion and dermal contact HP2: Inhalation of dust and / or vapours	HR1: Current users [Commercial] HR2: Construction and maintenance workers HR3: End users [commercial] HR4: Adjacent site users [commercial]	A hazardous building materials survey is recommended prior to any demolition works.

8. Sampling and analysis plan

8.1 Data quality objectives

The sampling plan was devised with reference to the seven-step data quality objectives (DQO) process, which is provided in Appendix B, Schedule B2, NEPC (2013). The data quality objective process is outlined in Appendix E.

8.2 Soil sampling and analysis rationale

Based on the CSM and data quality objectives (DQO), the following sampling rationale was adopted.

Opportunistic samples were collected from six geotechnical boreholes, with collection of samples at regular intervals, changes in strata or upon signs of contamination, extending a minimum of 0.5 m into natural soils. Borehole locations are shown on Drawing D.002, Appendix A. It is noted that the geotechnical boreholes were targeted footings and may not be representative of the general subsurface conditions across the site.

Representative samples from five locations (S01 / BH101, BH102, BH103, BH105 and BH106) were selected to provide general coverage and analysed for CoPC as mentioned in the SAC (Section 7). However, it is noted that while VOC and asbestos were identified CoPC, samples were not analysed for these contaminants as limited to no fill was encountered during the investigation, and the sample recovery method not being considered reliable for VOC (due to the high level of disturbance in core recovery). Three soil vapour pins were installed to target the above ground diesel tank to screen for VOC.

The general sampling methods are described in the field work methodology, included in Appendix G.

8.3 Soil vapour sampling and analysis rationale

In order to assess the risk of sub-slab soil vapour at the site and evaluate whether historical or current land uses (including the storage of diesel) have impacted the site, three soil vapor pins SV1 to SV3 were installed and field screened for VOC by using a PID. The locations were selected based on the following rational:

- SV1 was positioned to target a pump room with an above ground diesel storage tank identified during site walkover; and
- SV2 and SV3 were positioned down-gradient of the pump room for general site coverage.

The locations of SV1 TO SV3 are shown on Drawing D.002, Appendix A.

The general sampling methods are described in the field work methodology, included in Appendix G.

9. Site assessment criteria

The site assessment criteria (SAC) applied in the current investigation are informed by the CSM (Section 7) which identified human receptors to potential contamination on the site. Analytical results are assessed (as a Tier1 assessment) against the SAC comprising primarily the investigation and screening levels of Schedule B1 of NEPC (2013).

The investigation and screening levels applied in the current investigation comprise levels adopted for a generic commercial land use scenario. The derivation of the SAC is in Appendix F, and the adopted SAC are listed on the summary analytical results tables in Appendix I.

10. Results

10.1 Field work results

The borehole logs for this assessment are provided in Appendix H. The logs recorded the following general sub-surface profile:

Concrete	160 mm to 430 mm thick concrete slab from surface level. Sometimes including a thin layer of gravel, sand or clay fill which separated the concrete slab from the possible footings.
Possible Footings	Possible concrete footings were encountered below the concrete slab at: BH101 - 0.43 m to 1.4 m BH102 – 0.43 m to 1.48 m BH103 – 0.2 m to 1.52 m BH104 – 0.25 m to 1.33 m BH105 – 0.29 m to 1.43 m BH106 – 0.28 m to 1.65 m
Hawkesbury Sandstone	Generally ranging from medium to high strength, moderately weathered to fresh rock, fractured to slightly fractured sandstone encountered below the concrete footings at depths of between 1.33 m to 1.65 m to the maximum investigation depth of 4.94 m. BH105 and BH106 was drilled within or in close proximity to the expected alignment of the fault zone crossing through the site. BH106 encountered low strength, with very low, medium and high strength band, highly to moderately weathered, highly fractured to fragmented sandstone. BH105 encountered sandstone comparable to other areas of the site with a zone of distinctly weathered low to medium strength sandstone at 3.4 m.

It is noted that little to no fill materials were found in the boreholes, and as such, natural rock was sampled for site characterisation from borehole locations BH102, BH103 and BH106. Fill material was sampled from BH101 and BH105.

No visual or olfactory evidence (e.g. staining, odours, free phase product) was observed during the investigations to suggest the presence of contamination within the soils at the site.

The PID screening recorded values of less than 1 ppm suggesting the absence, or very low concentrations, of VOC in the samples tested.

The PID screening of all three soil vapor pins recorded values of less than 1 ppm suggesting the absence, or very low concentrations, of VOC in the sub-slab soil.

No free groundwater was observed during drilling of boreholes, noting the use of drilling fluids precluded groundwater observations. It should be noted that groundwater levels are affected by climatic conditions and soil permeability and will therefore vary with time.

10.2 Laboratory analytical results

The results of laboratory analysis are summarised in the following tables in Appendix I:

- Table I: Summary of results of soil analysis.

The laboratory certificate of analysis together with the chain of custody and sample receipt information is provided in Appendix J.

10.3 Data quality assurance and quality control

The data quality assurance and quality control (QA / QC) results are provided in Appendix E. Based on the results of the field QA and field and laboratory QC, and evaluation against the data quality indicators (DQI) it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

11. Discussion

The analytical results for TRH, BTEX, phenols, OCP, OPP, and PCB in all samples tested were below the laboratory practical quantitation limit (PQL) and the SAC. The analytical results for metals and some PAH were above the PQL, but below the SAC in one or more of the samples tested.

The PID screening of all three soil vapor pins recorded values of less than 1 ppm, which is not considered to be representative of the presence of significant concentration of volatile vapours in the sub slab horizon.

12. Conclusions and recommendations

No change in land use is included in the proposed development. The proposed redevelopment includes extending the existing 11-storey hotel building an additional 11 storeys. The proposed redevelopment aims to retain as much of the existing structure as possible to reduce the embodied carbon emissions of the construction and to align with the sustainability objectives of the City of Sydney council.

No bulk excavation is expected as part of the redevelopment. However, excavation is expected to be required for lift pits, footing expansions and services. It is noted that final architectural or engineering plans were not available at the time of reporting.

The investigation comprised a desktop study and a limited scope of opportunistic soil investigation from boreholes drilled to assess current footings. The site history shows that the site has been used for commercial / industrial purposes since the 1930s before being developed into a hotel in the 1980s and 1990s.

Limited fill was identified in the boreholes (no fill was recorded at BH102, BH103 and BH106), although it is noted that this may not be representative of conditions away from the current footings. Samples were tested from the fill (two samples) and from the natural sandstone (three samples). The concentration of contaminants in all analysed soil / rock samples were below the adopted SAC.

Based on the results of this PSI, it is considered that the site can be made suitable, from a contamination perspective, under the proposed development subject to the following recommendations:

- Additional soil vapour sampling within the lower basement to assess potential risk of VOC / diesel contamination impacting air quality in the building. If results record potentially significant VOC or TRH in soil vapour, further assessment (including of groundwater) should be undertaken in accordance with the recommendation of the Environmental Consultant;
- If there is any change in land use, or significant excavation, proposed further assessment of soils may be warranted;
- Development of an Unexpected Finds Protocol (UFP) that must remain in place during future civil and construction works to enable identification and management of contamination; and
- Undertaking a hazardous building materials survey of the current buildings within the site to assess the presence or otherwise of hazardous building materials prior to redevelopment. Identified hazardous building materials are then to be appropriately managed in accordance with applicable legislation.

It is also recommended that waste classification assessment will be required for any excess fill or natural soils / rock arising from the proposed redevelopment that may require offsite disposal.

13. References

CRC CARE. (2017). *Risk-based Management and Remediation Guidance for Benzo(a)pyrene*. Technical Report no. 39: Cooperative Research Centre for Contamination Assessment and Remediation of the Environment.

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

NSW EPA. (2020). *Guidelines for Consultants Reporting on Contaminated Land*. Contaminated Land Guidelines: NSW Environment Protection Authority.

NSW EPA. (2022). *Contaminated Sites, Sampling Design Guidelines*. NSW Environment Protection Authority.

14. Limitations

Douglas Partners Pty Ltd (Douglas) has prepared this report (or services) for this project at 150 Day Street, Sydney, NSW in line with Douglas' proposal dated 2 September 2024 and acceptance received from Jack Rixon of Mecone C/- UOL Group Limited. The work was carried out under Douglas' Engagement Terms. This report is provided for the exclusive use of Mecone C/- UOL Group Limited for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of Douglas, does so entirely at its own risk and without recourse to Douglas for any loss or damage. In preparing this report, Douglas has necessarily relied upon information provided by the client and / or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and / or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after Douglas' field testing has been completed.

Douglas' advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by Douglas in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and / or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

The assessment of atypical safety hazards arising from this advice is restricted to the environmental components set out in this report and based on known project conditions and stated design advice and assumptions. While some recommendations for safe controls may be provided, detailed 'safety in design' assessment is outside the current scope of this report and requires additional project data and assessment.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. Douglas cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by Douglas. This is because this report has been written as advice and opinion rather than instructions for construction.

Appendix A

Drawings



SITE LOCATION

LEGEND

Site Boundary

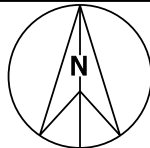
0 10 20 30 40 50 m

- NOTE:
1. Drawing projection in GDA2020 / MGA zone 56, adapted from aerial imagery from Metro Map.
 2. Site boundary is approximate only.

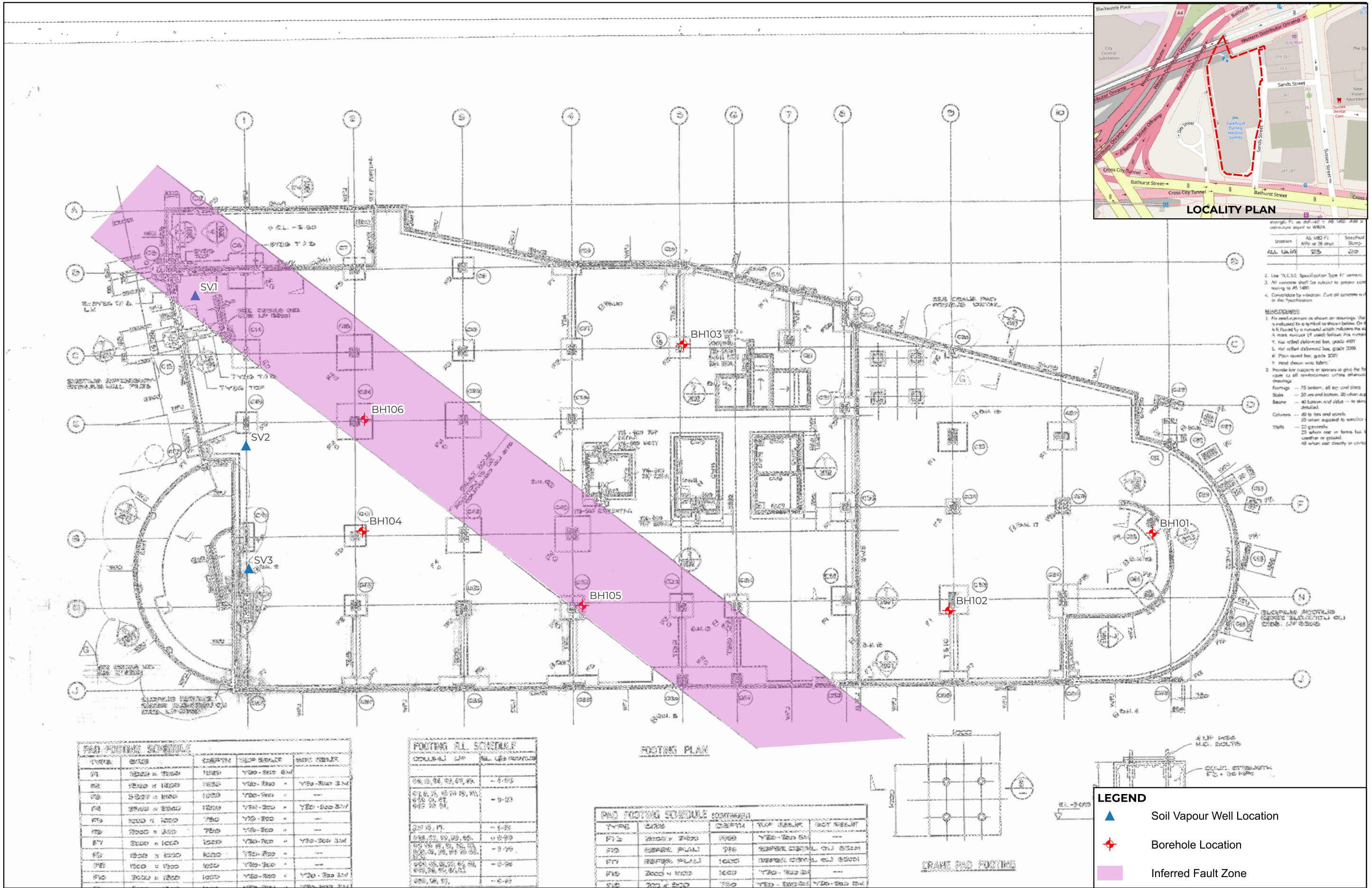


CLIENT: UOL Group Limited	
OFFICE: Sydney	DRAWN BY: IR
SCALE: 1:500 @A3	DATE: 25.October.2024

TITLE: **Site Location and Boundary**
Park Royal Hotel Redevelopment
150 Day Sreet, Sydney NSW



PROJECT:	231572.01
DRAWING No:	1
REVISION:	0



PAD FOOTING SCHEDULE				
TYPE	SIZE	DEPTH	TOP REBAR	NOTES
P1	2000 x 2000	1000	Y20-200	Y20-200 3M
P2	1500 x 1500	1000	Y20-200	Y20-200 3M
P3	2000 x 1500	1000	Y20-200	Y20-200 3M
P4	2000 x 2000	1000	Y20-200	Y20-200 3M
P5	2000 x 2000	1000	Y20-200	Y20-200 3M
P6	2000 x 2000	1000	Y20-200	Y20-200 3M
P7	2000 x 1000	1000	Y20-200	Y20-200 3M
P8	1500 x 2000	1000	Y20-200	Y20-200 3M
P9	1500 x 1500	1000	Y20-200	Y20-200 3M
P10	2000 x 2000	1000	Y20-200	Y20-200 3M

FOOTING RL SCHEDULE			
COLLUM	LP	RL	REMARKS
01, 02, 03, 04, 05		-0.00	
06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100		-0.00	
01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100		-0.00	
01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100		-0.00	
01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100		-0.00	

PAD FOOTING SCHEDULE				
TYPE	SIZE	DEPTH	TOP REBAR	NOTES
P15	2000 x 2000	1000	Y20-200	Y20-200 3M
P16	2000 x 2000	1000	Y20-200	Y20-200 3M
P17	2000 x 2000	1000	Y20-200	Y20-200 3M
P18	2000 x 2000	1000	Y20-200	Y20-200 3M
P19	2000 x 2000	1000	Y20-200	Y20-200 3M
P20	2000 x 2000	1000	Y20-200	Y20-200 3M

LEGEND

- ▲ Soil Vapour Well Location
- ✦ Borehole Location
- Inferred Fault Zone

150 DAY STREET CONSULTANT WORKSHOP

PROPOSED DRAWINGS
DRAFT - WIP

SPATIAL BRIEF

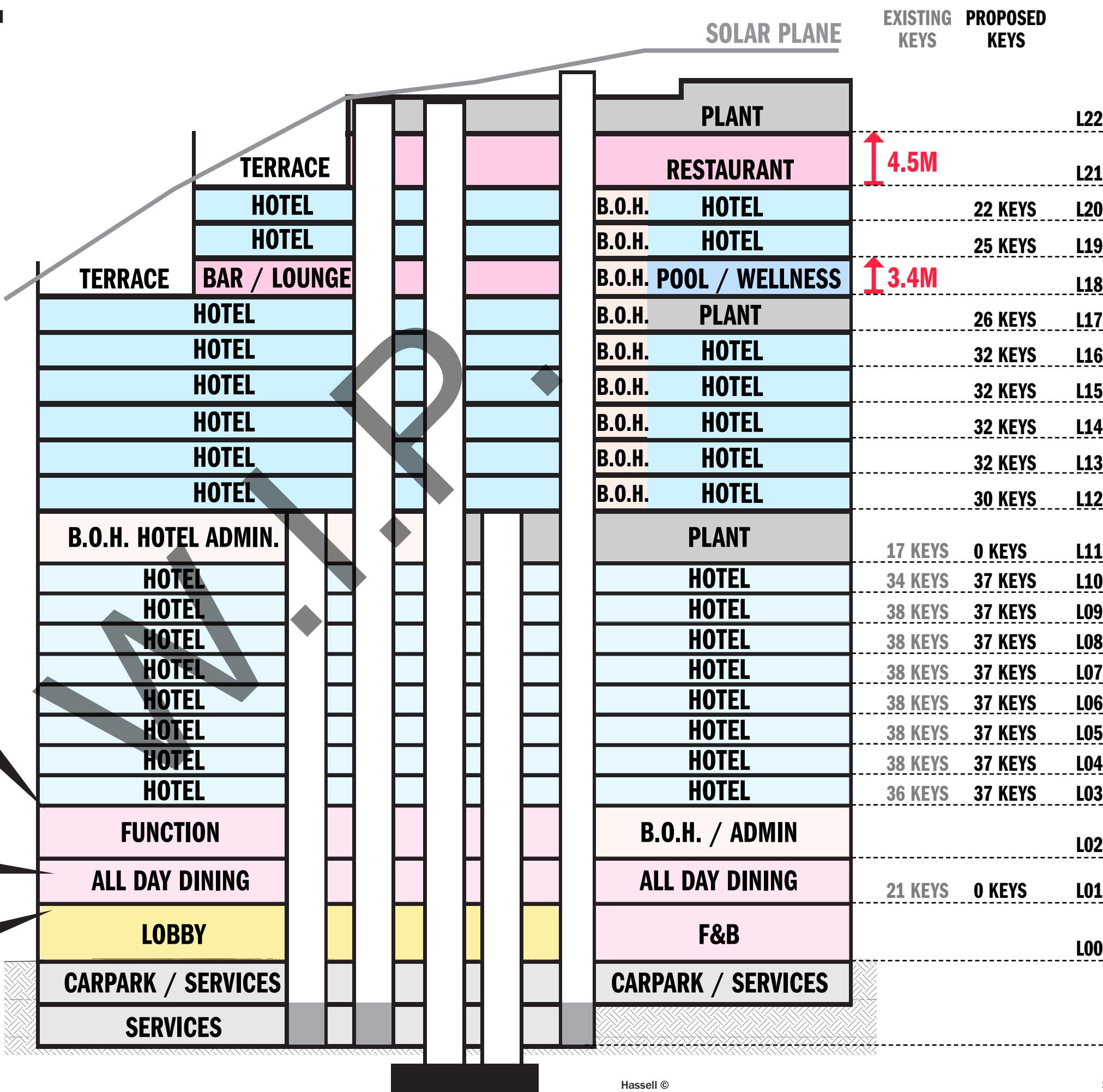
CONCEPT SECTION - TERRACE OPTION

EXISTING PARK ROYAL HOTEL KEYS:	336
PROPOSED PARK ROYAL HOTEL KEYS:	296
PROPOSED PPHG HOTEL KEYS:	231

BALLROOM
FUNCTION/MEETING ROOMS
KITCHEN
B.O.H. / ADMIN

COMBINED KITCHEN
PR ALL DAY DINING
PP ALL DAY DINING

COMBINED LOBBY
PR CHECK-IN
PP CHECK-IN
LOBBY LOUNGE



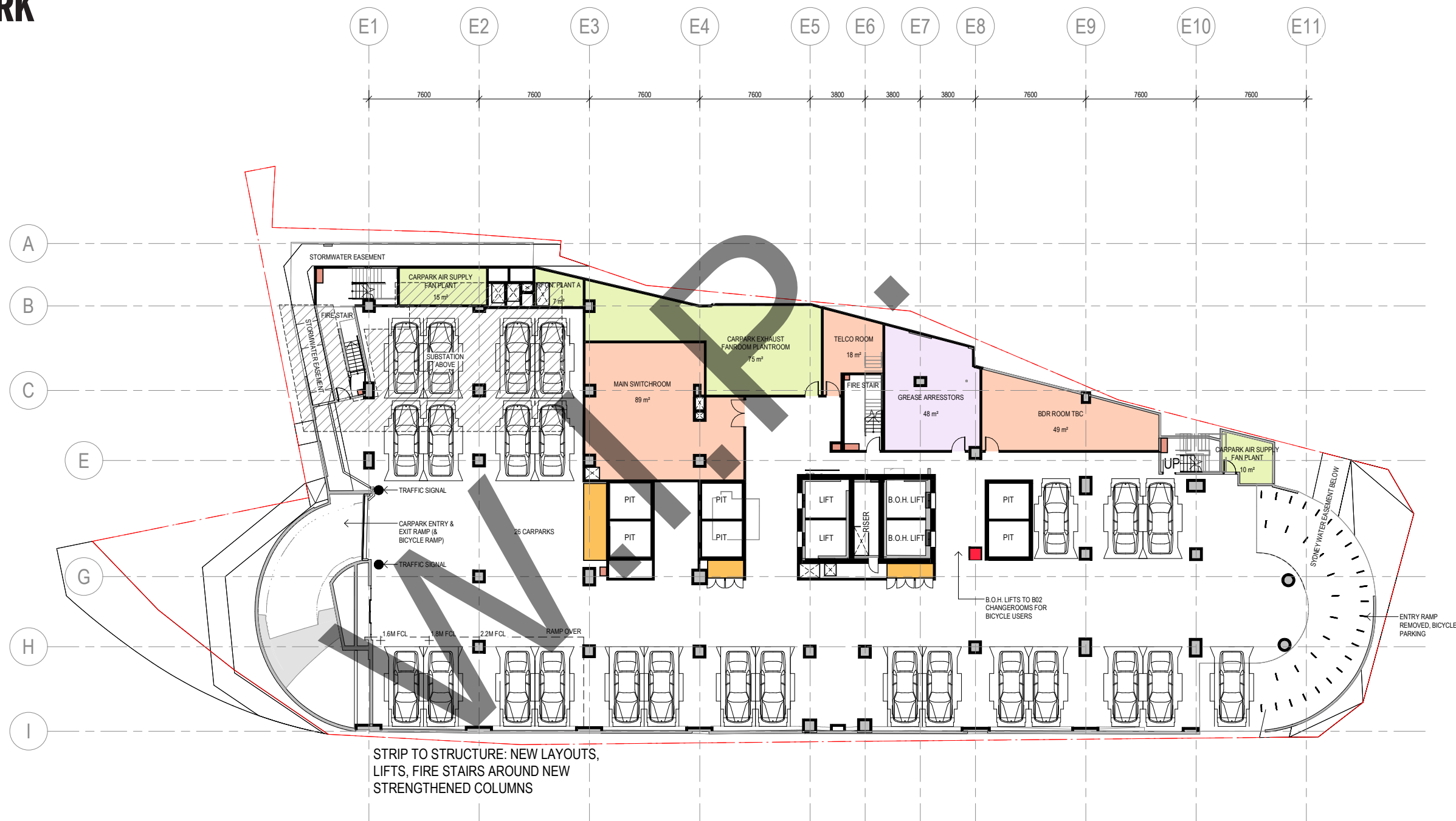
EXISTING

B02 PLAN - BASEMENT



EXISTING HOTEL

B01 PLAN - CARPARK



0 HOTEL KEYS

LEVEL G PLAN

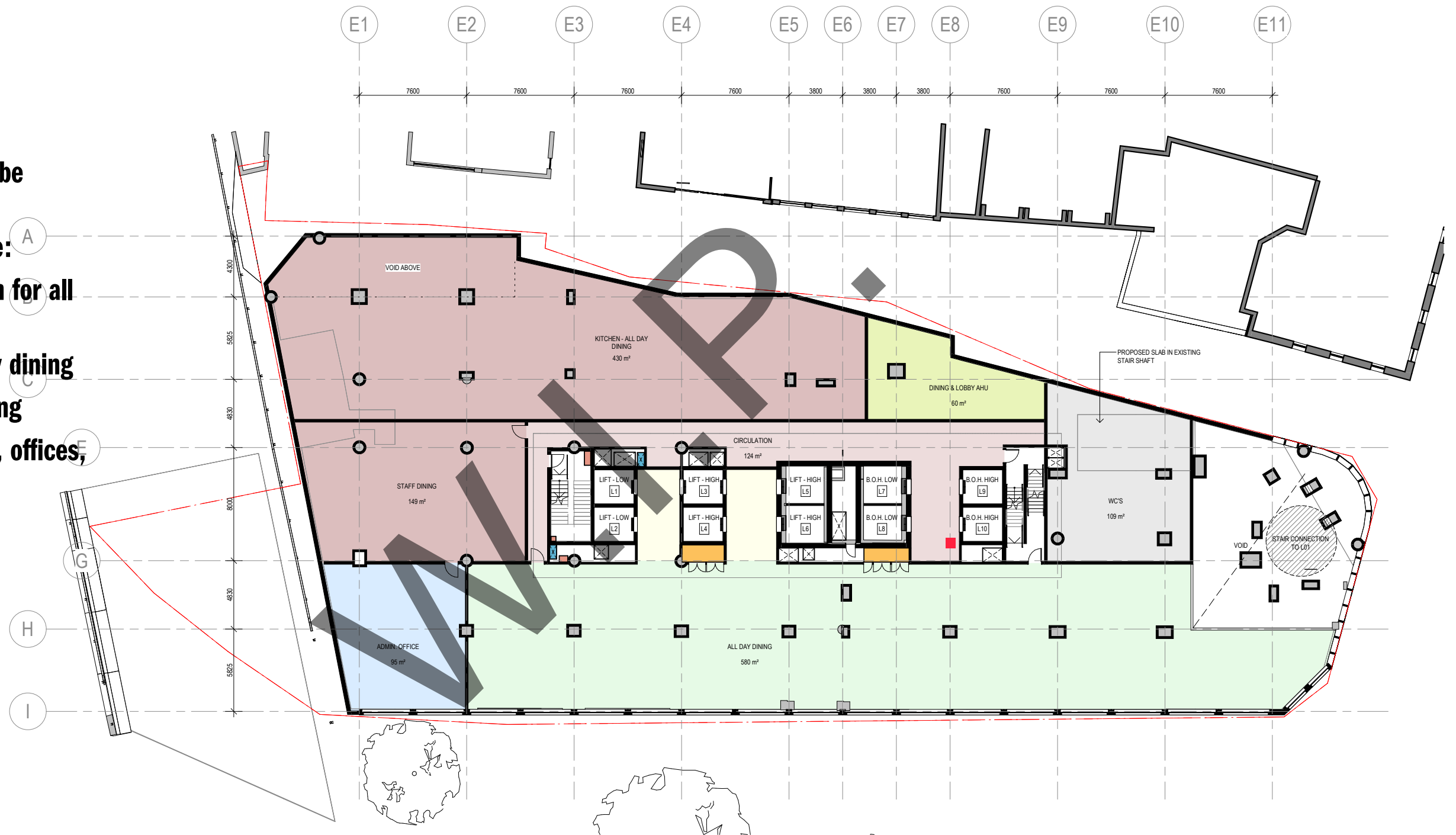
-
- The floor plan shows a building with the following rooms and areas:
- Substation:** 156 m²
 - Hard Waste:** 21 m²
 - Compactor:** 224 m²
 - Loading / Waste:** 224 m²
 - Food Waste:** 34 m²
 - Fire Control Rm.:** 34 m²
 - Booster:** 34 m²
 - B.O.H. (Back of House):** 224 m²
 - Hotel Lobby:** 670 m²
 - Structural Slab Levels:** To be reconciled with pavement and interiors.
 - Fire Stair Transfer Over:** Multiple locations.
 - Fire Stair:** Multiple locations.
 - Drop-off / Pick-up Bays:** 1, 2, 3, 4.
 - Day St Entry:** Main entrance.
 - Bathurst St Entry:** Side entrance.
 - Velet Vehicle Entry:** Entrance for valet service.
 - Strip to Structure:** New layouts, lifts, fire stairs around new strengthened columns.
 - Tree Island:** Extents adjusted.
 - Stepping in Slab:** To be rationalised.
 - Existing Crossover:** Retained and removed.
 - Existing Slab Levels:** To be reconciled.
 - Existing Crossover 1:** Retained.
 - Existing Crossover 2:** Retained.
 - Fire Stair Transfer Over:** Multiple locations.
 - Fire Stair:** Multiple locations.
 - Drop-off / Pick-up Bays:** 1, 2, 3, 4.
 - Day St Entry:** Main entrance.
 - Bathurst St Entry:** Side entrance.
 - Velet Vehicle Entry:** Entrance for valet service.
 - Strip to Structure:** New layouts, lifts, fire stairs around new strengthened columns.
 - Tree Island:** Extents adjusted.
 - Stepping in Slab:** To be rationalised.
 - Existing Crossover:** Retained and removed.
 - Existing Slab Levels:** To be reconciled.
 - Existing Crossover 1:** Retained.
 - Existing Crossover 2:** Retained.
- Annotations include: "STRIP TO STRUCTURE: NEW LAYOUTS, LIFTS, FIRE STAIRS AROUND NEW STRENGTHENED COLUMNS", "TREE ISLAND EXTENTS ADJUSTED", "STEPPING IN SLAB TO BE RATIONALISED", "EXISTING Crossover 1 RETAINED", "EXISTING Crossover 2 RETAINED", "EXISTING SLAB LEVELS TO BE RECONCILED", "VALET VEHICLE ENTRY", "DAY ST ENTRY", "BATHURST ST ENTRY", "DROP-OFF / PICK-UP BAY 1", "DROP-OFF / PICK-UP BAY 2", "DROP-OFF / PICK-UP BAY 3", "DROP-OFF / PICK-UP BAY 4", "KEEP CLEAR ZONE", "TRAFFIC SIGNAL", "Western Distributor", "Sand Street", "PP_200", "PP_201", "PP_202", "SK_300", "Hassell ©", "6".

Hassell ©

EXISTING HOTEL

LEVEL 01 PLAN

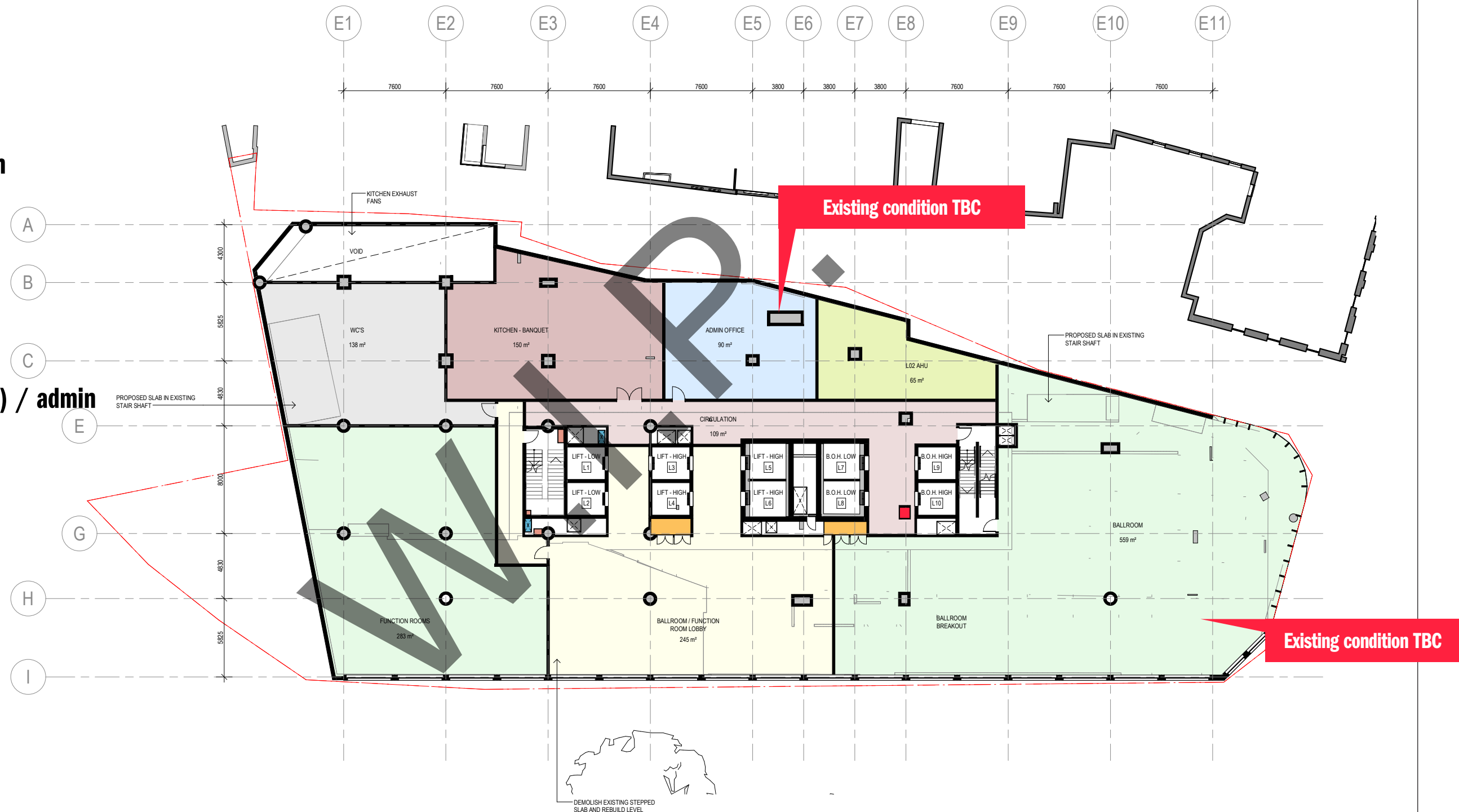
- Typical hotel rooms to be demolished.
- Level 1 Brief to include:
 - Combined kitchen for all day dining
 - Park Royal all day dining
 - PPHG all day dining
 - B.O.H. (coldroom, offices, etc)



0 HOTEL KEYS

LEVEL 02 PLAN

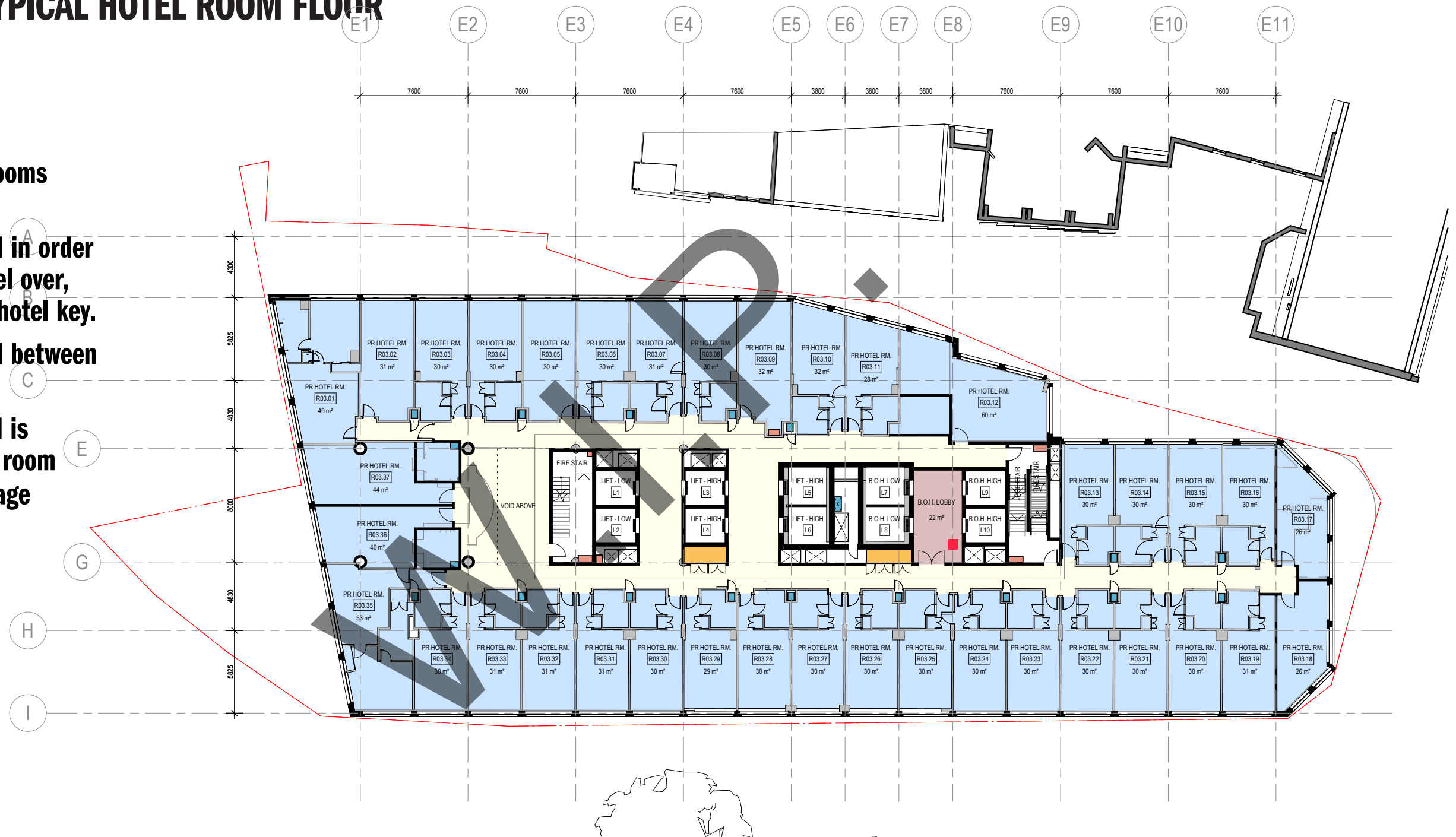
- **Level 2 Brief - Function Facilities to include:**
 - **Ballroom**
 - **Function room**
 - **Meeting rooms**
 - **Ballroom kitchen**
 - **B.O.H. (Coldroom) / admin office**



EXISTING HOTEL

LEVEL 03 PLAN - TYPICAL HOTEL ROOM FLOOR

- Majority of the hotel rooms have been retained.
- A new core is proposed in order to service the new hotel over, removing one existing hotel key.
- Service lifts are shared between both hotel offers
- Existing structural grid is retained and therefore room size is 31 sqm on average

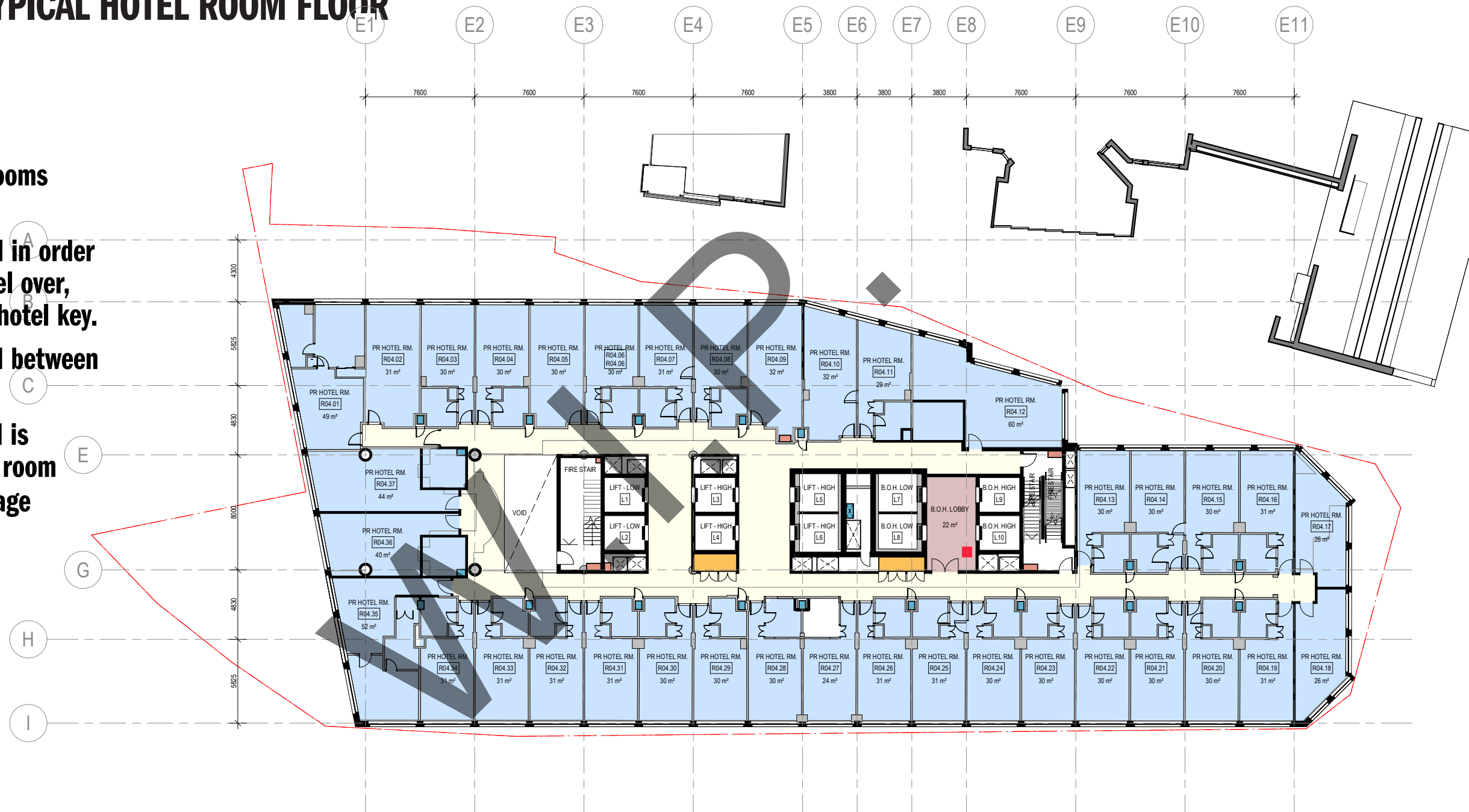


37 HOTEL KEYS

EXISTING HOTEL

LEVEL 04 PLAN - TYPICAL HOTEL ROOM FLOOR

- Majority of the hotel rooms have been retained.
- A new core is proposed in order to service the new hotel over, removing one existing hotel key.
- Service lifts are shared between both hotel offers
- Existing structural grid is retained and therefore room size is 31 sqm on average

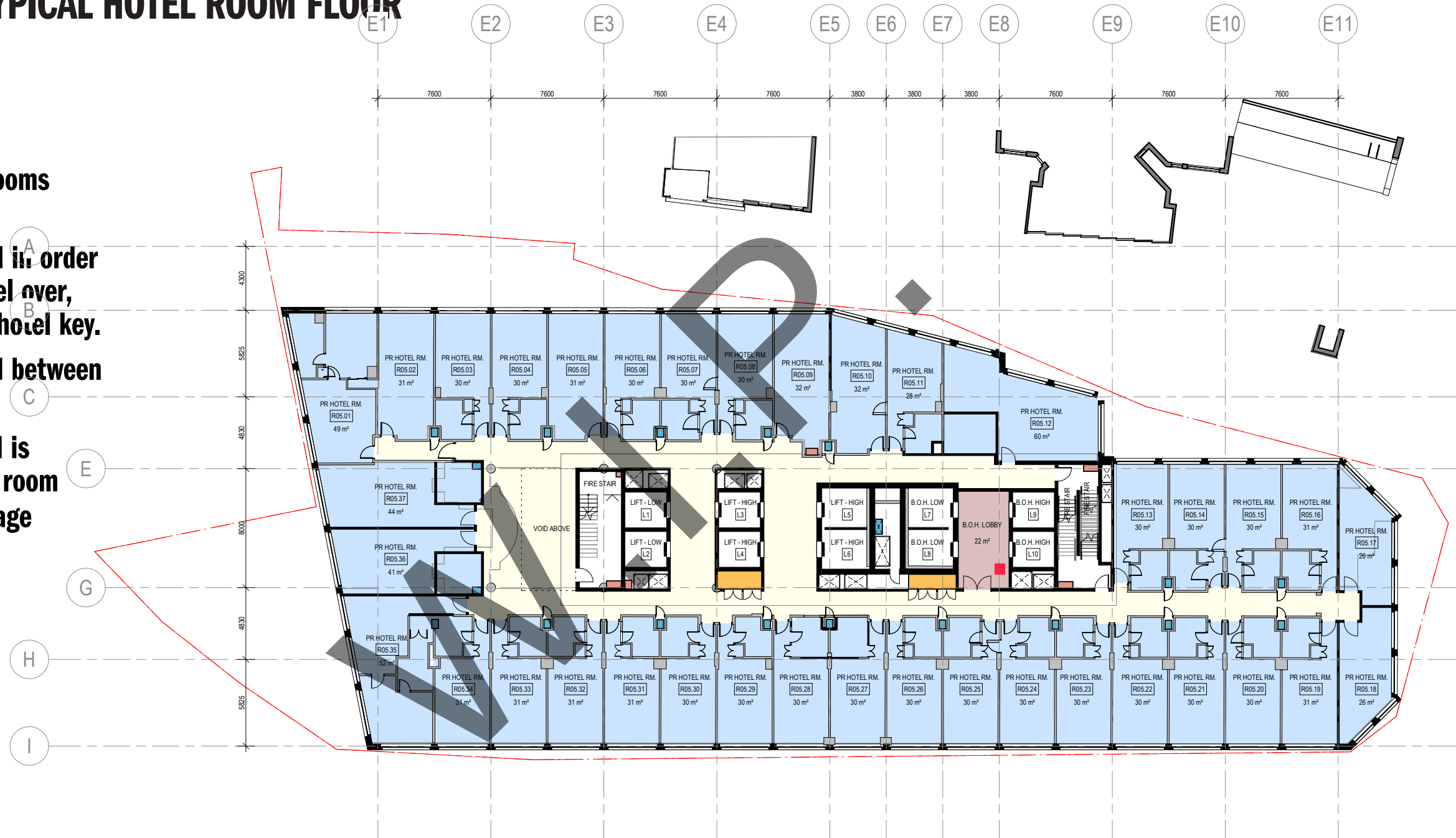


37 HOTEL KEYS

EXISTING HOTEL

LEVEL 05 PLAN - TYPICAL HOTEL ROOM FLOOR

- Majority of the hotel rooms have been retained.
- A new core is proposed in order to service the new hotel over, removing one existing hotel key.
- Service lifts are shared between both hotel offers
- Existing structural grid is retained and therefore room size is 31 sqm on average



37 HOTEL KEYS

EXISTING HOTEL

LEVEL 06 PLAN - TYPICAL HOTEL ROOM FLOOR

- Majority of the hotel rooms have been retained.
- A new core is proposed in order to service the new hotel over, removing one existing hotel key.
- Service lifts are shared between both hotel offers
- Existing structural grid is retained and therefore room size is 31 sqm on average

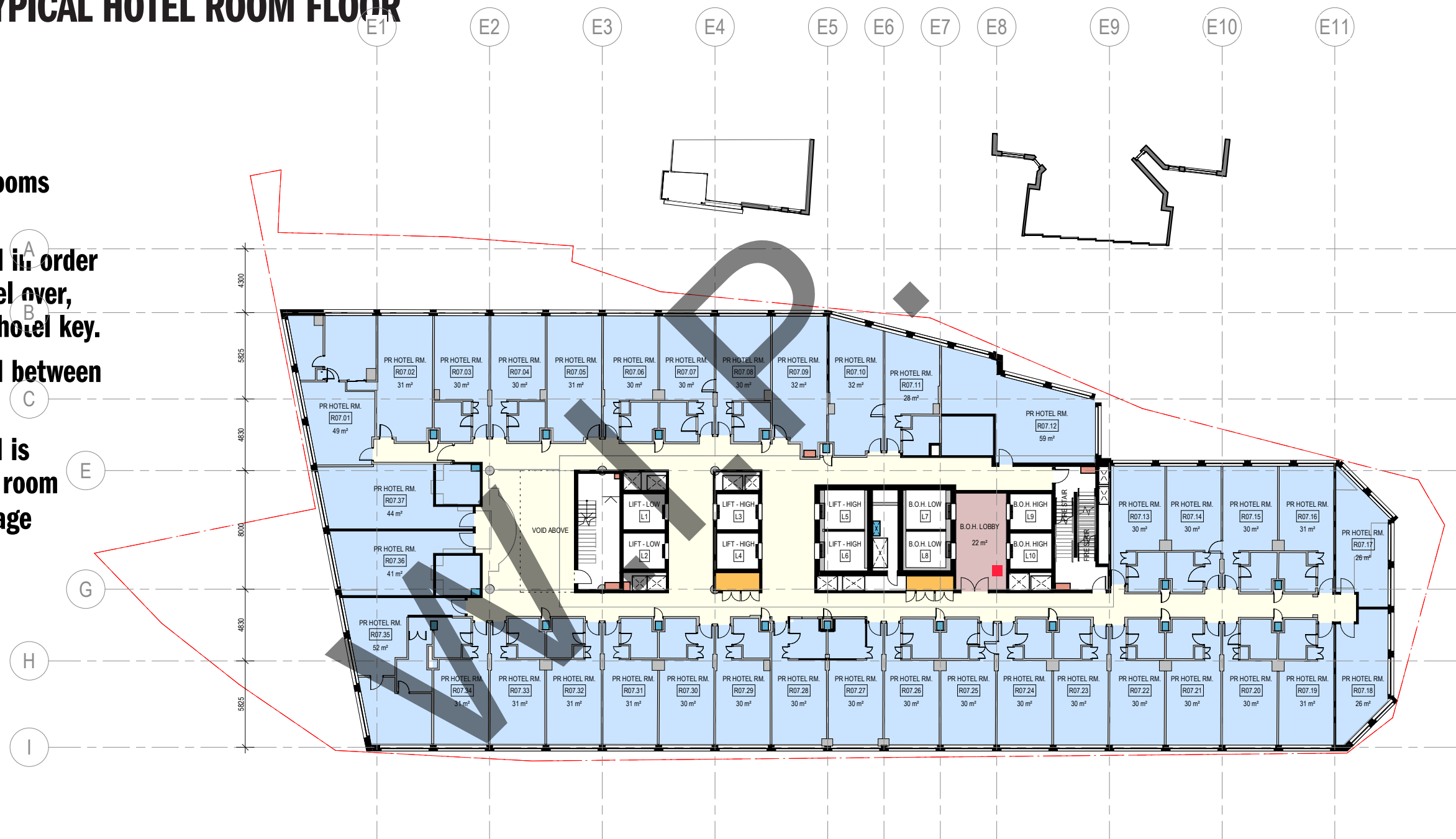


37 HOTEL KEYS

EXISTING HOTEL

LEVEL 07 PLAN - TYPICAL HOTEL ROOM FLOOR

- Majority of the hotel rooms have been retained.
- A new core is proposed in order to service the new hotel over, removing one existing hotel key.
- Service lifts are shared between both hotel offers
- Existing structural grid is retained and therefore room size is 31 sqm on average



37 HOTEL KEYS

EXISTING HOTEL

LEVEL 08 PLAN - TYPICAL HOTEL ROOM FLOOR

- Majority of the hotel rooms have been retained.
- A new core is proposed in order to service the new hotel over, removing one existing hotel key.
- Service lifts are shared between both hotel offers
- Existing structural grid is retained and therefore room size is 31 sqm on average



37 HOTEL KEYS

EXISTING HOTEL

LEVEL 09 PLAN - TYPICAL HOTEL ROOM FLOOR

- Majority of the hotel rooms have been retained.
- A new core is proposed in order to service the new hotel over, removing one existing hotel key.
- Service lifts are shared between both hotel offers
- Existing structural grid is retained and therefore room size is 31 sqm on average



37 HOTEL KEYS

EXISTING HOTEL

LEVEL 10 PLAN

- Majority of the hotel rooms have been retained.
- A new core is proposed in order to service the new hotel over, removing one existing hotel key.
- Service lifts are shared between both hotel offers
- Existing structural grid is retained and therefore room size is 31 sqm on average



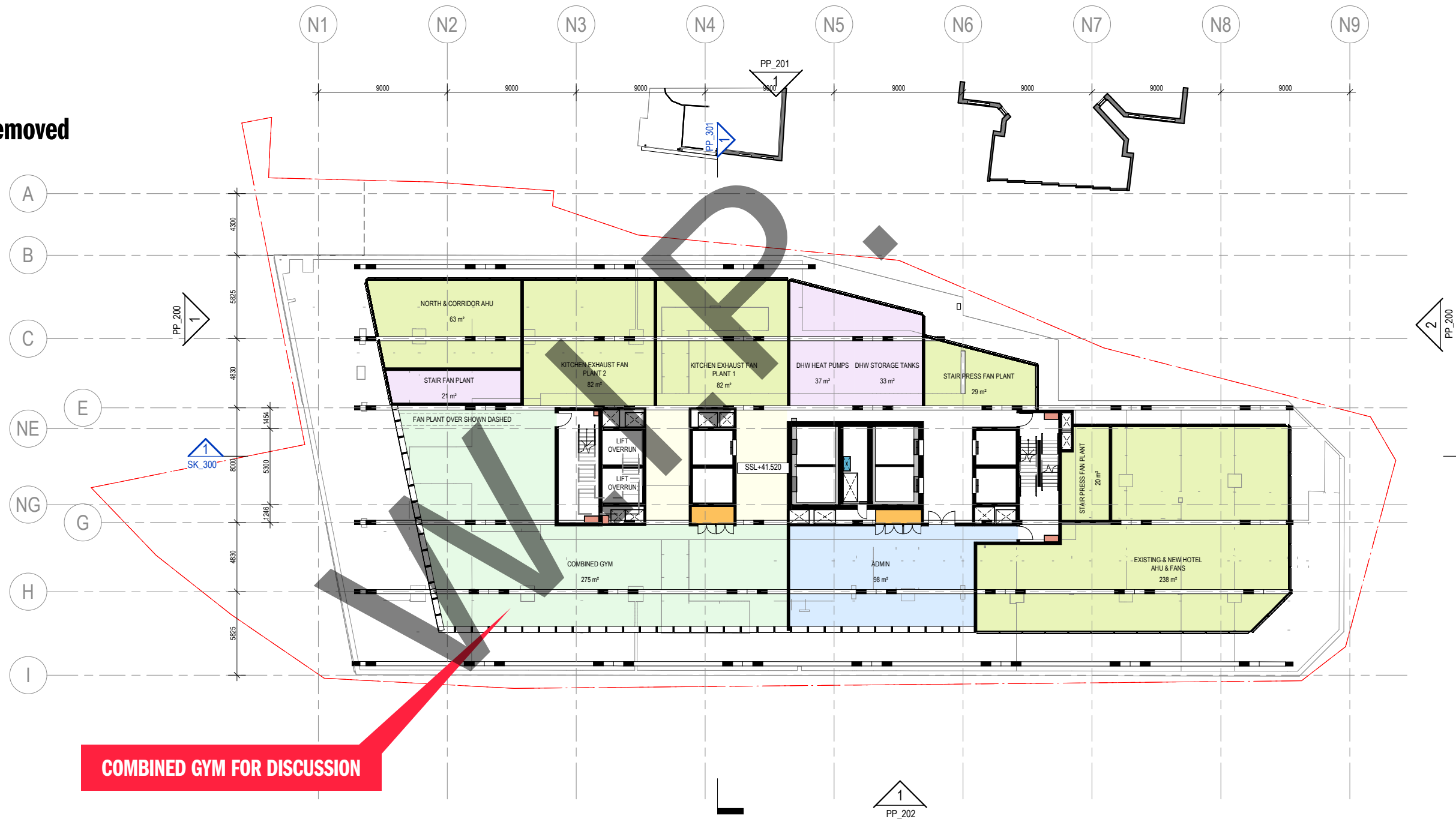
Existing bar / club lounge removed and replaced with new hotel rooms

37 HOTEL KEYS

NEW HOTEL

LEVEL 11 PLAN - TRANSFER FLOOR

- Existing hotel rooms removed for transfer floor.



0 HOTEL KEYS

NEW HOTEL

LEVEL 12 PLAN - NEW HOTEL TYPICAL LAYOUT

- UOL confirmed to allow 1.5 people per hotel room for population calculations



30 HOTEL KEYS

NEW HOTEL

LEVEL 13 PLAN - NEW HOTEL TYPICAL LAYOUT

- UOL confirmed to allow 1.5 people per hotel room for population calculations

PPHG Current Room Count = 231
If reduced to 2 large suites = 226

Greening Design being Developed

Columns = 260
Walls = 300

NEW HOTEL

LEVEL 14 PLAN - NEW HOTEL TYPICAL LAYOUT

- UOL confirmed to allow 1.5 people per hotel room for population calculations

PPHG Current Room Count = 231
If reduced to 2 large suites = 226

Greening Design being Developed

Columns = 260
Walls = 300

32 HOTEL KEYS

NEW HOTEL

LEVEL 15 PLAN - NEW HOTEL TYPICAL LAYOUT

- UOL confirmed to allow 1.5 people per hotel room for population calculations

PPHG Current Room Count = 231
If reduced to 2 large suites = 226

Greening Design being Developed

Columns = 260
Walls = 300

32 HOTEL KEYS

NEW HOTEL

LEVEL 16 PLAN - NEW HOTEL TYPICAL LAYOUT

- UOL confirmed to allow 1.5 people per hotel room for population calculations

PPHG Current Room Count = 231
If reduced to 2 large suites = 226

Greening Design being Developed

Columns = 260
Walls = 300

NEW HOTEL

LEVEL 17 PLAN - NEW HOTEL TYPICAL LAYOUT

- UOL confirmed to allow 1.5 people per hotel room for population calculations
- Rooms to south removed for Services & Pool above

PPHG Current Room Count = 231
If reduced to 2 large suites = 226

Greening Design being Developed

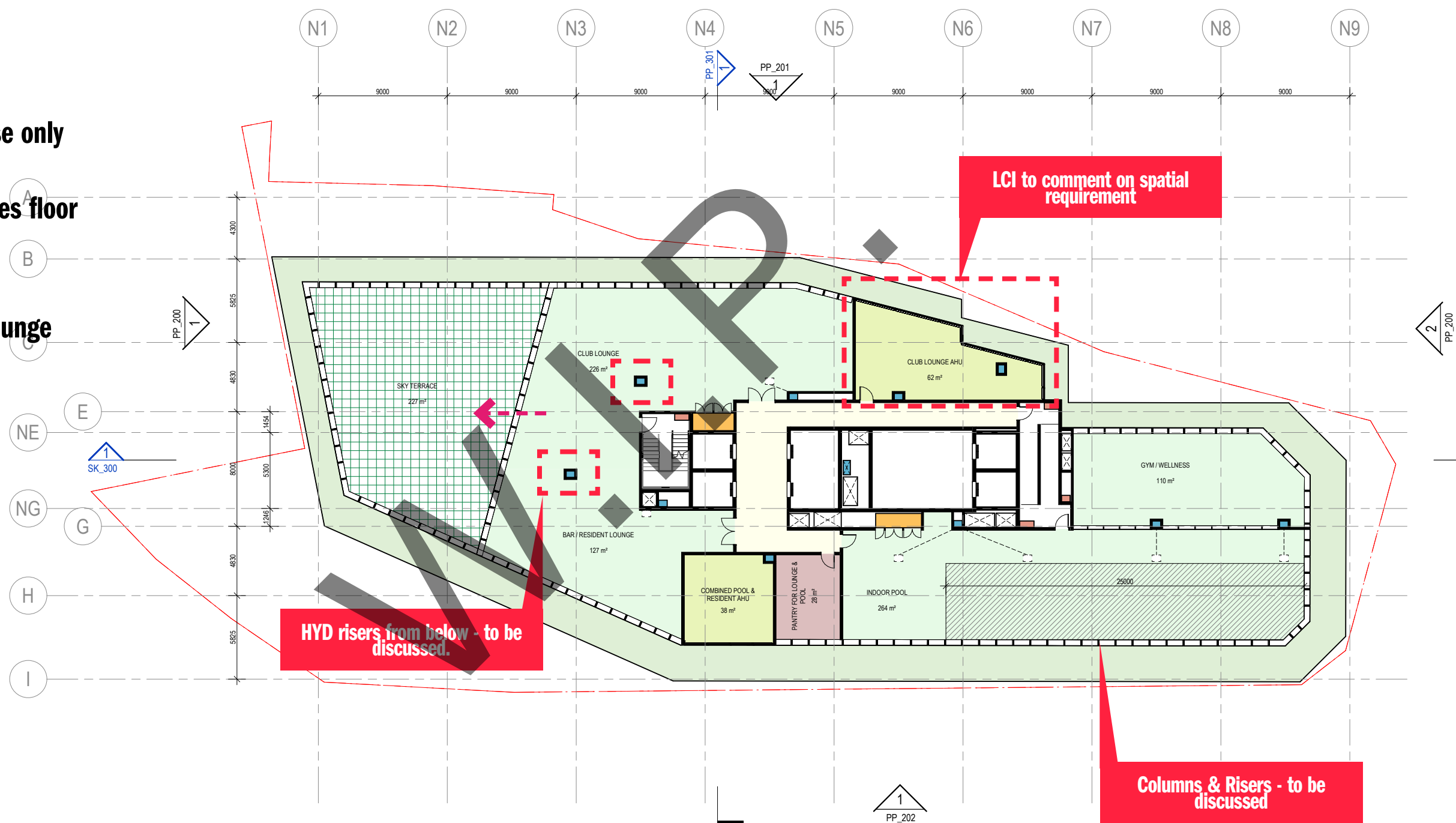
Columns = 260
Walls = 300



NEW HOTEL

LEVEL 18 PLAN - TERRACE

- Level 18 is for hotel use only (existing population)
- Level 18 PPHG amenities floor to include:
 - Club lounge
 - Bar / Resident lounge
 - Gym
 - Pool



NEW HOTEL

LEVEL 19 PLAN

- UOL confirmed to allow 1.5 people per hotel room for population calculations
- Hotel Room keys TBC with heights of F&B below



25 HOTEL KEYS

NEW HOTEL

LEVEL 20 PLAN

- Hotel Room keys TBC with heights of F&B below

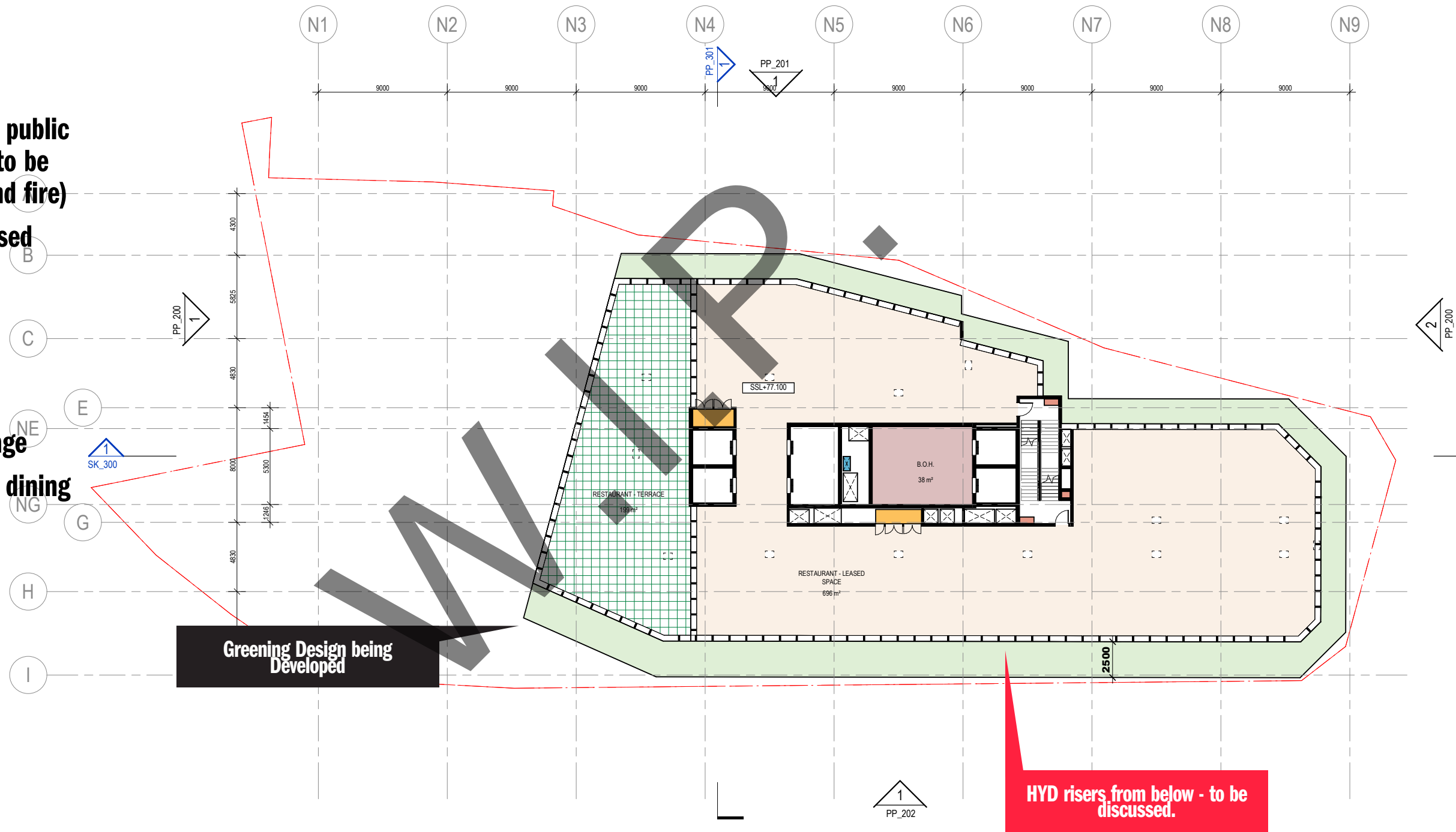


22 HOTEL KEYS

NEW HOTEL

LEVEL 21 PLAN

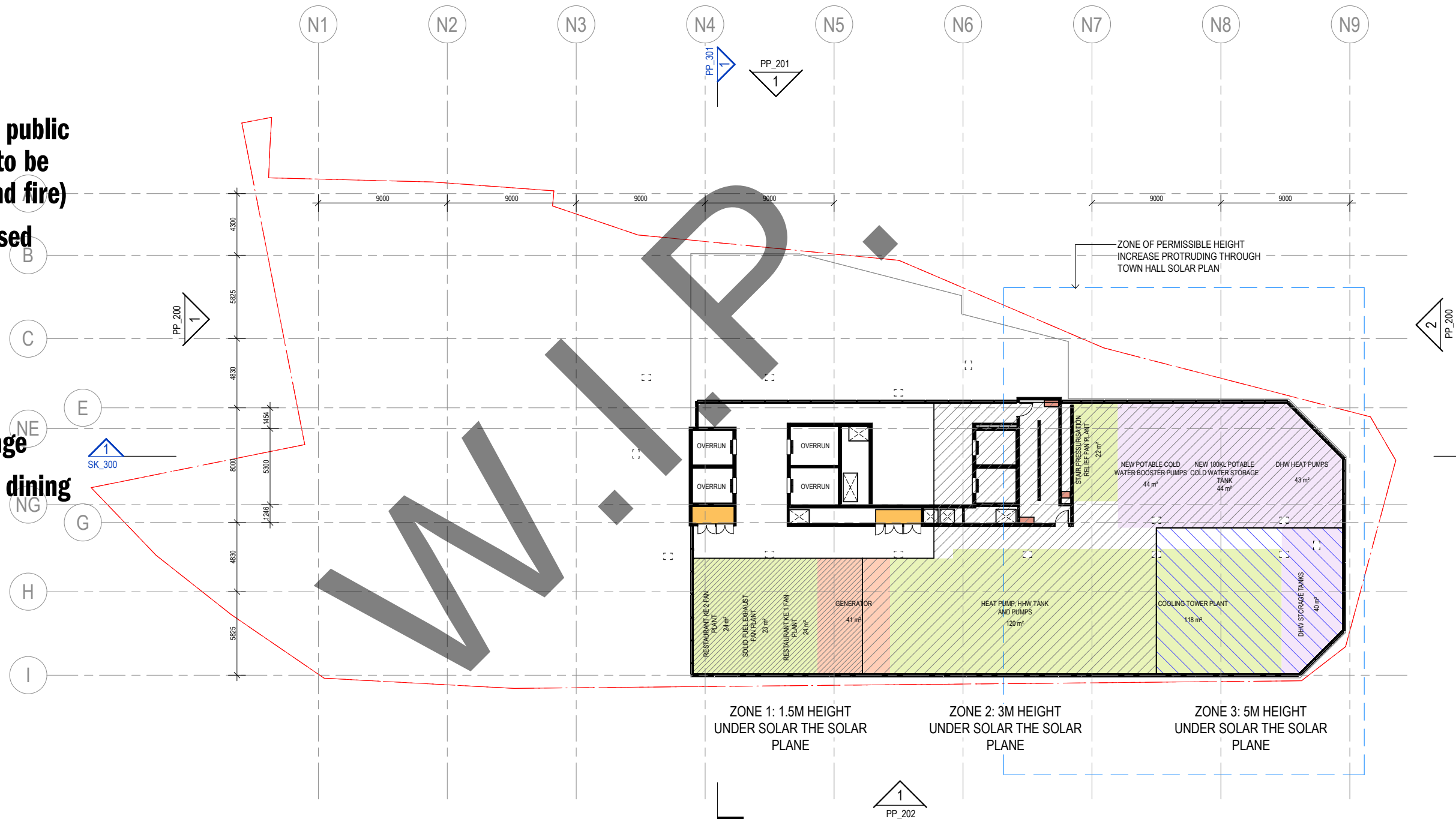
- Level 21 to service the public (additional population to be allowed for in lifting and fire)
- Level 21 to include leased tenancy:
 - Restaurant
 - Kitchen
 - Toilets
 - Coldroom / Storage
 - Indoor / Outdoor dining



NEW HOTEL

LEVEL 22 PLAN

- Level 21 to service the public (additional population to be allowed for in lifting and fire)
- Level 21 to include leased tenancy:
 - Restaurant
 - Kitchen
 - Toilets
 - Coldroom / Storage
 - Indoor / Outdoor dining



3D VIEWS

L11

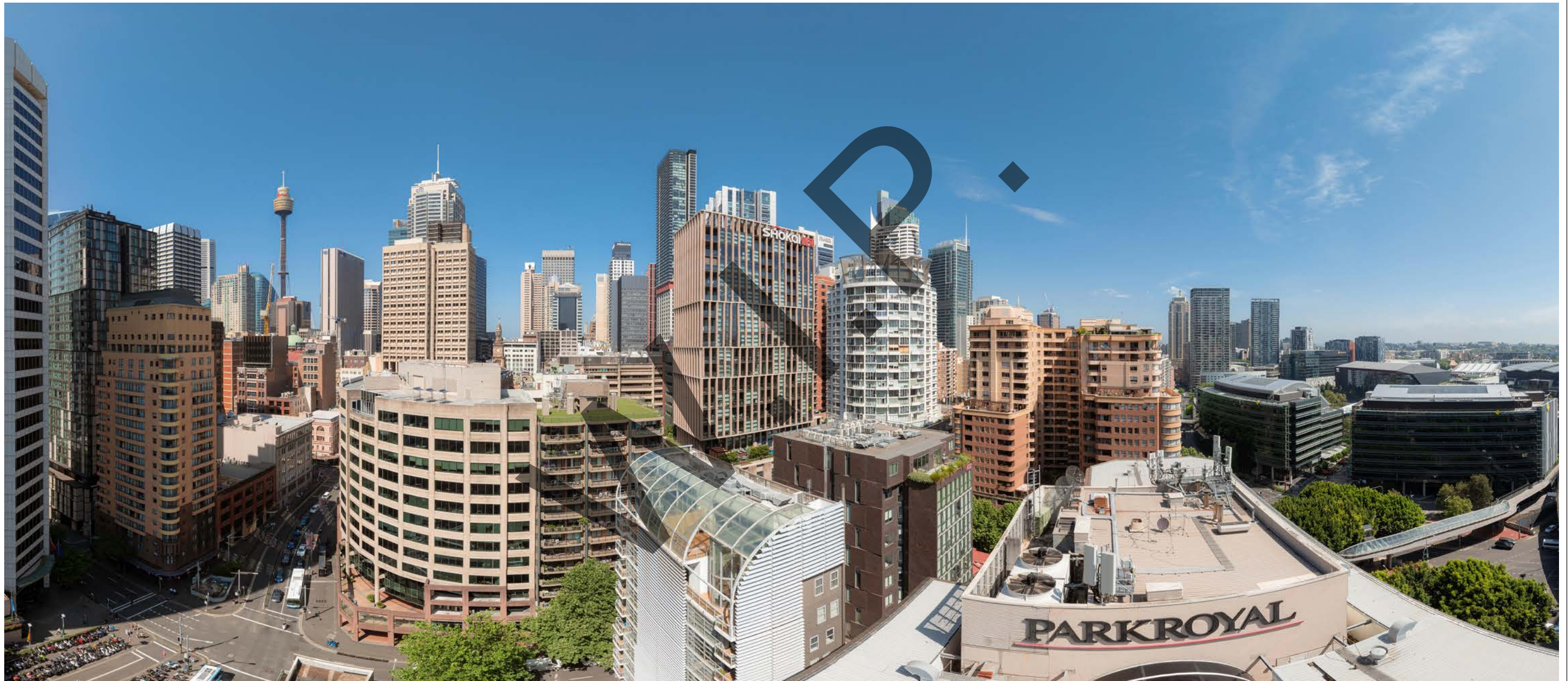
View To North / City



L18



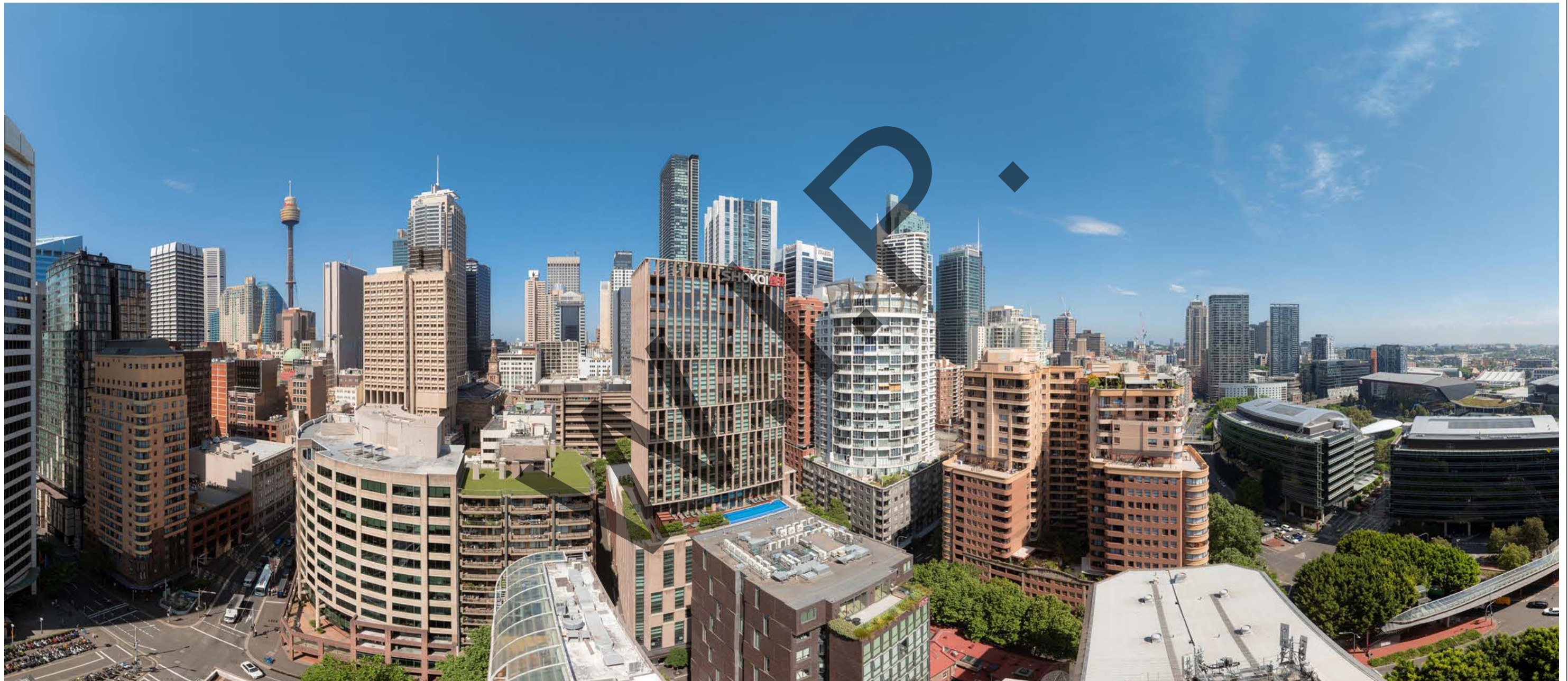
L18



L21



L21





Appendix B

About this Report

Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at

the time of construction as are indicated in the report; and

- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

continued next page

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

intentionally blank

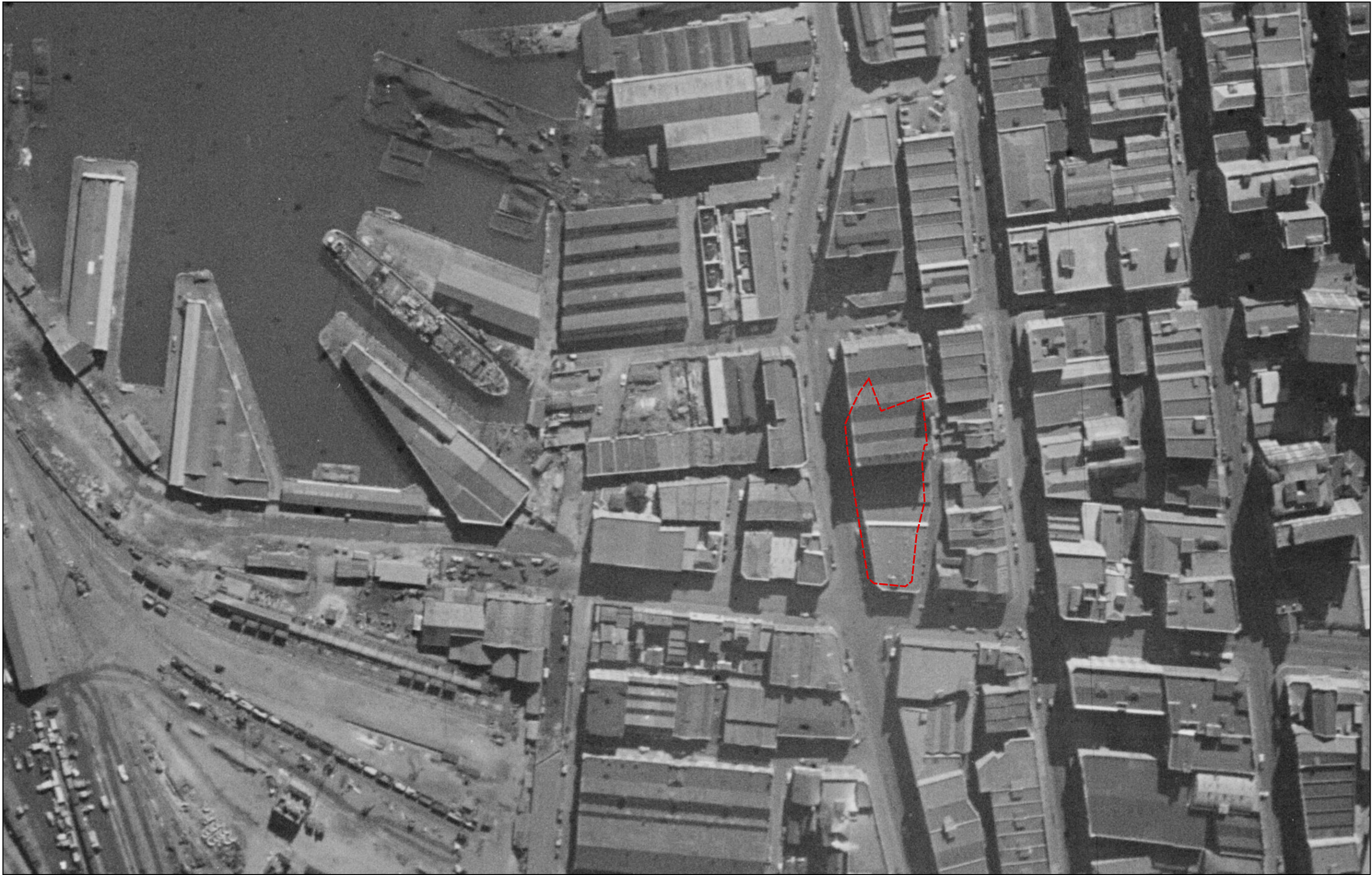
intentionally blank

Appendix C

Site History Information:

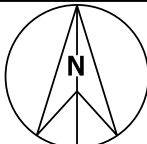
Appendix C1

Historical Aerial Photographs

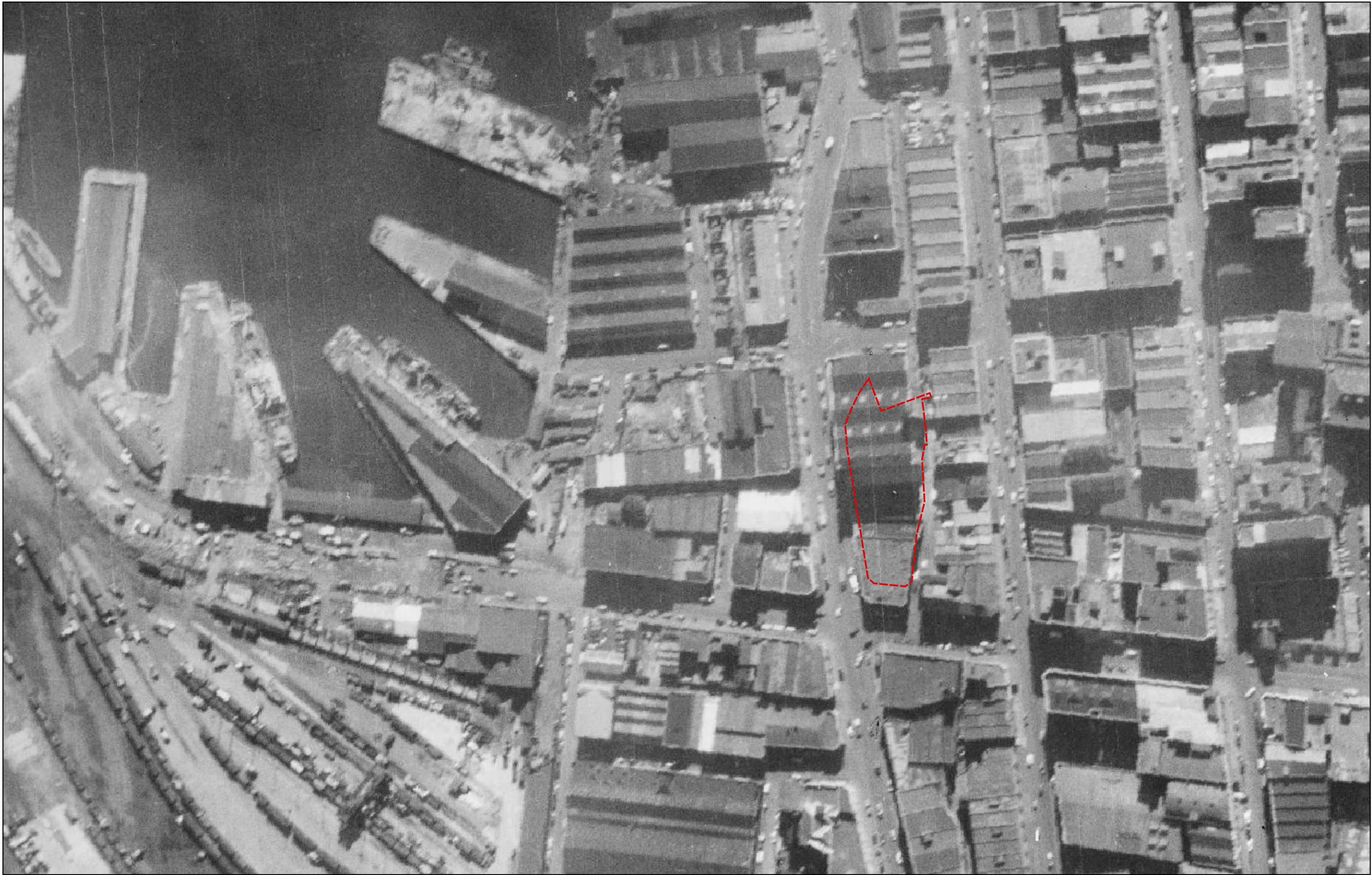


CLIENT: UOL Group Limited	
OFFICE: Sydney	DRAWN BY: IR
SCALE: 1:1500 @A3	DATE: 25.October.2024

TITLE: **Historical Aerial Imagery 1943**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW



PROJECT:	231572.01
DRAWING No:	A
REVISION:	0



CLIENT: UOL Group Limited

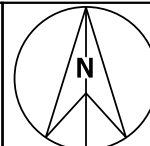
OFFICE: Sydney

DRAWN BY: IR

SCALE: 1:1500 @A3

DATE: 25.October.2024

TITLE: **Historical Aerial Imagery 1951**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW



PROJECT: 231572.01

DRAWING No: B

REVISION: 0



CLIENT: UOL Group Limited

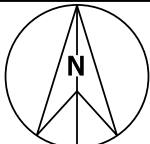
OFFICE: Sydney

DRAWN BY: IR

SCALE: 1:1500 @A3

DATE: 25.October.2024

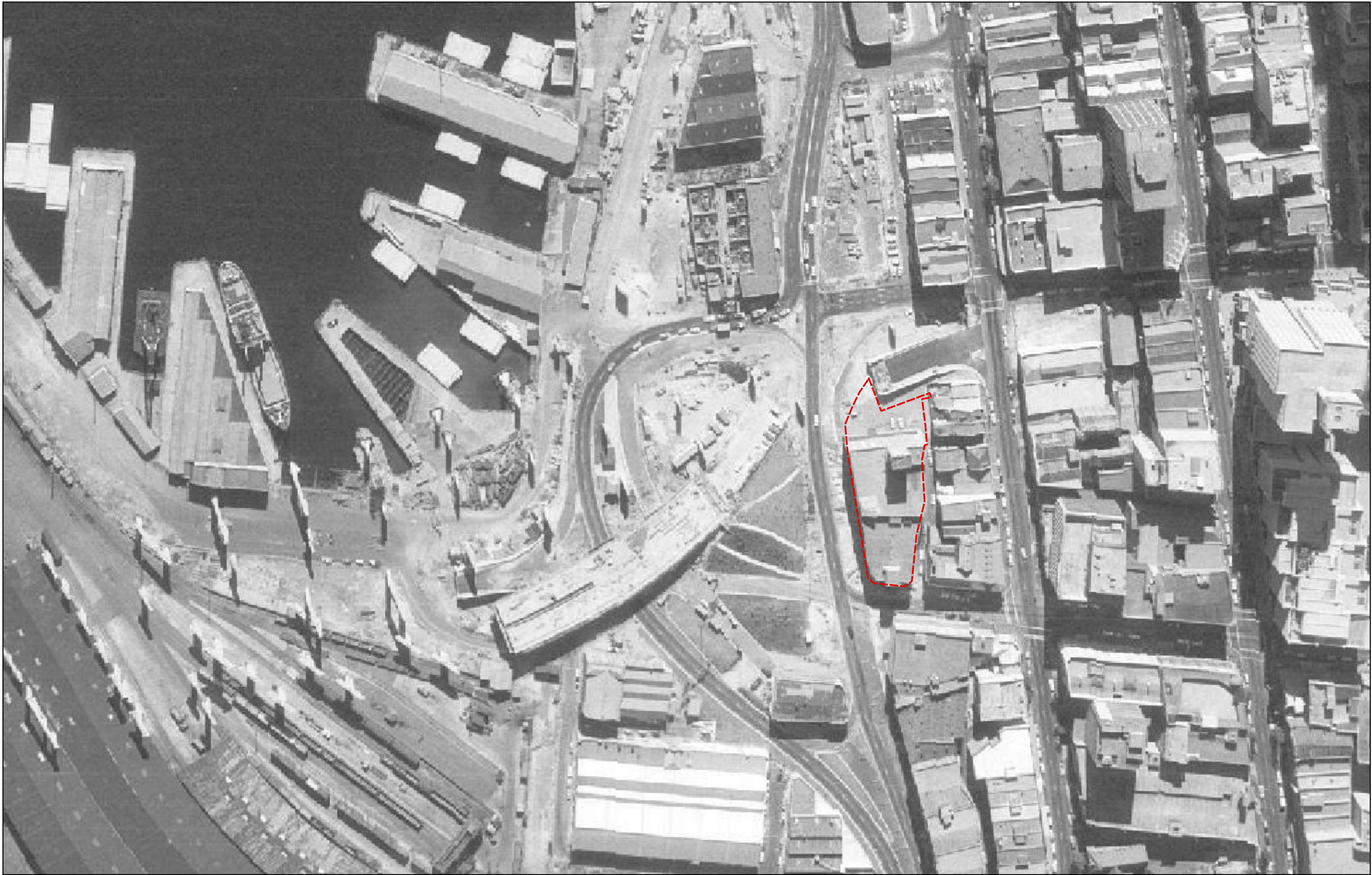
TITLE: **Historical Aerial Imagery 1961**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW



PROJECT: 231572.01

DRAWING No: C

REVISION: 0



CLIENT: UOL Group Limited

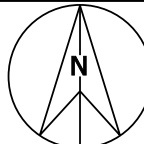
OFFICE: Sydney

SCALE: 1:1500 @A3

DRAWN BY: IR

DATE: 25.October.2024

TITLE: **Historical Aerial Imagery 1978**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW



PROJECT: 231572.01

DRAWING No: D

REVISION: 0



CLIENT: UOL Group Limited

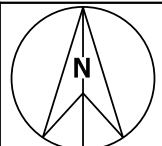
OFFICE: Sydney

DRAWN BY: IR

SCALE: 1:1500 @A3

DATE: 25.October.2024

TITLE: **Historical Aerial Imagery 1982**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW



PROJECT: 231572.01

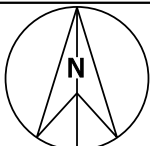
DRAWING No: E

REVISION: 0



CLIENT: UOL Group Limited	
OFFICE: Sydney	DRAWN BY: IR
SCALE: 1:1500 @A3	DATE: 25.October.2024

TITLE: **Historical Aerial Imagery 1991**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW

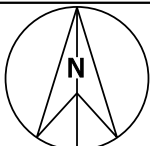


PROJECT:	231572.01
DRAWING No:	F
REVISION:	0



CLIENT: UOL Group Limited	
OFFICE: Sydney	DRAWN BY: IR
SCALE: 1:1500 @A3	DATE: 25.October.2024

TITLE:	Historical Aerial Imagery 2000
	Park Royal Hotel Redevelopment
	150 Day Street, Sydney NSW



PROJECT:	231572.01
DRAWING No:	G
REVISION:	0



CLIENT: UOL Group Limited

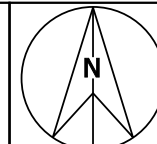
OFFICE: Sydney

DRAWN BY: IR

SCALE: 1:1500 @A3

DATE: 25.October.2024

TITLE: **Historical Aerial Imagery 2014**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW



PROJECT: 231572.01

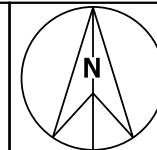
DRAWING No: 1

REVISION: 0



CLIENT: UOL Group Limited	
OFFICE: Sydney	DRAWN BY: IR
SCALE: 1:1500 @A3	DATE: 25.October.2024

TITLE:	Historical Aerial Imagery 2020
	Park Royal Hotel Redevelopment
	150 Day Street, Sydney NSW

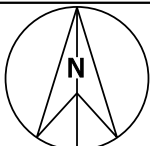


PROJECT:	231572.01
DRAWING No:	J
REVISION:	0



CLIENT: UOL Group Limited	
OFFICE: Sydney	DRAWN BY: IR
SCALE: 1:1500 @A3	DATE: 25.October.2024

TITLE:	Historical Aerial Imagery 2024
	Park Royal Hotel Redevelopment
	150 Day Street, Sydney NSW



PROJECT:	231572.01
DRAWING No:	K
REVISION:	0



CLIENT: UOL Group Limited	
OFFICE: Sydney	DRAWN BY: IR
SCALE: 1:1500 @A3	DATE: 25.October.2024

TITLE: **Historical Aerial Imagery 1982**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW



PROJECT:	231572.01
DRAWING No:	E
REVISION:	0



CLIENT: UOL Group Limited

OFFICE: Sydney

DRAWN BY: IR

SCALE: 1:1500 @A3

DATE: 25.October.2024

TITLE: **Historical Aerial Imagery 2000**
Park Royal Hotel Redevelopment
150 Day Street, Sydney NSW



PROJECT: 231572.01

DRAWING No: G

REVISION: 0

Appendix C2

Historical Title Deeds



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Summary of Owners Report

Re: - 150 Day Street, Sydney

Description: - Lot 20 D.P. 1046870

As regards the part tinted yellow on the attached Cadastral Records Enquiry Report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
03.12.1925 (1925 to 1926)	The Municipal Council of Sydney	Volume 3807 Folio 132
08.03.1926 (1926 to 1936)	John Sands Limited	Volume 3807 Folio 132
13.03.1936 (1936 to 1979)	Geo. H. Martin & Co. Limited Now Geo. H. Martin & Co. Pty Limited	Volume 3807 Folio 132
06.12.1979 (1979 to 1982)	Bruttso Pty Limited	Volume 3807 Folio 132
31.08.1982 (1982 to 1988)	Tabma Properties Pty Limited	Volume 3807 Folio 132
02.12.1988 (1988 to 1994)	Skydane Pty Limited	Volume 3807 Folio 132 Now 1/76514
12.01.1994 (1994 to date)	# Success Venture Pty Limited	1/76514 Then 8/861767 1/1031912 10/1036978 Now 20/1046870

Denotes Current Registered Proprietor

As regards the part tinted green and numbered (1) on the attached Cadastral Records Enquiry Report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
16.05.1923 (1923 to 1968)	John Sands Limited	Volume 3453 Folio 215
06.09.1968 (1968 to 1996)	The Commissioner for Main Roads Now Roads & Traffic Authority of New South Wales	Volume 3453 Folio 215 Then 3/773893 Now 8/861767

Continued over.



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Continued as regards the part tinted green and numbered (1) on the attached Cadastral Records Enquiry Report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
06.09.1996 (1996 to date)	# Success Venture Pty Limited	8/861767 Then 1/1031912 10/1036978 Now 20/1046870

Denotes Current Registered Proprietor

As regards the part tinted green and numbered (2) on the attached Cadastral Records Enquiry Report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
16.05.1923 (1923 to 1968)	John Sands Limited	Volume 3453 Folio 215
06.09.1968 (1968 to 1988)	The Commissioner for Main Roads	Volume 3453 Folio 215 Now 2/773893
22.07.1988 (1988 to 1994)	Skydane Pty Limited	2/773893
12.01.1994 (1994 to date)	# Success Venture Pty Limited	2/773893 Then 8/861767 1/1031912 10/1036978 Now 20/1046870

Denotes Current Registered Proprietor

As regards the part tinted blue on the attached Cadastral Records Enquiry Report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
17.01.1923 (1923 to 1968)	John Sands Limited	Book 1289 No. 6385 (Mortgage)
28.06.1968 (1968 to	The Commissioner for Main Roads	Book 2890 No. 826 Now 2/773893
22.07.1988 (1988 to 1994)	Skydane Pty Limited	2/773893



ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Continued as regards the part tinted blue on the attached Cadastral Records Enquiry Report.

<u>Date of Acquisition and term held</u>	<u>Registered Proprietor(s) & Occupations where available</u>	<u>Reference to Title at Acquisition and sale</u>
12.01.1994 (1994 to date)	# Success Venture Pty Limited	2/773893 Then 8/861767 1/1031912 10/1036978 Now 20/1046870

Denotes Current Registered Proprietor

Leases, excluding premises: -

- Various leases affecting the land tinted yellow were found from 28th May 1992 to 1st July 1992, now expired or surrendered – not investigated.
- Various leases affecting the land tinted green and numbered 2 were found from 6th September 1988 to 12th January 1994, now expired or surrendered – not investigated.
- 13.07.2017 (AM 545406) now expired – not investigated.

Easements: -

- 27.08.1996 (D.P. 861767) Easement for Drainage 1.5 wide and Easement for Support 1.5 wide.
- 27.08.1996 (D.P. 861767) Right of Public Footway 3. Wide.
- 27.08.1996 (D.P. 861767) Easement for Drainage 1.5 wide (Designated E).
- 27.08.1996 (D.P. 861767) Easement for Drainage 1.5 wide (Designated D).
- 02.05.2003 (9450438) Easement for Rock Anchors and support variable width.
- 25.01.2006 (D.P. 1092390) Easement for Electricity purposes variable width.

Yours Sincerely
Mark Groll
9 October 2024

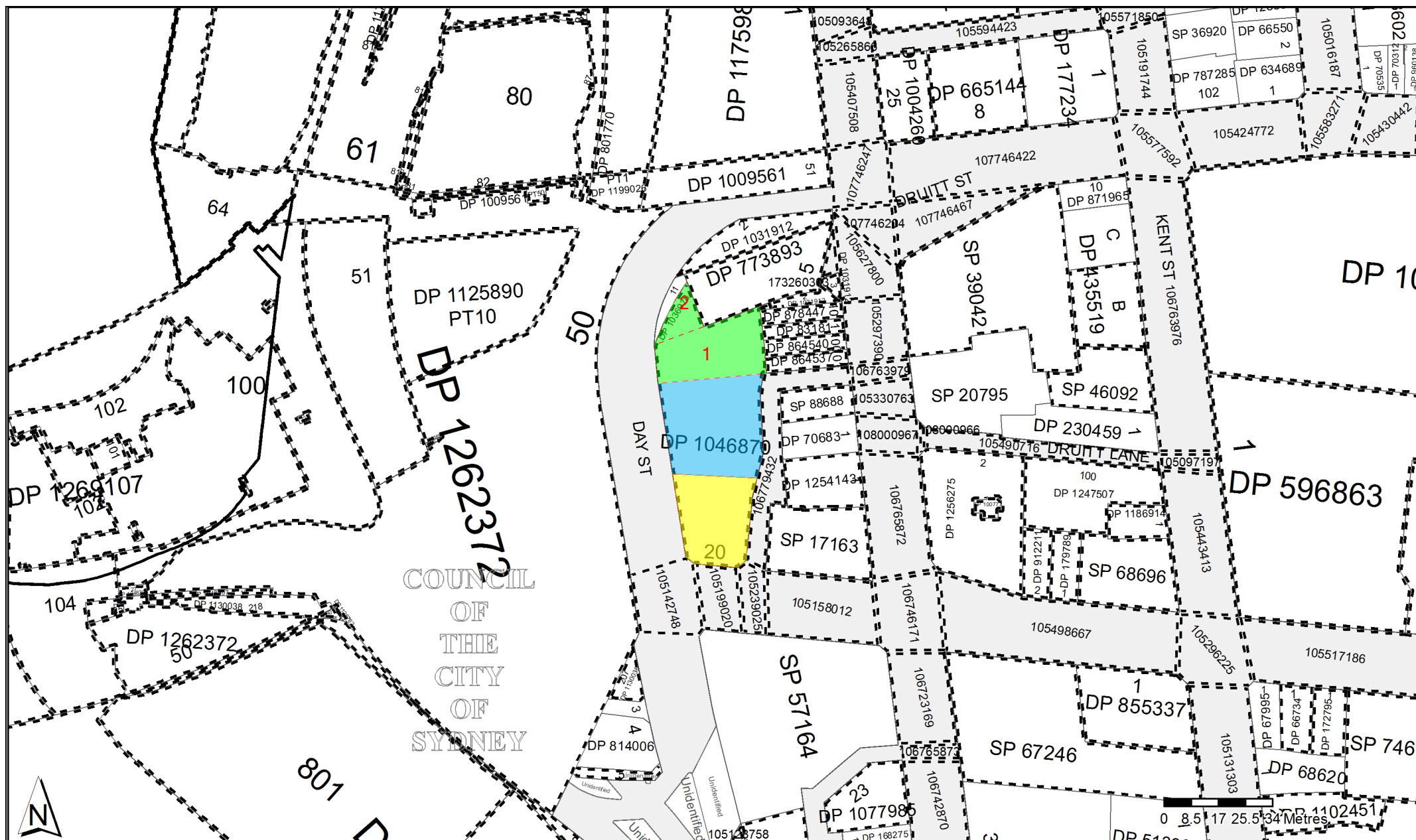
Cadastral Records Enquiry Report : Lot 20 DP 1046870

Locality : SYDNEY

Parish : ST ANDREW

LGA : SYDNEY

County : CUMBERLAND





PLAN FORM 2a

Plan Drawing only to appear in this space

Signatures and seals only.

Council Clerk's Certificate

I hereby certify that -

(a) the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

(b) the requirements of section 34B of the Metropolitan Water, Sewerage and Drainage Act, 1924, as amended, Hunter District Water, Sewerage, and Drainage Act, 1925, as amended

Have been complied with by the applicant in relation to the proposed -

(Insert "new road", "subdivision" or "consolidated lot") set out herein

Subdivision No.

Date

(Signature)

Council Clerk

*This part of certificate to be deleted where the application is only for a consolidated lot or the opening of a new road or where the land to be subdivided is wholly outside the area of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter District Water Board.

(Where it is inapplicable)

LOT 5 IS REQUIRED FOR CONTROLLED ACCESS ROAD UNDER DIVISION 2 PART 3 OF THE STATE ROADS ACT, 1986.

ACCESS WILL BE DENIED ACROSS THE BOUNDARIES MARKED A-B AND D-E

⊕ BOUNDARY OF LOT 3 ABOVE

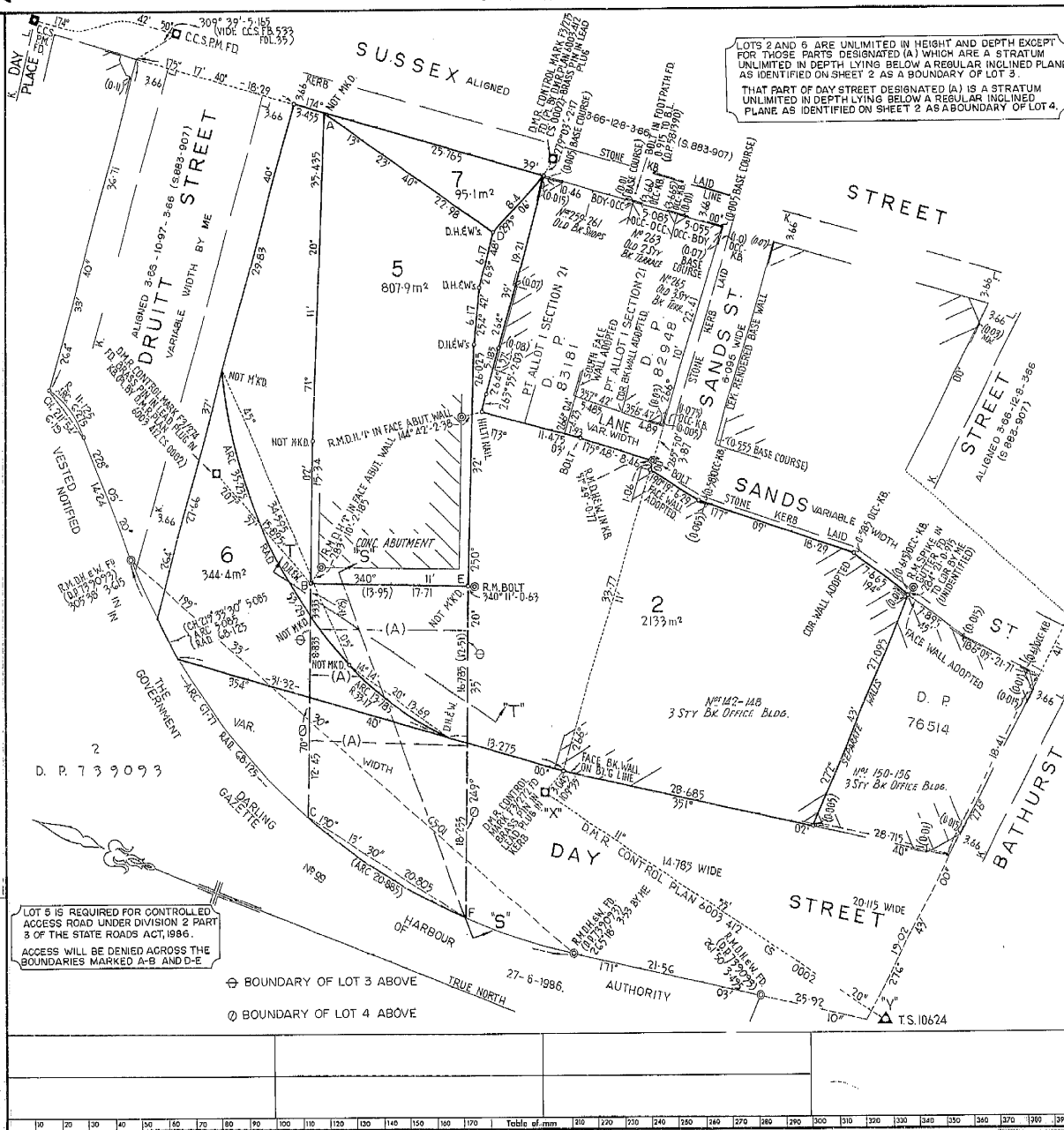
⊙ BOUNDARY OF LOT 4 ABOVE

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this day.

21st March, 1988

10 20 30 40 50 60 70 Table of mm 110 120 130 140



LOTS 2 AND 6 ARE UNLIMITED IN HEIGHT AND DEPTH EXCEPT FOR THOSE PARTS DESIGNATED (A) WHICH ARE A STRATUM UNLIMITED IN DEPTH LYING BELOW A REGULAR INCLINED PLANE AS IDENTIFIED ON SHEET 2 AS A BOUNDARY OF LOT 3.

THAT PART OF DAY STREET DESIGNATED (A) IS A STRATUM UNLIMITED IN DEPTH LYING BELOW A REGULAR INCLINED PLANE AS IDENTIFIED ON SHEET 2 AS A BOUNDARY OF LOT 4.

DP 773893

Registered: 17.3.1988

C.A.: TORRENS & OLD SYSTEM

Title System: ACQUISITION

Ref. Map: CITY SECTION 21

Last Plans: DP 443299 (PT.)
DP 107206 (PT.)

PLAN OF LAND TO BE ACQUIRED FOR THE PURPOSES OF THE STATE ROADS ACT, 1986

Reduction Ratio 1:200
Lengths are in metres.

Municipality: SYDNEY

Locality: DARLING HARBOUR

Parish: ST ANDREW

County: CUMBERLAND

This is sheet 1 of my plan in 2 sheets.
(Delete if inapplicable)

JOHN HAMILTON GILLIES
DEPARTMENT OF MAIN ROADS, N.S.W.
I, a surveyor registered under the Surveyors Act, 1929, as amended, hereby certify that the survey represented in this plan is accurate and has been made "in accordance with the Survey Practice Regulations, 1933, and was completed on 4 NOVEMBER 1989."

Signature: [Signature]
Date: 16.12.87
D.M.R. CONTROL PLAN 5101 412 55 0002

Panel for use only for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

LOTS 3, 4, AND 5 ARE REQUIRED FOR CONTROLLED ACCESS ROAD UNDER DIVISION 2 PART 3 OF THE STATE ROADS ACT, 1986.

ACCESS WILL BE DENIED ACROSS THE BOUNDARIES OF LOTS 3, 4 AND 5 MARKED A-B-C AND D-E.

LOTS 6 AND 7 ARE TO BE DECLARED PUBLIC ROAD.

APPROVED: [Signature]
FOR DEPUTY PRINCIPAL SURVEYOR AND PROPERTY OFFICER,
DEPARTMENT OF MAIN ROADS,
17.1.88

D.M.R. FILE: 150 DAY STREET

D.M.R. PLAN: 5101 412 55 0005

	10	20	30	40	50	60	70	Table of mm	110	120	130	140
--	----	----	----	----	----	----	----	-------------	-----	-----	-----	-----



SEARCH DATE

9/10/2024 1:15PM

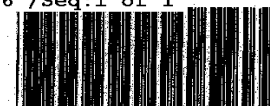
FOLIO: 1/76514

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 3807 FOL 132

Recorded	Number	Type of Instrument	C.T. Issue
2/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
31/8/1990		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
3/12/1991	E101021	CAVEAT	
28/5/1992	E490671	LEASE	EDITION 1
1/7/1992	E549129	LEASE	EDITION 2
15/10/1993	I673980	REQUEST	
15/10/1993	I673981	REQUEST	EDITION 3
12/1/1994	I886657	WITHDRAWAL OF CAVEAT	
12/1/1994	I886660	TRANSFER BY MORTGAGEE UNDER POWER OF SALE	EDITION 4
13/1/1994	I886662	MORTGAGE	EDITION 5
20/8/1996	DP861767	DEPOSITED PLAN	FOLIO CANCELLED RESIDUE REMAINS

*** END OF SEARCH ***



I
886660 H

**TRANSFER BY MORTGAGEE
UNDER POWER OF SALE**

REAL PROPERTY ACT, 1900
(See Instructions for Completion on back of form)

Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
Polto Identifiers 1/76514 2/773893	WHOLE	Darling Harbour Sydney
TRANSFEROR Mort (b) TRICONTINENTAL CORPORATION LIMITED ACN 008 416 297		OFFICE USE ONLY N

(the abovesigned TRANSFEROR) being the registered proprietor of MORTGAGE No. Y392953
dated 12th May 19 89, from the MORTGAGOR, Skydane Pty Limited
ACN 003 283 074

I hereby acknowledge receipt of the consideration of \$ 50,000,000
and as mortgagee under the abovementioned mortgage, transfer in exercise of power of sale an estate in fee simple in the land above described to the under-
mentioned TRANSFEREE

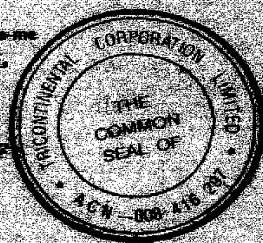
TRANSFEREE Mort (b)	OFFICE USE ONLY
SUCCESS VENTURE PTY LIMITED ACN 060 569 539 c/- Level 38, MLC Centre, 19-29 Martin Place, Sydney as joint tenants/tenants in common	S off M Y392953

subject to the following PRIOR ENCUMBRANCES 1. _____
2. _____ 3. _____

DATE OF TRANSFER 26th OCTOBER 1993

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900.

Signed in my presence by the transferor who is personally known to me
THE COMMON SEAL OF TRICONTINENTAL
CORPORATION LIMITED WAS APPLIED
IN ACCORDANCE WITH ITS ARTICLES
OF ASSOCIATION IN THE PRESENCE OF



J Amley
Director/Secretary

Signature of Transferor
Director/Secretary

Signed in my presence by the transferee who is personally known to me

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

BRIAN McFADYEN
Solicitor, Sydney
11/10/93

LODGED BY		CT		OTHER	
LEGALITIES PTY. LIMITED DX 725 SYDNEY PH 221 8866					
Delivery Box Number M6MM:LR					
Extra Fee	Checked	REGISTERED - 19		Herewith.	
				In R.G.O. with	
Dep. Mgr.	Yes			Produced by	
Destroyed	No				
Registral General		off		Y392953	

TO BE COMPLETED
BY SENDING PARTY
Mort (b) and (c)

OFFICE USE ONLY



SEARCH DATE

9/10/2024 2:04PM

FOLIO: 3/773893

First Title(s): OLD SYSTEM

Prior Title(s): VOL 3453 FOL 215

Recorded	Number	Type of Instrument	C.T. Issue
1/6/1988	DP773893	DEPOSITED PLAN	FOLIO CREATED CT NOT ISSUED
20/8/1996	DP861767	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

RP 36



PA
060558 E



RESUMPTION APPLICATION

Section 31A (2) Real Property Act, 1900

RA

or

\$ 65V

DESCRIPTION OF LAND

Note (a)

DESCRIPTION OF EASEMENT

Note (b)

APPLICANT

Note (c)

GAZETAL

Note (d)

EASEMENT

Note (e)

Note (f)

Note (c)

Lot No.	Plan No.	Location
2 ϕ	773893	Ph: St. Andrew Co: Cumberland
Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
	WHOLE	

APPLICANT
 Note (c)
COMMISSIONER FOR MAIN ROADS.

(the abovenamed Applicant) in consequence of the resumption notified in Government Gazette dated 11th March 1988, folio 1596, a true copy whereof is attached hereto, hereby applies to the Registrar General

- (i) for the issue of a certificate of title in favour of the applicant,
 (ii) ~~for the recording of an easement for~~

so resumed on the folio(s) of the Register, described in the above schedule.

And I Hugh King Roberts, State Crown Solicitor hereby certify that

- (1) I am authorised to make the within application;
 (2) the said land has not been divested from the applicant the Commissioner for Main Roads and no estate or interest therein has been created in favour of any other person.
 (3) the said land is not under the provisions of the Real Property Act, 1900, and no sale, lease or other transaction affecting it is intended to be completed prior to the issue of the folio of the Register; and
 (4) this application is correct for the purposes of the Real Property Act, 1900.

(Copy of Gazette notification.)

See Annexure Hereto

Dated SYDNEY this 23rd day of March 1988

Signed in my presence

EXECUTION

Note (g)

by the said Hugh King Roberts, State Crown Solicitor by
John Anthony Mahoney, State Crown Solicitor's Office,
 who is personally known to me:

Signature of Witness

H. K. ROBERTS
 State Crown Solicitor
 per

S. Aust. Clerk, State Crown Solicitor's

Name of Witness (BLOCK LETTERS)

88/715 C25:DMCO
 Signature

TO BE COMPLETED BY LODGING PARTY
 Notes (h) and (i)

Passed	LODGED BY STATE CROWN SOLICITORS OFFICE GOODFELL BUILDING 112 CHIFLEY SQUARE, SYDNEY. 2000 DX 19 PHONE: 238-7406 Delivery Box Number 813E	LOCATION OF DOCUMENTS		DELIVERY DIRECTIONS	
		CT	OTHER		
Checked			Herewith		
			In R.G.O. with		
			Produced by		

ANNEXURE TO RESUMPTION APPLICATION DATED
by State Crown Solicitor

22.MAR1988

1596

NEW SOUTH WALES GOVERNMENT GAZETTE No. 52

[11 MARCH, 1988]

STATE ROADS ACT 1986—PUBLIC WORKS ACT 1912

NOTIFICATION OF APPROPRIATION OF LAND AND DECLARATION
OF PUBLIC ROAD AT DARLING HARBOUR IN THE CITY OF
SYDNEY

IT is hereby notified and declared by His Excellency the Governor, acting with the advice of the Executive Council, that in pursuance of the State Roads Act 1986, the land described in Schedules 1 and 2 hereunder in respect of so much of the said land as is Crown land is hereby appropriated, and in respect of so much of the said land as is private property is hereby resumed, under the Public Works Act 1912, for the purposes of the State Roads Act 1986, and that all the said land is hereby vested in The Commissioner for Main Roads; AND further, that the land described in Schedule 1 is hereby declared a public road and placed under the control of the Council of the City of Sydney.

Dated at Sydney, this ninth day of March, 1988.

J. A. ROWLAND, Governor.

By His Excellency's Command.

SCHEDULE 1

All those pieces or parcels of land situate in the City of Sydney, Parish of St Andrew and County of Cumberland, being part of the land comprised within Certificate of Title, volume 3453, folio 215, and shown as lot 6 in Deposited Plan 773893; and part of the land comprised within Certificate of Title, volume 7634, folio 156, and volume 8050, folios 242 to 245 inclusive, and shown as lot 7 in Deposited Plan 773893.

Deposited Plan 773893 is also numbered 5101 412 SS 0005 at the Department of Main Roads. The land is in the possession of the Commissioner for Main Roads.

SCHEDULE 2

All that piece or parcel of land situate in the City of Sydney, Parish of St Andrew and County of Cumberland, being (part) of the land in Deed of Conveyance No. 826, Book 2890, and part of the land in Certificates of Title, volume 3453, folio 215, volume 7634, folio 156, volume 8050, folios 242 and 243, and shown as lot 2 in Deposited Plan 773893. Deposited Plan 773893 is also numbered 5101 412 SS 0005 at the Department of Main Roads. The land is in the possession of the Commissioner for Main Roads.

LOTS 6 AND 7
PUBLIC ROAD

WHOLE (SEE ERRATUM)
BELOW

LOT 2

STATE ROADS ACT 1986—PUBLIC WORKS ACT 1912

ERRATUM

IN the notification published in Government Gazette No. 52 of 11th March, 1988, on page 1596 under the heading of "Notification of Appropriation of Land and Declaration of Public Road at Darling Harbour in the City of Sydney" Schedule 2 should be corrected on the second line by substituting the words "the whole" in lieu of the word "part", such that the land resumed is the whole of the land in Deed of Conveyance No. 826, Book 2890.

TERRY SHEAHAN, Minister for Transport.

(D.M.R. Papers F4/412.1438)

(4056)

H. K. ROEL
State Crown Solicitor
per

Authorised Officer: _____

Witness: _____

For use where the land and/or easement is not under the provisions of the Real Property Act, 1900.

INSTRUCTIONS FOR COMPLETION

Use this form where the land resumed is not under the Real Property Act, 1900.

Typewriting and handwriting should be clear, legible and in permanent non-copying ink.

Alterations are not to be made by erasure; the words rejected are to be ruled through and initialled by the authorised officer.

If the space provided is insufficient, additional sheets of the same size and quality of paper and having the same margins as this form should be used. Each additional sheet must be identified as an annexure and signed by the authorised officer and attesting witness.

The following instructions relate to the side notes on the form.

- (a) (i) The lot and plan number or portion.
(ii) Insert the locality shown on the plan, e.g. at Chullora. If the locality is not shown, insert the Parish and County, e.g. Ph. Lismore Co. Rous.
- (b) (i) Insert the current Folio Identifier or Volume and Folio of the Certificate of Title/Crown Grant of the servient tenement.
(ii) Insert the locality shown on the Certificate of Title/Crown Grant.
(iii) A resumption application may not be made for the creation of a folio of the Register for an easement alone (see section 31A (28) of the Real Property, Act, 1900).
- (c) State the name of the authority in which the land is vested.
- (d) Show date and folio number of Gazette notification.
- (e) (i) Rule through if not applicable.
(ii) State the nature of the easement (see e.g. section 181A of the Conveyancing Act, 1919) and delete inappropriate words.
- (f) Name of authorised officer.
- (g) EXECUTION—The certificate of correctness under the Real Property Act, 1900 must be signed by an authorised officer of the applicant. Any person falsely or negligently certifying is liable to the penalties provided by section 117 of the Real Property Act, 1900.
- (h) Insert the name, postal address, Document Exchange reference, telephone number and Delivery Box number of the lodging party.
- (i) If any document is lodged with this application, record in DOCUMENTS LODGED panel.
- (j) Insert a copy of the Gazette notification. If the space provided is insufficient for this purpose, use an annexure sheet (identified as such) of the same size and quality paper as this form.

OFFICE USE ONLY

FIRST SCHEDULE DIRECTIONS					
(A)	FOLIO IDENTIFIER	(B) DIRECTION	(C) NAME		
SECOND SCHEDULE & OTHER DIRECTIONS					
(D)	FOLIO IDENTIFIER	(E) DIRECTION	(F) NOTFN TYPE	(G) DEALING NUMBER	(H) DETAILS



SEARCH DATE

9/10/2024 2:03PM

FOLIO: 2/773893

First Title(s): OLD SYSTEM

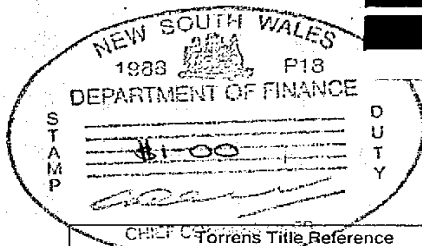
Prior Title(s): VOL 3453 FOL 215 VOL 7634 FOL 156 -
VOL 8050 FOLS 242-243 -

Recorded -----	Number -----	Type of Instrument -----	C.T. Issue -----
27/4/1988	PA60558	PRIMARY APPLICATION	FOLIO CREATED EDITION 1
23/6/1988	X541294	REQUEST	EDITION 2
22/7/1988	X707266	TRANSFER	
22/7/1988	X707267	MORTGAGE	EDITION 3
22/8/1988	X782943	CAVEAT	
6/9/1988	X807032	LEASE	EDITION 4
14/6/1989	Y392951	DISCHARGE OF MORTGAGE	
14/6/1989	Y392953	MORTGAGE	EDITION 5
2/8/1989	Y488896	SURRENDER OF LEASE	EDITION 6
27/2/1992	E285615	CAVEAT	
28/5/1992	E490671	LEASE	EDITION 7
1/7/1992	E549129	LEASE	EDITION 8
15/3/1993	I185886	CAVEAT	
15/10/1993	I673980	REQUEST	
15/10/1993	I673981	REQUEST	EDITION 9
12/1/1994	I886658	WITHDRAWAL OF CAVEAT	
12/1/1994	I886659	WITHDRAWAL OF CAVEAT	
12/1/1994	I886660	TRANSFER BY MORTGAGEE UNDER POWER OF SALE	
12/1/1994	I886661	LEASE	EDITION 10
13/1/1994	I886662	MORTGAGE	EDITION 11
20/8/1996	DP861767	DEPOSITED PLAN	FOLIO CANCELLED

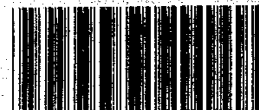
*** END OF SEARCH ***

RP 13

STAMP DUTY



TRANSFER
REAL PROPERTY ACT, 1900



X707266

T	B	1 ^{of} 2	X
	\$	39	

R1/2

DESCRIPTION
OF LAND
Note (a)

CHIEF OF Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
Folio Identifier 2/773893	WHOLE	at Sydney

TRANSFEROR
Note (b)

THE COMMISSIONER FOR MAIN ROADS

ESTATE
Note (c)

(the abovenamed TRANSFEROR) hereby acknowledges receipt of the consideration of \$8,100,000.00
and transfers an estate in fee simple
in the land above described to the TRANSFEREE

TRANSFEREE
Note (d)

SKYDANE PTY. LIMITED of 12th Floor, 32 Bridge Street, Sydney

as joint tenants/tenants in common

OFFICE USE ONLY

S

PRIOR
ENCUMBRANCES
Note (f)

subject to the following PRIOR ENCUMBRANCES 1.
2. 3.

DATE 6 July 1988

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900.

EXECUTION
Note (g)

Signed in my presence by the transferor who is personally known to me

SIGNED BY THE COMMISSIONER
FOR MAIN ROADS by his
delegate W. McL. CABLE
in the presence of
T. MAE
T. MAE
SOLICITOR
SYDNEY

Signed in my presence by the transferee who is personally known to me

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness

Signature of Transferor

EXECUTED PURSUANT TO DELEGATION
BOOK 3694 NO 480

Signature of Transferee

PAULINE MARGARET MALONEY

TO BE COMPLETED
BY LODGING PARTY
Notes (h)
and (i)

LODGED BY		LOCATION OF DOCUMENTS	
24J	24J	CT	OTHER
COMMONWEALTH BANK OF AUSTRALIA BRANCH SECURITIES PITT STREET & MARTIN PLACE SYDNEY. PHONE 233-3155 D.X. 1020 SYDNEY			Herewith.
Delivery Box Number 24J			In L.T.O. with
24J			Produced by
Checked	Passed	Secondary Directions	
Signed	Extra Fee		
REGISTERED - -19		Delivery Directions	
22 JUL 1988			

OFFICE USE ONLY



SEARCH DATE

8/10/2024 9:58AM

FOLIO: 8/861767

First Title(s): OLD SYSTEM

Prior Title(s): 1/76514 2-3/773893

Recorded	Number	Type of Instrument	C.T. Issue
27/8/1996	DP861767	DEPOSITED PLAN	FOLIO CREATED EDITION 1
6/9/1996	2379060	TRANSFER	EDITION 2
6/8/2001	DP1031912	DEPOSITED PLAN	
8/8/2001	7729569	REQUEST	
9/10/2001	7844194	REQUEST	FOLIO CANCELLED

*** END OF SEARCH ***

97-01T

①

LTO Licence No.
27C/0042/95

TRANSFER
Real Property Act 1900



2379060 M

Office of State Revenue use only

\$12-50

05/21\$

10/426441102 40 5291 96/042

1100 JWSIS "M-S-N

(A) **LAND TRANSFERRED**

Show no more than 20 References to Title.
If appropriate, specify the share transferred.

Those parts of Lot 8 formerly comprised within 3/773893 and 7/773893
in D.P. 861767

(B) **LODGED BY**

L.T.O. Box

27C

Name, Address or DX and Telephone

Freehill Hollingdale & Page
Solicitors
DX 364 Sydney
ph: 225 5000

REFERENCE (max. 15 characters):

BJMcF:DCK:31D

(C) **TRANSFEROR**

Roads & Traffic Authority of New South Wales

(D) acknowledges receipt of the consideration of the grant of certain easements by the Transferee
and as regards the land specified above transfers to the Transferee an estate in fee simple

(E) Subject to the following **ENCUMBRANCES** 1. _____ 2. _____ 3. _____

(F) **TRANSFEE**

T

Success Venture Pty Limited ACN 060 569 539

(G) **TENANCY: Not applicable**

(H) We certify this dealing correct for the purposes of the Real Property Act 1900. **DATED** _____

Signed in my presence by the Transferor who is personally known to me.

Signature of Witness

TREVOR GILLETT
Name of Witness (BLOCK LETTERS)

260 ELIZABETH ST SURRY HILLS
Address of Witness

Signature of Transferor

EXECUTED BY THE MANAGER PROPERTY ASSETS
PURSUANT TO DELEGATIONS BOOK 4008 No. 809
AND BOOK 4117 No. 182.

Signed in my presence by the Transferee who is personally known to me.

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

Signature of Transferee's solicitor
(DANIELLE KELLY)

INSTRUCTIONS FOR FILLING OUT THIS FORM ARE GIVEN AT THE BACK

CHECKED BY (office use only)



SEARCH DATE

8/10/2024 9:58AM

FOLIO: 1/1031912

First Title(s): OLD SYSTEM

Prior Title(s): 8/861767

Recorded	Number	Type of Instrument	C.T. Issue
6/8/2001	DP1031912	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
9/10/2001	7844194	REQUEST	FOLIO CREATED CT NOT ISSUED
21/12/2001	DP1036978	DEPOSITED PLAN	
8/2/2002	8247724	REQUEST	
6/3/2002	8411976	DEPARTMENTAL DEALING	
22/5/2002	8618692	DEPARTMENTAL DEALING	
5/8/2002	8702127	DISCHARGE OF MORTGAGE	
5/8/2002	8702128	TRANSFER	FOLIO CANCELLED

*** END OF SEARCH ***



8702128G

Form: 01T
Release: 2
www.lpi.nsw.gov.au



TRANSFER

New South Wales
Real Property Act 1900

28-06-2004 0001015117-001
pages to the top left-hand corner.
SECTION OTHER LEGN-TRANSFER
NO DUTY PAYABLE

PRIVACY NOTE: this information is legally required and will become part of the public record

STAMP DUTY

Office of State Revenue use only

(A) TORRENS TITLE

Lot 11 DP 1036978 PART 1/1031912

(B) LODGED BY

Delivery Box	Name, Address or DX and Telephone COLEMAN & GREIG SOLICITORS 189 Y	CODES T TW (Sheriff)
Reference:		

(C) TRANSFEROR

SUCCESS VENTURE PTY LIMITED ABN 78 060 569 539

(D) CONSIDERATION The transferor acknowledges receipt of the consideration of \$ 79,200.00 and as regards

(E) ESTATE the land specified above transfers to the transferee an estate in fee simple

(F) SHARE TRANSFERRED

(G) Encumbrances (if applicable):

(H) TRANSFEREE

ROADS AND TRAFFIC AUTHORITY OF NEW SOUTH WALES

(I)

TENANCY:

(J) DATE

17th June 2002

Certified correct for the purposes of the Real Property Act 1900 and executed on behalf of the corporation named below by the authorised person(s) whose signature(s) appear(s) below pursuant to the authority specified.

Corporation: SUCCESS VENTURE PTY LIMITED A.B.N 78 060 569 539
Authority:

Signature of authorised person:

Name of authorised person:

Office held:

DIRECTOR - C.S. NG

Signature of authorised person:

Name of authorised person:

Office held:

DIRECTOR - PAM

Certified for the purposes of the Real Property Act 1900 by the person whose signature appears below.

Signature:

Signatory's name:

Signatory's capacity:

ANNE MACKINNON
CLAU OLAF EINBERG
transferees' solicitor

Not for use



SEARCH DATE

8/10/2024 9:57AM

FOLIO: 10/1036978

First Title(s): OLD SYSTEM

Prior Title(s): 1/1031912

Recorded	Number	Type of Instrument	C.T. Issue
21/12/2001	DP1036978	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
5/8/2002	8702128	TRANSFER	FOLIO CREATED EDITION 1
11/11/2002	DP1046870	DEPOSITED PLAN	
3/1/2003	9192536	REQUEST	
14/3/2003	9449042	DEPARTMENTAL DEALING	
17/4/2003	9450438	REQUEST	FOLIO CANCELLED

*** END OF SEARCH ***



SEARCH DATE

8/10/2024 9:57AM

FOLIO: 20/1046870

First Title(s): OLD SYSTEM

Prior Title(s): 10/1036978

Recorded	Number	Type of Instrument	C.T. Issue
11/11/2002	DP1046870	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
2/5/2003	9450438	REQUEST	FOLIO CREATED CT NOT ISSUED
3/8/2005	AB670918	DEPARTMENTAL DEALING	EDITION 1
25/1/2006	DP1092390	DEPOSITED PLAN	EDITION 2
24/4/2007	DP1110512	DEPOSITED PLAN	
13/7/2017	AM545406	LEASE	EDITION 3
22/9/2018	AN730188	DEPARTMENTAL DEALING	EDITION 4 CORD ISSUED
17/12/2021	AR737419	LEASE	EDITION 5
23/4/2024	AT980418	DISCHARGE OF MORTGAGE	EDITION 6
6/5/2024	AT832503	TRANSFER OF LEASE	EDITION 7

*** END OF SEARCH ***



FOLIO: 20/1046870

SEARCH DATE	TIME	EDITION NO	DATE
8/10/2024	9:57 AM	7	6/5/2024

LAND

LOT 20 IN DEPOSITED PLAN 1046870
AT DARLING HARBOUR
LOCAL GOVERNMENT AREA SYDNEY
PARISH OF ST ANDREW COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1046870

FIRST SCHEDULE

SUCCESS VENTURE PTY LIMITED

SECOND SCHEDULE (10 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 X541294 RESTRICTION(S) ON THE USE OF LAND AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 3 DP861767 EASEMENT FOR DRAINAGE 1.5 WIDE AND EASEMENT FOR SUPPORT 1.5 WIDE AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 4 DP861767 RIGHT OF PUBLIC FOOTWAY 3.0 WIDE AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 5 DP861767 EASEMENT FOR DRAINAGE 1.5 WIDE AFFECTING THE PART SHOWN DESIGNATED 'E' IN THE TITLE DIAGRAM
- 6 DP861767 EASEMENT FOR DRAINAGE 1.5 WIDE AFFECTING THE PART DESIGNATED 'D' IN THE TITLE DIAGRAM
- 7 THE LAND ABOVE DESCRIBED IS LIMITED IN STRATUM IN THE MANNER DESCRIBED IN DP1036978
- 8 9450438 EASEMENT FOR ROCK ANCHORS AND SUPPORT VARIABLE WIDTH AFFECTING THE PART DESIGNATED (R) IN THE TITLE DIAGRAM
- 9 DP1092390 EASEMENT FOR ELECTRICITY PURPOSES VARIABLE WIDTH AFFECTING THE PART(S) SHOWN SO BURDENED IN DP1092390
- 10 AR737419 LEASE TO WAVECONN PTY LTD (SEE AT832503) PART FOLIO IDENTIFIER 201,046870, BEING AREA SHOWN HATCHED BLACK ON THE PLAN ANNEXED AND

MARKED 'B'. EXPIRES:
2/10/2026.

NOTATIONS

DP1110512 NOTE: PROPOSED EASEMENT

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

150 Day Street, Sydney

PRINTED ON 8/10/2024

Appendix C3

SafeWork Response

From: Licensing <licensing@safework.nsw.gov.au>
Sent: Friday, 25 October 2024 2:18 PM
To: Irha Riaz
Subject: SafeWork NSW: 01027642 –Site Search application – Result not found [thread::oiC3DiLjcVKulWnsw1jUW3w::]

**This message is suspicious**

- The subject has obscure characters.
- No employee in your company has ever replied to this person.

Security Classification: Sensitive Personal
Please do not amend the subject line of this email

Dear Irha

**Re: Site Search for Schedule 11 Hazardous Chemicals on premises
Application – Result not found**

I refer to your application for a Site Search for Schedule 11 Hazardous Chemicals on premises, received by SafeWork NSW on 8 October 2024 for the following site: 150 Day Street, SYDNEY, NSW, 2000.

A search of the records held by SafeWork NSW has not located any records pertaining to the above-mentioned premises.

If you have any further information or if you have any questions, please use one of the following options, quoting the SafeWork NSW enquiry reference number: 01027642

- Email: licensing@safework.nsw.gov.au
- Phone: 13 10 50

Kind regards
May

May Neill
Licensing Representative | Safework Licensing
Safework NSW
p 13 10 50 |
e may.neill@customerservice.nsw.gov.au | www.customerservice.nsw.gov.au
Level 3, 32 Mann Street, Gosford, NSW 2250



SafeWork

[150 Day St, SYDNEY - TaxInvoice.pdf](#)

thread::oiC3DiLjcVKulWnsw1jUW3w::

Appendix C4

Section 10.7 Planning Certificate

MECONE NSW PTY LIMITED
12/179 Elizabeth St
SYDNEY NSW 2000

PLANNING CERTIFICATE

Under Section 10.7 of the Environmental Planning and Assessment Act, 1979

Applicant: MECONE NSW PTY LIMITED

Your reference:

Address of property: 150 Day Street , SYDNEY NSW 2000

Owner: SUCCESS VENTURE PTY LTD

Description of land: Lot 20 DP 1046870

Certificate No.: 2024309419

Certificate Date: 22/11/24

Receipt No: APC-186582

Fee: \$168.00

Paid: 21/11/24

Title information and description of land are provided from data supplied by the Valuer General and shown where available.



Issuing Officer
per **Monica Barone**
Chief Executive Officer

CERTIFICATE ENQUIRIES:

Ph: 9265 9333

**PLANNING CERTIFICATE UNDER SECTION 10.7 (2) OF THE ENVIRONMENTAL
PLANNING AND ASSESSMENT ACT, 1979**

**MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 2 -
ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION 2021, CLAUSES (1) - (2).**

DEVELOPMENT CONTROLS

The following information must be read in conjunction with and subject to all other provisions of the environmental planning instruments specified in this certificate.

ZONING

Zone SP2 Infrastructure (Sydney Local Environmental Plan 2012)

1 Objectives of zone

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

2 Permitted without consent

Nil

3 Permitted with consent

Horticulture; Roads; Water storage facilities; Water treatment facilities; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose.

4 Prohibited

Any development not specified in item 2 or 3

Zone SP5 Metropolitan Centre (Sydney Local Environmental Plan 2012)

1 Objectives of zone

- To recognise and provide for the pre-eminent role of business, office, retail, entertainment and tourist premises in Australia's participation in the global economy.
- To provide opportunities for an intensity of land uses commensurate with Sydney's global status.
- To permit a diversity of compatible land uses that are characteristic of Sydney's global status and that serve the workforce, visitors and wider community.
- To encourage the use of alternatives to private motor vehicles, including public transport, walking and cycling.
- To promote land uses with active street frontages within podiums that contribute to the character of the street.
- To promote the efficient and orderly development of land in a compact urban centre.

- To promote a diversity of commercial opportunities varying in size, type and function, including new cultural, social and community facilities.
- To recognise the important role that central Sydney's public spaces, streets and amenity play in a global city.
- To promote the primary role of the zone as a centre for employment and permit residential accommodation and serviced apartments where the accommodation complements employment-generating land uses.

2 Permitted without consent

Nil

3 Permitted with consent

Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Information and education facilities; Oyster aquaculture; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Tank-based aquaculture; Tourist and visitor accommodation; Any other development not specified in item 2 or 4

4 Prohibited

Pond-based aquaculture

PROPOSED ZONING

Draft Zone B8 Metropolitan Centre - Planning Proposal (Sydney Local Environmental Plan 2012)

1 Objectives of zone

- To recognise and provide for the pre-eminent role of business, office, retail, entertainment and tourist premises in Australia's participation in the global economy.
- To provide opportunities for an intensity of land uses commensurate with Sydney's global status.
- To permit a diversity of compatible land uses characteristic of Sydney's global status and that serve the workforce, visitors and wider community.
- To encourage the use of alternatives to private motor vehicles such as public transport, walking or cycling.
- To promote uses with active street frontages within podiums that contribute to the vitality, life and existing character of the street.
- To promote the efficient and orderly development of land in a compact urban centre.
- To promote a diversity of commercial opportunities varying in size, type and function, including new cultural, social and community facilities.

- To recognise and reinforce the important role that Central Sydney's public spaces, streets and their amenity play in a global city.
- Promote the primary role of the zone as a centre for employment and permit residential and serviced apartment accommodation where they complement employment generating uses.

2 Permitted without consent

Nil

3 Permitted with consent

Child care centres; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Information and education facilities; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Tourist and visitor accommodation; Any other development not specified in item 2 or 4

4 Prohibited

Nil

LOCAL PLANNING CONTROLS

Sydney Local Environmental Plan 2012 (as amended) – Published 14 December 2012 NSW Legislation Website.

Sydney Development Control Plan 2012 (as amended) - (commenced 14.12.2012)

Planning Proposal: Amendment of Sydney Local Environmental Plan 2012 – Dwelling Retention

The objective of this planning proposal is to amend Sydney LEP 2012 to minimise the loss of housing diversity through the redevelopment of existing dwellings. It will be applied across the City by introducing a 'Local Provision' in Part 6 of Sydney Local Environmental Plan 2012.

HERITAGE

State Heritage Register (Amendment To Heritage Act, 1977 Gazetted 2/4/99)

This property may be identified as being of state heritage significance, and entered on the State Heritage Register.

To confirm whether the site is listed under the Heritage Act 1977 a Section 167 Certificate should be obtained from the NSW Heritage Office by contacting the NSW Heritage office on (02) 9873 8500 for an application form or by downloading the application form from www.heritage.nsw.gov.au

STATE PLANNING INSTRUMENTS

Full copies of State Environmental Planning Policies are available online at www.planning.nsw.gov.au.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

This Policy Streamlines assessment processes for development that complies with specified development standards. The policy provides exempt and complying development codes that have State-wide application, identifying, in the General Exempt Development Code, types of development that are of minimal environmental impact that may be carried out without the need for development consent; and, in the General Housing Code, types of complying development that may be carried out in accordance with a complying development certificate as defined in the Environmental Planning and Assessment Act 1979.

State Environmental Planning Policy (Housing) 2021

The principles of this Policy are as follows:

- (a) enabling the development of diverse housing types, including purpose-built rental housing,
- (b) encouraging the development of housing that will meet the needs of more vulnerable members of the community, including very low to moderate income households, seniors and people with a disability,

- (c) ensuring new housing development provides residents with a reasonable level of amenity,
- (d) promoting the planning and delivery of housing in locations where it will make good use of existing and planned infrastructure and services,
- (e) minimising adverse climate and environmental impacts of new housing development,
- (f) reinforcing the importance of designing housing in a way that reflects and enhances its locality,
- (g) supporting short-term rental accommodation as a home-sharing activity and contributor to local economies, while managing the social and environmental impacts from this use,
- (h) mitigating the loss of existing affordable rental housing.

State Environmental Planning Policy (Planning Systems) 2021

- identifies State or regionally significant development, State significant Infrastructure, and critical State significant infrastructure.
- provides for consideration of development delivery plans by local Aboriginal land councils in planning assessment.
- allows the Planning Secretary to elect to be the concurrence authority for certain development that requires concurrence under nominated State environmental planning policies.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

This SEPP contains:

- planning rules and controls for the clearing of native vegetation in NSW on land zoned for urban and environmental purposes that is not linked to a development application.
- the land use planning and assessment framework for koala habitat.
- provisions which establish a consistent and co-ordinated approach to environmental planning and assessment along the River Murray.
- provisions seeking to protect and preserve bushland within public open space zones and reservations.
- provisions which aim to prohibit canal estate development.
- provisions to support the water quality objectives for the Sydney drinking water catchment.
- provisions to protect the environment of the Hawkesbury-Nepean River system.
- provisions to manage and improve environmental outcomes for Sydney Harbour and its tributaries.
- provisions to manage and promote integrated catchment management policies along the Georges River and its tributaries.

- provisions which seek to protect, conserve and manage the World Heritage listed Willandra Lakes property.

State Environmental Planning Policy (Resilience and Hazards) 2021

This SEPP contains planning provisions:

- for land use planning within the coastal zone, in a manner consistent with the objects of the Coastal Management Act 2016.
- to manage hazardous and offensive development.
- which provides a state-wide planning framework for the remediation of contaminated land and to minimise the risk of harm.

State Environmental Planning Policy (Transport and Infrastructure) 2021

This SEPP contains planning provisions:

- for infrastructure in NSW, such as hospitals, roads, railways, emergency services, water supply and electricity delivery.
- for child-care centres, schools, TAFEs and Universities.
- planning controls and reserves land for the protection of three corridors (North South Rail Line, South West Rail Link extension and Western Sydney Freight Line).
- the land use planning and assessment framework for appropriate development at Port Kembla, Port Botany and Port of Newcastle.

State Environmental Planning Policy (Industry and Employment) 2021

This SEPP contains planning provisions:

- applying to employment land in western Sydney.
- for advertising and signage in NSW.

State Environmental Planning Policy (Resources and Energy) 2021

This SEPP contains planning provisions:

- for the assessment and development of mining, petroleum production and extractive material resource proposals in NSW.
- which aim to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area by identifying land which contains extractive material of regional significance.

State Environmental Planning Policy (Precincts—Eastern Harbour City) 2021

This SEPP contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area. The precincts in this SEPP are located in the Eastern Harbour City. This city is based the strategic planning

vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Sustainable Buildings) 2022

Encourages the design and delivery of more sustainable buildings across NSW. It sets sustainability standards for residential and non-residential development and starts the process of measuring and reporting on the embodied emissions of construction materials.

The standards for energy use that apply to large commercial development contained in the SEPP do not apply to land in the City of Sydney LGA except to the extent the development relates to prescribed serviced apartments.

OTHER MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 2 - E. P. & A. REGULATION, 2021. SECTIONS (3) - (22)

(3) Contribution plans

The following Contributions Plans apply to properties within the City of Sydney local government area. Contributions plans marked **YES** may apply to this property:

▪ Central Sydney Development Contributions Plan 2020 – in operation 26 th November 2021	YES
▪ City of Sydney Development Contributions Plan 2015 – in operation 1 st July 2016	NO
▪ Redfern Waterloo Authority Affordable Housing Contributions Plan – in operation 16 th May 2007	NO

Notes:

- An affordable housing contribution may be payable as part of a development application or planning proposal under The City of Sydney Affordable Housing Program (Program) – Adopted 26 June 2023.
- The subject land is within the Greater Sydney region to which the Environmental Planning and Assessment (Housing and Productivity Contribution) Order 2023 applies. Housing and Productivity Contributions may be payable to the NSW Government for certain new development. Details of these contributions are available here: <https://www.planning.nsw.gov.au/policy-and-legislation/infrastructure/infrastructure-funding/improving-the-infrastructure-contributions-system#housing-and-productivity-contribution>. Inquiries can be directed to the NSW Government through this email address: hpc.enquiry@planning.nsw.gov.au

(4) Complying Development

- (1) If the land is land on which complying development may be carried out under each of the complying development under *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*. because of that Policy, clause 1.17A (1) (c) to (e), (2), (3) or (4), 1.18(1)(c3) or 1.19.
- (2) If complying development may not be carried out on that land because of 1 of those clauses, the reasons why it may not be carried out under those clauses.
- (3) If the council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.
- (4) If the complying development codes are varied, under that Policy, clause 1.12, in relation to the land.

Note: If any restrictions apply to this land, or to part of this land, which may preclude the carrying out of complying development. Council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

Clause 1.12 does not apply to the land in the City of Sydney LGA

Housing Code, Industrial and Business Buildings Code and Low Rise Housing Diversity Code

Complying development **may not** be carried out on the land under the Housing Code, the Commercial and Industrial (New Buildings and Additions) and the Low Rise Housing Diversity Code if because of the provisions of clause 1.17A, 1.18(1)(c3) & 1.19 (Land-based requirements for exempt and complying development) any of the following statements are **YES**.

Clause 1.19(5)d. Land that is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997. (Applies only to the Industrial and Business Buildings) Code.	NO
Clause 1.17A(d). Has been identified as a property that comprises, or on which there is, an item that is listed on the State Heritage Register under the <i>Heritage Act 1977</i> or that is subject to an interim heritage order under the <i>Heritage Act 1977</i>.	NO
Clause 1.17A(d) & 1.18(1)(c3). Has been identified as a property that comprises, or on which there is, a heritage item or draft heritage item.	NO
Clause 1.17A(c). Has been identified as being within a wilderness area (identified under the <i>Wilderness Act 1987</i>.	NO
Clause 1.17A(e) & 1.19(1)e or 1.19(5)f. Has been identified as land that is within an environmentally sensitive area or by an environmental planning instrument as being within a buffer area, a river front area, an ecologically sensitive area, environmentally sensitive land or a protected area	NO
Clause 1.19(1)a.or 1.19(5)a Has been identified as being within a heritage conservation area or a draft heritage conservation area.	NO
Clause 1.19(1)b or 1.19(5)b. Has been identified as being land that is reserved for a public purpose in an environmental planning instrument.	NO
Clause 1.19(1)c or 1.19(5)c. Has been identified as being on an Acid Sulfate Soils Map as being Class 1 or Class 2.	YES
Clause 1.19(1)d or 1.19(5)e. Has been identified as land that is subject to a biobanking agreement under part 7A of the threatened Species Conservation Act 1995 or a property vegetation plan under the Native Vegetation Act 2003.	NO
Clause 1.19(1)f or 1.19(5)g. Has been identified by an environmental planning instrument, a development control plan or a policy adopted by the Council as being or affected by a coastline hazard, a coastal hazard or a coastal erosion hazard.	NO
Clause 1.19(1)g or 1.19(5)h. Has been identified as being land in a foreshore area.	NO
Clause 1.19(1)h. Has been identified as land that is in the 25 ANEF contour or a higher ANEF contour. (Applies to the Housing Code & Low Rise Housing Diversity Code)	NO
Clause 1.19(1)j or 1.19(5)i. Has been identified as unsewered land within a drinking water catchment.	NO
Clause 1.19(1)i. Has been identified as land that is declared to be a special area under the Sydney Water Catchment Management Act 1998.	NO

Housing Alterations Code

Complying development under the Housing Alterations Code **may** be carried out on the land.

Industrial and Business Alterations Code

Complying development under the Commercial and Industrial Alterations Code **may** be carried out on the land.

Subdivisions Code

Complying development under the Subdivisions Code **may** be carried out on the land.

Rural Housing Code

The Rural Housing Code does not apply to this Local Government Area.

General Development Code

Complying development under the General Development Code **may** be carried out on the land.

Demolition Code

Complying development under the Demolition Code **may** be carried out on the land.

(5) Exempt Development

- (1) If the land is land on which exempt development may be carried out under each of the exempt development under *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*, because of that Policy, clause 1.16(1)(b1)-(d) or 1.16A.
- (2) If exempt development may not be carried out on that land because of 1 of those clauses, the reasons why it may not be carried out under those clauses.
- (3) If the council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land, a statement that a restriction applies to the land, but it may not apply to all of the land, and that council does not have sufficient information to ascertain the extent to which complying development may or may not be carried out on the land.

- (4) If the exempt development codes are varied, under that Policy, clause 1.12, in relation to the land.

Note: If any restrictions apply to this land, or to part of this land, which may preclude the carrying out of exempt development. Council does not have sufficient information to ascertain the extent to which exempt development may or may not be carried out on the land.

Clause 1.12 does not apply to the land in the City of Sydney LGA

All Exempt and Complying Development Codes

Exempt development under each of the exempt development codes **may** be carried out on the land.

(6) Affected building notices and building product rectification orders

(1)

- (a) The land to which the certificate relates is not subject to any affected building notice of which Council is aware.
- (b) The land to which the certificate relates is not subject to any building product rectification order of which Council is aware and has not been fully complied with.
- (c) The land to which the certificate relates is not subject to any notice of intention to make a building product rectification order of which Council is aware and is outstanding.

(2) In this clause:

affected building notice has the same meaning as in Part 4 of the [Building Products \(Safety\) Act 2017](#).

building product rectification order has the same meaning as in the [Building Products \(Safety\) Act 2017](#).

(7) Land reserved for acquisition

No environmental planning instrument, or proposed environmental planning instrument applying to the land, provides for the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

(8) Road Widening and/or Road Realignment affected by (a) Division 2 of Part 3 of the Roads act 1993 or (c) any resolution of council or other authority.

This land **is not** affected by road widening and/or road realignment under section 25 of the Roads Act, 1993 and/or resolution of Council or any other authority.

(8) Road Widening and/or Road Realignment Affected by (b) any environmental planning instrument.

This land **is not** affected by any road widening or road realignment under any planning instrument.

(9) Flood related development controls information.

- (1) If the land or part of the land is within the flood planning area and subject to flood related development controls.

YES

- (2) If the land or part of the land is between the flood planning area and the probable maximum flood and subject to flood related development controls.

YES

- (3) In this section:

flood planning area has the same meaning as in the Floodplain Development Manual.

Floodplain Development Manual means the *Flood Risk Management Manual* (ISBN 978-1-923076-17-4) published 30 June 2023 by the NSW Government.

probable maximum flood has the same meaning as in the Floodplain Development Manual.

(10) Council and other public authorities policies on hazard risk restrictions:

- (a) The land **is not** affected by a policy adopted by the Council that that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk; and

- (b) The land **is not** affected by a policy adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to on planning certificate issued by Council, that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk.

(11) Bush fire prone land

The land has not been identified as Bush fire prone land.

(12) Loose-fill asbestos insulation

Not Applicable.

(13) Mine Subsidence District

This land has not been proclaimed to be a mine subsidence district within the meaning of section 15 of the mine subsidence compensation act, 2017.

(14) Paper subdivision information

Not Applicable.

(15) Property vegetation plans

Not Applicable.

(16) Biodiversity stewardship sites

Not Applicable.

(17) Biodiversity certified land

The land has not been certified as biodiversity certified land.

(18) Orders under Trees (Disputes Between Neighbours) Act 2006

Council has not been notified of an order which as been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land.

(19) Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

In relation to a coastal council: The owner (or any previous owner) of the land has not consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act).

Note. “Existing coastal protection works” are works to reduce the impact of coastal hazards on land (such as seawalls, revetments, groynes and beach nourishment) that existed before 1 January 2011.

(20) Western Sydney Aerotropolis

Not Applicable.

(21) Development consent conditions for seniors housing

[State Environmental Planning Policy \(Housing\) 2021](#), Chapter 3, Part 5 applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, section 88(2).

(22) Site compatibility certificates and development conditions for affordable rental housing

- (1) The land to which the certificate relates is not subject to a current site compatibility certificate under [State Environmental Planning Policy \(Housing\) 2021](#), and is not subject to a former site compatibility certificate, of which the council is aware, in relation to proposed development on the land.
- (2) [State Environmental Planning Policy \(Housing\) 2021](#), Chapter 2, Part 2, Division 1 or 5 does not apply to the land which the certificate relates.
- (3) The land to which the certificate relates is not subject to any conditions of development consent in relation to land of a kind referred to in [State Environmental Planning Policy \(Affordable Rental Housing\) 2009](#), clause 17(1) or 38(1).
- (4) In this section:

former site compatibility certificate means a site compatibility certificate issued under [State Environmental Planning Policy \(Affordable Rental Housing\) 2009](#)

(23) Water or sewerage services

Water or sewerage services are not provided to the land under the Water Industry Competition Act 2006

Note—

A public water utility may not be the provider of some or all of the services to the land. If a water or sewerage service is provided to the land by a licensee under the [Water Industry Competition Act 2006](#), a contract for the service will be deemed to have been entered into between the licensee and the owner of the land. A register relating to approvals and licences necessary for the provision of water or sewerage services under the [Water Industry Competition Act 2006](#) is maintained by the Independent Pricing and Regulatory Tribunal and provides information about the areas serviced, or to be serviced, under that Act. Purchasers should check the register to understand who will service the property. Outstanding charges for water or sewerage services provided under the [Water Industry Competition Act 2006](#) become the responsibility of the purchaser.

Note. The following matters are prescribed by section 59 (2) of the *Contaminated Land Management Act 1997* as additional matters to be specified in a planning certificate:

- (a) The land to which the certificate relates **is not** declared to be **significantly contaminated land** within the meaning of that act as at the date when the certificate is issued.
- (b) The land to which the certificate relates **is not** subject to a **management order** within the meaning of that act as at the date when the certificate is issued.
- (c) The land to which the certificate relates **is not** the subject of an **approved voluntary management proposal** within the meaning of that act at the date the certificate is issued.
- (d) The land to which the certificate relates **is not** the subject of an **ongoing maintenance order** within the meaning of that act as at the date when the certificate is issued.
- (e) As at the date when the certificate is issued, Council **has not** identified that a **site audit statement** within the meaning of that act has been received in respect of the land the subject of the certificate.

PLANNING CERTIFICATE SECTION 10.7 (2) INFORMATION:

Information provided in accordance with planning certificate section 10.7 (2) has been taken from council's records and advice from other authorities but council disclaims all liability for any omission or inaccuracy in the information. Specific inquiry should be made where doubt exists.

PLANNING CERTIFICATE UNDER SECTION 10.7 (5) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

PLANNING CERTIFICATE SECTION 10.7 (5) ADVICE is current as at 12:00 noon two working days prior to the date of issue of this certificate. The following matters have been considered & details provided where information exists: easements in favour of council; parking permit scheme; heritage floor space restrictions; low-rental residential building; foreshore building line; tree preservation order.

Easement for right of footway purposes 3m wide DP 1046870 registered 11/11/2002.

Easement for drainage purposes 1.5m wide DP 1046870 registered 11/11/2002.

Contaminated Land Potential:

Council records do not have sufficient information about the uses (including previous uses) of the land which is the subject of this section 10.7 certificate to confirm that the land has not been used for a purpose which would be likely to have contaminated the land. Parties should make their own enquiries as to whether the land may be contaminated.

Hazard Risk Restriction:

Some City of Sydney Local Environmental Plans incorporate Acid Sulfate soil maps.

Development on the land identified in those maps should have regard to the acid sulfate soil clause within the relevant Local Environmental Plan.

Construction Noise and View Loss Advice:

Intending purchasers are advised that the subject property may be affected by construction noise and loss or diminution of views as a result of surrounding development.

Outstanding Notice & Order information

In relation to this property, there **is not** an outstanding Order or Notice of Intention to issue an Order relating to Fire Safety (being an Order or Notice of Intention to issue an Order under Part 2 of Schedule 5 of the Environmental Planning and Assessment Act, 1979). Further information about the Order or Notice of Intention to issue an Order may be obtained by applying for a certificate under clause 41 of Schedule 5 of the Environmental Planning and Assessment Act and Section 735A of the Local Government Act. In relation to this property, there **is not** an outstanding Order or Notice of Intention to issue an Order (being an Order or Notice of Intention to issue an Order of a type other than relating to fire safety). Further information about the Order or Notice of Intention to issue an Order may be obtained by applying for a certificate under clause 41 of Schedule 5 of the Environmental Planning and Assessment Act and Section 735A of the Local Government Act.

Neighbourhood Parking Policy

The City of Sydney co-ordinates a Resident Permit Parking Scheme and a Visitor Permit Parking scheme. This property may be restricted from participating in either scheme. Eligibility may change after the date of this certificate, as parking supply and other traffic demands change. For more information contact Council's call centre on 9265 9333.

ADVICE FROM OTHER BODIES**Sydney Ports Corporation Advice**

Some land in the City of Sydney located in the vicinity of the White Bay, Glebe Island and Darling Harbour ports may be affected by noise from port operations.

Advice provided in accordance with planning certificate section 10.7 (5) is supplied in good faith. Council accepts no liability for the validity of the advice given. (see section 10.7 (6) of the Environmental Planning and Assessment Act, 1979).

Planning certificate section 10.7 (2), local planning controls are available are available online at www.cityofsydney.nsw.gov.au

General Enquiries:

Telephone: 02 9265 9333

Town Hall House

Level 2

Town Hall House

456 Kent Street

Sydney

9am – 5pm Monday - Friday

State planning controls are available online at www.legislation.nsw.gov.au

Where planning certificate section 10.7 (5) matters are supplied, complete details are available by writing to:

Chief Executive Officer

City of Sydney

G.P.O. Box 1591

Sydney NSW 2000

End of Document

Appendix D

Site Photographs



Photograph 1 Building facade, facing south



Photograph 2 Above-ground diesel tank within sprinkler / pump room



Site Photographs

Proposed Redevelopment

150 Day Street, Sydney

CLIENT

Mecone C/- UOL Group Limited

PROJECT:

231572.01

PLATE No:

1

REV:

0



Photograph 3 Laundry room, lower basement level



Photograph 4 Cleaning chemical storage, laundry room



Site Photographs

Proposed Redevelopment

150 Day Street, Sydney

CLIENT

Mecone C/- UOL Group Limited

PROJECT:

231572.01

PLATE No:

2

REV:

0



Photograph 5 Chemical storage within engineering room



Photograph 6 Grease arrestors, lower ground level

Appendix E

Data Quality Objectives, Quality Assurance and Quality Control

1. Data quality objectives

The PSI has been devised broadly in accordance with the seven-step data quality objectives (DQO) process which is provided in Appendix B, Schedule B2 of NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)* [NEPM] (NEPC, 2013).

Table 1: Data quality objectives

Step	Summary
1: State the problem	The objective of the investigation is to assess the potential for contamination at the site with respect to the proposed land use. The report is being undertaken as the site is to be redeveloped. A preliminary conceptual site model (CSM) has been prepared (Section 7) for the proposed development. The project team consisted of experienced environmental engineers and scientists working in the roles of Project Principal, Project Reviewer, Project Manager and field staff.
2: Identify the decisions / goal of the study	The site history has identified possible contaminating previous uses which are identified in the CSM (Section 7). The CSM identifies the associated contaminants of potential concern (CoPC) and the likely impacted media. The site assessment criteria (SAC) for each of the CoPC are detailed in Appendix F. The decision is to establish whether or not the results fall below the SAC. On this basis, an assessment of the site's suitability from a contamination perspective will be derived and a decision made on whether (or not) further assessment and / or remediation will be required.
3: Identify the information inputs	Inputs will be the analytical results for the CoPC (identified in the CSM, Section 7) from NATA accredited laboratories and methods, where possible. The SAC for each of the CoPC are detailed in Appendix F. A photoionisation detector (PID) will be used on-site to screen soils for VOC. PID readings will be used to inform sample selection for laboratory analysis.
4: Define the study boundaries	The lateral boundaries of the investigation area are shown on Drawing 1, Appendix A. The vertical boundaries are to the extent of contamination impact as determined from the site history assessment and site observations. The assessment is limited to the timeframe over which the field works were undertaken. Constraints to the assessment are identified and discussed in the conclusions of the report, Section 15.
5: Develop the analytical approach (or decision rule)	The decision rule is to compare all analytical results with the SAC (Appendix F, based on NEPC (2013)). Where guideline values are absent, other sources of guideline values accepted by NEPC (2013) shall be adopted where possible. Where a sample result exceeds the adopted criterion, a further site-specific assessment will be made as to the risk posed by the presence of that contaminant(s).

Step	Summary
	Initial comparisons will be with individual results then, where required and appropriate, summary statistics (including mean, standard deviation and 95% upper confidence limit (UCL) of the arithmetic mean (95% UCL)) to assess potential risks posed by the site contamination. Quality control results are to be assessed according to their relative percent difference (RPD) values. For field duplicate and laboratory results, RPD values should generally be below 30%. The field and laboratory quality assurance assessment is included in Appendix E.
6: Specify the performance or acceptance criteria	Baseline condition: Contaminants at the site exceed the human health and environmental SAC and pose a potentially unacceptable risk to receptors (null hypothesis). Alternative condition: Contaminants at the site comply with the human health and environmental SAC and as such, do not pose a potentially unacceptable risk to receptors (alternative hypothesis). Unless conclusive information from the collected data is sufficient to reject the null hypothesis, it is assumed that the baseline condition is true.
7: Optimise the design for obtaining data	As the purpose of the investigation is to assess the contamination status of the site, the sampling program is reliant on professional judgement to identify and sample the potentially affected areas. Further details regarding the proposed sampling plan are presented in Section 8.

2. References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

1. Field and laboratory data quality assurance and quality control

The field and laboratory data quality assurance and quality control (QA / QC) procedures and results are summarised in the following Table 1. Reference should be made to the field work methodology and the laboratory results / certificates of analysis for further details. The relative percentage difference (RPD) results are included at the end of this appendix.

Table 1: Field and laboratory quality control

Item	Evaluation / acceptance criteria	Compliance
Analytical laboratories used	NATA accreditation	C
Holding times	Various based on type of analysis	C
Intra-laboratory replicates	10% of primary samples; <30% RPD	C PC
Laboratory / Reagent Blanks	1 per batch; <PQL	C
Laboratory Duplicate	1 per lab batch; As laboratory certificate	C
Matrix Spikes	1 per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Surrogate Spikes	All organics analysis; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Control Samples	1 per lab batch; 70-130% recovery (inorganics); 60-140% recovery (organics)	C
Standard Operating Procedures (SOP)	Adopting SOP for all aspects of the sampling field work	C

Notes:

C = compliance; PC = partial compliance; NC = non-compliance

The RPD results were all within the acceptable range, with the exception of zinc as indicated in Table QA1 (results in bold). The exceedances are not, however, considered to be of concern given that the actual differences in the concentrations of the replicate pairs was low.

In summary, the QC data is determined to be of sufficient quality to be considered acceptable for the assessment.

2. Data quality indicators

The reliability of field procedures and analytical results was assessed against the following data quality indicators (DQI) as outlined in NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)* [NEPM] (NEPC, 2013):

- Completeness: a measure of the amount of usable data from a data collection activity;

- Comparability: the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event;
- Representativeness: the confidence (qualitative) of data representativeness of media present on-site;
- Precision: a measure of variability or reproducibility of data; and
- Accuracy: a measure of closeness of the data to the 'true' value.

Table 2: Data quality indicators

Data quality indicator	Method(s) of achievement
Completeness	Preparation of borehole logs, sample location plan and chain of custody records.
	Laboratory sample receipt information received confirming receipt of samples intact and appropriateness of the chain of custody.
	Samples analysed for contaminants of potential concern (COPC) identified in the conceptual site model (CSM).
	Completion of chain of custody (COC) documentation.
	NATA accredited laboratory results certificates provided by the laboratory.
	Satisfactory frequency and results for field and laboratory quality control (QC) samples as discussed in Section 1.
Comparability	Using appropriate techniques for sample recovery, storage and transportation, which were the same for the duration of the project.
	Experienced sampler(s) used.
	Use of NATA registered laboratories, with test methods the same or similar between laboratories.
	Satisfactory results for field and laboratory QC samples.
Representativeness	Target media sampled.
	Sample numbers recovered and analysed are considered to be representative of the target media and complying with DQO.
	Samples were extracted and analysed within holding times.
	Samples were analysed in accordance with the COC.
Precision	Field staff followed standard operating procedures.
	Acceptable RPD between original samples and replicates.
	Satisfactory results for all other field and laboratory QC samples.
Accuracy	Field staff followed standard operating procedures.
	Satisfactory results for all field and laboratory QC samples.

Based on the above, it is considered that the DQI have been complied with.

3. Conclusion

Based on the results of the field QA and field and laboratory QC, and evaluation against the DQI it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

4. References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

Appendix F

Site Assessment Criteria

1. Introduction

1.1 Guidelines

The following key guidelines were consulted for deriving the site assessment criteria (SAC):

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)* [NEPM] (NEPC, 2013).

1.2 General

The SAC applied in the current investigation are informed by the CSM which identified human and environmental receptors to potential contamination at the site. Analytical results are assessed (as a Tier 1 assessment) against the SAC comprising primarily the investigation and screening levels of Schedule B1 of NEPC (2013).

The following inputs are relevant to the selection and/or derivation of the SAC:

- Land use: commercial (hotel):
 - Corresponding to land use category 'D', commercial / industrial such as shops, offices, factories and industrial sites.
- Soil type: sand (adopted as a screen for sandstone).

2. Soils

2.1 Health investigation and screening levels

The generic health investigation levels (HIL) and health screening levels (HSL) are considered to be appropriate for the assessment of human health risk via all relevant pathways of exposure associated with contamination at the site. The adopted soil HIL and HSL for the contaminants of concern are in Table 1 and Table 2.

Table 1: Health investigation levels (mg/kg)

Contaminant	HIL-D
Metals	
Arsenic	3000
Cadmium	900
Chromium (VI)	3600
Copper	240 000
Lead	1500
Mercury (inorganic)	730
Nickel	6000
Zinc	400 000

Contaminant	HIL-D
PAH	
B(a)P TEQ	40
Total PAH	4000
Phenols	
Phenol	240 000
OCP	
DDT+DDE+DDD	3600
Aldrin and dieldrin	45
Chlordane	530
Endosulfan	2000
Endrin	100
Heptachlor	50
HCB	80
Methoxychlor	2500
OPP	
Chlorpyrifos	2000
PCB	
PCB	7

Table 2: Health screening levels (mg/kg)

Contaminant	HSL-D
SAND	0 m to <1 m
Benzene	3
Toluene	NL
Ethylbenzene	NL
Xylenes	230
Naphthalene	NL
TRH F1	260
TRH F2	NL

Notes: TRH F1 is TRH C₆-C₁₀ minus BTEX

TRH F2 is TRH >C₁₀-C₁₆ minus naphthalene

The soil saturation concentration (Csat) is defined as the soil concentration at which the porewater phase cannot dissolve any more of an individual chemical. The soil vapour that is in equilibrium with the porewater will be at its maximum. If the derived soil HSL exceeds Csat, a soil vapour source concentration for a petroleum mixture could not exceed a level that would result in the maximum allowable vapour risk for the given scenario. For these scenarios, no HSL is presented for these chemicals and the HSL is shown as 'not limiting' or 'NL'

The HSL for direct contact derived from CRC CARE (2011) are in Table .

Table 3: Health screening levels for direct contact (mg/kg)

Contaminant	DC HSL-D	DC HSL-IMW
Benzene	430	1100
Toluene	99 000	120 000
Ethylbenzene	27 000	85 000
Xylenes	81 000	130 000
Naphthalene	11 000	29 000
TRH F1	26 000	82 000
TRH F2	20 000	62 000
TRH F3	27 000	85 000
TRH F4	38 000	120 000

Notes: TRH F1 is TRH C₆-C₁₀ minus BTEX
 TRH F2 is TRH >C₁₀-C₁₆ minus naphthalene
 IMW intrusive maintenance worker

2.2 Management limits

In addition to appropriate consideration and application of the HSL, there are additional considerations which reflect the nature and properties of petroleum hydrocarbons, including:

- Formation of observable light non-aqueous phase liquids (LNAPL);
- Fire and explosion hazards; and
- Effects on buried infrastructure e.g. penetration of, or damage to, in-ground services.

The adopted management limits are in Table 4.

Table 4: Management limits (mg/kg)

Contaminant	Soil type	ML-D
TRH F1	Coarse	700
TRH F2	Coarse	1000
TRH F3	Coarse	3500
TRH F4	Coarse	10 000

Notes: TRH F1 is TRH C₆-C₁₀ including BTEX
 TRH F2 is TRH >C₁₀-C₁₆ including naphthalene

3. References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

Appendix G

Fieldwork Methodology

1. Guidelines

The following key guidelines were consulted for the field work methodology:

- NEPC *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]* (NEPC, 2013).

2. Soil sampling

Soil sampling is carried out in accordance with Douglas' standard operating procedures. The general sampling and sample management procedures comprise:

- Collect soil samples directly from the core barrel at regular intervals, changes in strata or upon signs of contamination;
- Transfer samples in laboratory-prepared glass jars with Teflon lined lids by hand, capping immediately and minimising headspace within the sample jar;
- Collect replicate samples in zip-lock bags for photoionisation detector (PID) screening;
- Wear a new disposable nitrile glove for each sample point thereby minimising potential for cross-contamination;
- Collect 10% replicate samples for quality control (QC) purposes;
- Label sample containers with individual and unique identification details, including project number, sample location and sample depth (where applicable);
- Place samples into a cooled, insulated and sealed container for transport to the laboratory; and
- Use chain of custody documentation.

2.1 Field testing

Field testing is carried out in accordance with Douglas' standard operating procedures. The general sampling and sample management procedures comprise:

- Calibrate the PID with isobutylene gas at 100 ppm and with fresh air prior to commencement of each successive day's field work;
- Allow the headspace in the PID zip-lock bag samples to equilibrate; and
- Screen using the PID.

3. Soil vapour installation and screening

Vapour pin installation comprises the following steps:

- Drilling of a 38 mm pilot hole into the pavement to a depth of approximately 50 mm using a rotary hammer drill and masonry bit;
- Drilling of a second hole with a diameter of 16 mm to fully penetrate the pavement (approximately 150 mm);

- A pre-fabricated stainless-steel vapour pin with a silicon sleeve (with an outer diameter approximately 20 mm) was inserted into the drilled hole and then drive into the pavement using a hammer. The silicon sleeve holds the pin in place. No glues, cements or other binding products are applied to the installation;
- Place a plastic cap on the inlet to the pin and screw a stainless-steel cap into place;
- Allow the pins to sit for approximately 60 minutes to equilibrate to ambient conditions before purging; and
- Using a photoionisation detector (PID) to insert into the inlet of the pin to record the volatile organic compounds (VOC) readings.

4. References

NEPC. (2013). *National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]*. Australian Government Publishing Services Canberra: National Environment Protection Council.

Appendix H

Field Logs

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: 0.0 AHD
COORDINATE: E:333851.5, N:6250375.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH101
PROJECT No: 231572.00
DATE: 18/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE				TESTING								
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL				ROCK						SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS						
					ORIGIN(1)	CONSISTENCY(2)	DENSITY(3)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)							DEFECTS & REMARKS					
18/10/24 No free groundwater observed whilst augering		0.33	CONCRETE.		NA							100	-													
		0.43	FILL / GRAVEL: dark grey; sub-angular; poorly graded.		FILL							100	-													
		1	CONCRETE; (possible footing).		NA							89	0													
		1.40	SANDSTONE: pale grey with red-brown and orange staining; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone				SW	1.40	H						1.40m: Unless otherwise stated below, all defects are bedding dipping 0°-10°											
		1.51																								
		1.65																			PLT	PL(A)=1.3MPa				
		1.75																		PLT	PL(A)=0.86MPa					
		2						SW		M to H	100	78							PLT	PL(A)=0.70MPa						
		2.30																		PLT	PL(A)=0.62MPa					
		2.68																		PLT	PL(A)=1.3MPa					
	2.92	SANDSTONE: pale grey with orange staining; indistinct and distinct bedding at 0-10°. Hawkesbury Sandstone					FR	2.92	H					3.37m CZ, 60mm						PLT	PL(A)=0.41MPa					
	3																								PLT	PL(A)=0.70MPa
	4																								PLT	PL(A)=0.60MPa
	4.86m																								PLT	PL(A)=0.41MPa
	5	Borehole discontinued at 4.92m depth. Target depth reached.																								

NOTES: (1) Soil origin is "probable" unless otherwise stated. (2) Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: ¹Soil origin is "probable" unless otherwise stated. ²Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Concrete Coring Equipment
METHOD: DT (125mmØ) to 0.33m, DT (64mmØ) to 4.92m
REMARKS:

OPERATOR: TJ Core Drilling (NR)

LOGGED: JC
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: 0.0 AHD
COORDINATE: E:333851.5, N:6250375.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH101
PROJECT No: 231572.00
DATE: 18/10/24
SHEET: 1 of 1



0.43-4.92 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: 0.0 AHD
COORDINATE: E:333843.0, N:6250388.3
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH102
PROJECT No: 231572.00
DATE: 18/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE				TESTING		
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
					ORIGIN ^(#)	CONSIS. ^(*)	DENSITY. ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)						
18/10/24 No free groundwater observed whilst augering		0.43	CONCRETE.		NA															
		1	CONCRETE; (possible footing).		NA						100	0								
		1.48	SANDSTONE: pale grey and orange staining; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone				SW	1.48												
		2					FR	1.63												
		2.17	SANDSTONE: pale brown; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone								86	56								
		2.27							2.00											
		2.41	SANDSTONE: pale grey and orange staining; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone																	
		2.68							2.27											
		3	SANDSTONE: pale brown; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone																	
		3.64																		
		4	SANDSTONE: pale grey and orange staining; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone																	
		4.00																		

NOTES: ¹Soil origin is "probable" unless otherwise stated. ²Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Concrete Coring Equipment

OPERATOR: TJ Core Drilling (NR)

LOGGED: JC

METHOD: DT (125mmØ) to 0.43m, DT (64mmØ) to 4.71m

CASING: Uncased

REMARKS:

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: 0.0 AHD
COORDINATE: E:333843.0, N:6250388.3
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH102
PROJECT No: 231572.00
DATE: 18/10/24
SHEET: 1 of 1



0.43-4.71 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333858.2, N:6250409.1
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH103
PROJECT No: 231572.00
DATE: 26/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE				TESTING		
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK						DEFECTS & REMARKS	SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
					ORIGIN (#)	CONSIS. (%)	DENSITY (%)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD							
26/10/24 No free groundwater observed whilst augering	0.16	0.20	CONCRETE.		NA							100	-							
			FILL / CLAY: pale brown, yellow; mesh material.		PROB										ES		0.16 0.20			
			CONCRETE; (possible footing).		NA							100	-							
	1.52		SANDSTONE: fine to coarse grained, distinct and indistinct cross-bedding, 0 to 10°, slightly fractured. Hawkesbury Sandstone							1.52									PLT	PL(A)=1.4MPa
																			</	

CORE PHOTO LOG

CLIENT:

UOL Group Limited

PROJECT:

Proposed Hotel Upgrade

LOCATION:

150 Day Street, Syd, NSW 2000

SURFACE LEVEL:

-4.0 AHD

COORDINATE:

E:333858.2, N:6250409.1

DATUM/GRID:

MGA2020 Zone 56

DIP/AZIMUTH:

90°/---°

LOCATION ID:

BH103

PROJECT No:

231572.00

DATE:

26/10/24

SHEET:

1 of 1



0.20-4.00 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333842.2, N:6250429.4
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH104
PROJECT No: 231572.00
DATE: 19/10/24
SHEET: 1 of 1

GROUNDWATER	CONDITIONS ENCOUNTERED													SAMPLE				TESTING	
	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
				ORIGIN(†)	CONSIS. (‡)	DENSITY (‡)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)						
RL (m)																			
19/10/24 No free groundwater observed whilst augering	0.25	CONCRETE.		NA							100	-							
		CONCRETE; (possible footing).		NA							100	-							
	1												1.10m: , unless otherwise stated, all defects are bedded and dipping 0-10°			1			
	1.33	SANDSTONE: grey, pale grey and orange, fine to medium grained. Hawkesbury Sandstone						1.33	M	100	27		1.41m: B, 0°, PR, CN, RF	UCS		1.39	PLT	PL(A)=0.51MPa	
	2							1.80					1.66m: B, 5°, PR, CT Clay, RF			2			
	3									100	100		2.28m: B, 0°, PR, CN, RF						
													2.51m: JT, 30°, PR, SN Fe, RF				PLT	PL(A)=1.6MPa	
	4									100	100		3.52m: B, 10°, PR, CN, RF						
													3.67m: B, 5°, PR, CN, RF				PLT	PL(A)=1.4MPa	
		Borehole discontinued at 4.00m depth. Target depth reached.																	

PLANT: Concrete Coring Equipment	OPERATOR: TJ Core Drilling (NR)	LOGGED: LS
METHOD: DT (125mmØ) to 0.25m, DT (64mmØ) to 4.0m		CASING: Uncased
REMARKS:		

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333842.2, N:6250429.4
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH104
PROJECT No: 231572.00
DATE: 19/10/24
SHEET: 1 of 1



0.25-4.00 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333839.7, N:6250412.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH105
PROJECT No: 231572.00
DATE: 26/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE			TESTING		
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
				ORIGIN ^(#)	CONSIS. ^(*)	DENSITY ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)						
26/10/24 No free groundwater observed whilst augering	0.20	CONCRETE.		NA															
	0.22	FILL / CLAY: pale yellow, pale brown; unknown material mesh; unusual odour.													D/ES	0.22			
		CONCRETE; (possible footing).		NA															
	1																		
	1.43	SANDSTONE: pale brown-yellow, fine to coarse grained, distinct and indistinct bedding , 0 to 10°. Hawkesbury Sandstone																	

PLANT: Concrete Coring Equipment

OPERATOR: TJ Core Drilling (NR)

LOGGED: RDS

METHOD: DT (125mmØ) to 0.20m, DT (64mmØ) to 3.88m

CASING: Uncased

REMARKS:

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: UOL Group Limited

PROJECT: Proposed Hotel Upgrade

LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD

COORDINATE: E:333839.7, N:6250412.8

DATUM/GRID: MGA2020 Zone 56

DIP/AZIMUTH: 90°/---°

LOCATION ID: BH105

PROJECT No: 231572.00

DATE: 26/10/24

SHEET: 1 of 1



0.22-3.88 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333849.6, N:6250430.6
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH106
PROJECT No: 231572.00
DATE: 19/10/24
SHEET: 1 of 1

[illegible]

PLANT: Concrete Coring Equipment

OPERATOR: TJ Core Drilling (NR)

LOGGED: LS

METHOD: DT (125mmØ) to 0.29, DT (64mmØ) to 4.94m

CASING: Uncased

REMARKS:

Refer to explanatory notes for symbol and abbreviation definitions

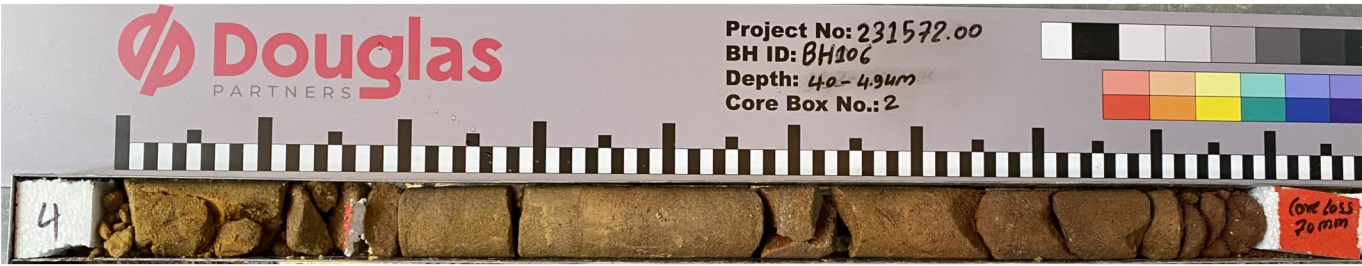


CORE PHOTO LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333849.6, N:6250430.6
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH106
PROJECT No: 231572.00
DATE: 19/10/24
SHEET: 1 of 1



BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: 0.0 AHD
COORDINATE: E:333851.5, N:6250375.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH101
PROJECT No: 231572.00
DATE: 18/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE				TESTING							
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK						SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS						
					ORIGIN (#)	CONSIS. (I) DENSITY (I)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)							DEFECTS & REMARKS					
18/10/24 No free groundwater observed whilst augering		0.33	CONCRETE.		NA							100	-												
		0.43	FILL / GRAVEL: dark grey; sub-angular; poorly graded.		FILL							100	-												
		1	CONCRETE; (possible footing).		NA							89	0												
		1.40	SANDSTONE: pale grey with red-brown and orange staining; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone				SW	1.40	H						1.40m: Unless otherwise stated below, all defects are bedding dipping 0°-10°										
		1.51																							
		1.65																						PLT — PL(A)=1.3MPa	
		2																		PLT — PL(A)=0.86MPa					
																				PLT — PL(A)=0.70MPa					
																				PLT — PL(A)=0.62MPa					
																				PLT — PL(A)=1.3MPa					
		2.92	SANDSTONE: pale grey with orange staining; indistinct and distinct bedding at 0-10°. Hawkesbury Sandstone					FR	2.92	H											PLT — PL(A)=0.41MPa				
																									PLT — PL(A)=0.60MPa
																				PLT — PL(A)=0.41MPa					
	5	Borehole discontinued at 4.92m depth. Target depth reached.																							

NOTES: [#]Soil origin is "probable" unless otherwise stated. ^IConsistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: ^(I) Soil origin is "probable" unless otherwise stated. ^(C) Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Concrete Coring Equipment
METHOD: DT (125mmØ) to 0.33m, DT (64mmØ) to 4.92m
REMARKS:

OPERATOR: TJ Core Drilling (NR)

LOGGED: JC
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: 0.0 AHD
COORDINATE: E:333851.5, N:6250375.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH101
PROJECT No: 231572.00
DATE: 18/10/24
SHEET: 1 of 1



0.43-4.92 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: 0.0 AHD
COORDINATE: E:333843.0, N:6250388.3
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH102
PROJECT No: 231572.00
DATE: 18/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE				TESTING		
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
					ORIGIN ^(#)	CONSIS. ^(*)	DENSITY. ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)						
18/10/24 No free groundwater observed whilst augering		0.43	CONCRETE.		NA															
		1	CONCRETE; (possible footing).		NA						100	0								
		1.48	SANDSTONE: pale grey and orange staining; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone					SW	1.48										PLT — PL(A)=0.59MPa	
		2					FR	1.63											PLT — PL(A)=0.93MPa	
		2.17	SANDSTONE: pale brown; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone						2.00		86	56							PLT — PL(A)=1.3MPa	
		2.27							2.27										PLT — PL(A)=1.5MPa	
		2.41							2.41										PLT — PL(A)=1.5MPa	
		2.68	SANDSTONE: pale grey and orange staining; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone																PLT — PL(A)=1.1MPa	
		3																	PLT — PL(A)=1.8MPa	
		3.64	SANDSTONE: pale brown; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone					FR			100	69							PLT — PL(A)=2.3MPa	
		4.00	SANDSTONE: pale grey and orange staining; indistinct and distinct cross-bedding at 0-10°. Hawkesbury Sandstone																PLT — PL(A)=1.0MPa	
																			PLT — PL(A)=1.0MPa	
												</								

NOTES: ⁽¹⁾ Soil origin is "probable" unless otherwise stated. ⁽²⁾ Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Concrete Coring Equipment
METHOD: DT (125mmØ) to 0.43m, DT (64mmØ) to 4.71m
REMARKS:

OPERATOR: TJ Core Drilling (NR)

LOGGED: JC
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: 0.0 AHD
COORDINATE: E:333843.0, N:6250388.3
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH102
PROJECT No: 231572.00
DATE: 18/10/24
SHEET: 1 of 1



0.43-4.71 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333858.2, N:6250409.1
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH103
PROJECT No: 231572.00
DATE: 26/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE				TESTING		
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK						SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	
					ORIGIN (#)	CONSIS. ⁽¹⁾ DENSITY. ⁽²⁾	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)							DEFECTS & REMARKS
26/10/24 No free groundwater observed whilst augering		0.16	CONCRETE.		NA						100	-								
		0.20	FILL / CLAY: pale brown, yellow; mesh material.		PROB										ES		0.16 0.20			
			CONCRETE; (possible footing).		NA						100	-					1			
		1.52	SANDSTONE: fine to coarse grained, distinct and indistinct cross-bedding, 0 to 10°, slightly fractured. Hawkesbury Sandstone						1.52									PLT	PL(A)=1.4MPa	
																		2	PLT	PL(A)=1.7MPa
</																				

NOTES: ¹Soil origin is "probable" unless otherwise stated. ²Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Concrete Coring Equipment

OPERATOR: TJ Core Drilling (NR)

LOGGED: RDS

METHOD: DT (125mmØ) to 0.16m, DT (64mmØ) to 4.0m

CASING: Uncased

REMARKS:

Refer to explanatory notes for symbol and abbreviation definitions

CORE PHOTO LOG

CLIENT:

UOL Group Limited

PROJECT:

Proposed Hotel Upgrade

LOCATION:

150 Day Street, Syd, NSW 2000

SURFACE LEVEL:

-4.0 AHD

COORDINATE:

E:333858.2, N:6250409.1

DATUM/GRID:

MGA2020 Zone 56

DIP/AZIMUTH:

90°/---°

LOCATION ID:

BH103

PROJECT No:

231572.00

DATE:

26/10/24

SHEET:

1 of 1



0.20-4.00 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333842.2, N:6250429.4
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH104
PROJECT No: 231572.00
DATE: 19/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE				TESTING																	
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK						SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS																
					ORIGIN(%)	CONSIS. (%)	DENSITY (%)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD							FRACTURE SPACING (m)	DEFECTS & REMARKS														
19/10/24 No free groundwater observed whilst augering		0.25	CONCRETE.		NA							100	-																						
			CONCRETE; (possible footing).																																
					NA							100	-																						
		1.33	SANDSTONE: grey, pale grey and orange, fine to medium grained. Hawkesbury Sandstone																																
														</																					

NOTES: "Soil origin is "probable" unless otherwise stated. "Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Concrete Coring Equipment
METHOD: DT (125mmØ) to 0.25m, DT (64mmØ) to 4.0m
REMARKS:

OPERATOR: TJ Core Drilling (NR)

LOGGED: LS
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333842.2, N:6250429.4
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH104
PROJECT No: 231572.00
DATE: 19/10/24
SHEET: 1 of 1



0.25-4.00 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333839.7, N:6250412.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH105
PROJECT No: 231572.00
DATE: 26/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE			TESTING				
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL				ROCK						SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS	
					ORIGIN (#)	CONSISTENCY (M)	DENSITY (M)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)							DEFECTS & REMARKS
26/10/24 No free groundwater observed whilst augering		0.20	CONCRETE.		NA							100	-		0.00m: , unless otherwise stated below all defects are bedding planar dipping at 0-10°						
		0.22	FILL / CLAY: pale yellow, pale brown; unknown material mesh; unusual odour.													D/ES					
			CONCRETE; (possible footing).		NA							100	-								
	-5	1																			
		1.43	SANDSTONE: pale brown-yellow, fine to coarse grained, distinct and indistinct bedding , 0 to 10°. Hawkesbury Sandstone						1.43	H	100	71		1.43-154m: JT x4, HE			1.59				
	-6	2										100	100						2	PLT	PL(A)=1.1MPa
		3.55	CORE LOSS																		
		3.76	AS ABOVE																		
		4	Borehole discontinued at 3.88m depth. Target depth reached.																		
		5																			

mesh: would be better consistent between logs (bh1 doesn't say unknown and calls it mesh material)

odour: is it unnatural odour (this would be a better description than unusual)

NOTES: [#]Soil origin is "probable" unless otherwise stated. [□]Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

mesh: would be better consistent between logs (bh103 doesn't say unknown, and calls it mesh material)

odour: is it unnatural odour (this would be a better description than unusual)

NOTES: ¹Soil origin is "probable" unless otherwise stated. ²Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Concrete Coring Equipment
METHOD: DT (125mmØ) to 0.20m, DT (64mmØ) to 3.88m
REMARKS:

OPERATOR: TJ Core Drilling (NR)

LOGGED: RDS
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

CLIENT:

UOL Group Limited

PROJECT:

Proposed Hotel Upgrade

LOCATION:

150 Day Street, Syd, NSW 2000

SURFACE LEVEL:

-4.0 AHD

COORDINATE:

E:333839.7, N:6250412.8

DATUM/GRID:

MGA2020 Zone 56

DIP/AZIMUTH:

90°/---°

LOCATION ID:

BH105

PROJECT No:

231572.00

DATE:

26/10/24

SHEET:

1 of 1



0.22-3.88 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333849.6, N:6250430.6
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH106
PROJECT No: 231572.00
DATE: 19/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED													SAMPLE			TESTING		
GROUNDWATER	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL			ROCK						SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS
				ORIGIN ^(#)	CONSIS. ^(*) DENSITY ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)						
19/10/24 No free groundwater observed whilst augering	0.28	CONCRETE.		NA							100	-						
		CONCRETE; (possible footing).									100	100						
	1			NA														
	1.65										91	89						
	1.71	SANDSTONE: grey, orange-brown and red-brown, fine to medium grained.					MW	1.65	L					1.68m: JT, 45°, UN, CN, RF				
	1.78	Hawkesbury Sandstone					MW	1.78	VL to L									
	2	CORE LOSS						2.00						2.00-2.15m: JT, 0-20°, UN, SN Fe, RF			PLT	PL(A)=0.09MPa
		AS ABOVE												2.21-2.30m: JT, 45°, PR, SN Fe, RF			PLT	PL(A)=0.08MPa
														2.26-2.40m: JT, 80°, PR, SN Fe, RF				
														2.53-2.60m: JT, 45°, PR, SN Fe, RF				
							HW	L			100	29	2.76-2.81m: JT, 30°, PR, SN Fe, RF					
													2.95m: FG, 50mm					
													3.00-3.05m: JT, 30°, PR, SN Fe, RF					
													3.08-3.16m: FG, 80 mm					
													3.16m: JT, 80°, UN, SN Fe					
							MW	3.38	H				3.63-3.75m: JT, 0-45°, PR, SN Fe, RF			PLT	PL(A)=1.4MPa	
								3.50					3.75-3.85m: FG, 100mm					
							HW	L			100	30	3.85-4.20m: JT, 80-90°, PR, Fe					
								4.20					4.28m: B, 0°, PR, SN Fe, RF					
													4.46m: B, 5°, UN, SN Fe, RF					
							MW		M				4.58- 4.63m: JT, 30°, PR, SN Fe, RF					
													4.66m JT, 30°, SN Fe, RF					
								4.77	L				4.80m: FG, 70mm					
	4.87	CORE LOSS																
	5																	
		Borehole discontinued at 4.94m depth. Target depth reached.																

NOTES: ^(#)Soil origin is "probable" unless otherwise stated. ^(*)Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

PLANT: Concrete Coring Equipment

OPERATOR: TJ Core Drilling (NR)

LOGGED: LS

METHOD: DT (125mmØ) to 0.29, DT (64mmØ) to 4.94m

CASING: Uncased

REMARKS:

Refer to explanatory notes for symbol and abbreviation definitions



CORE PHOTO LOG

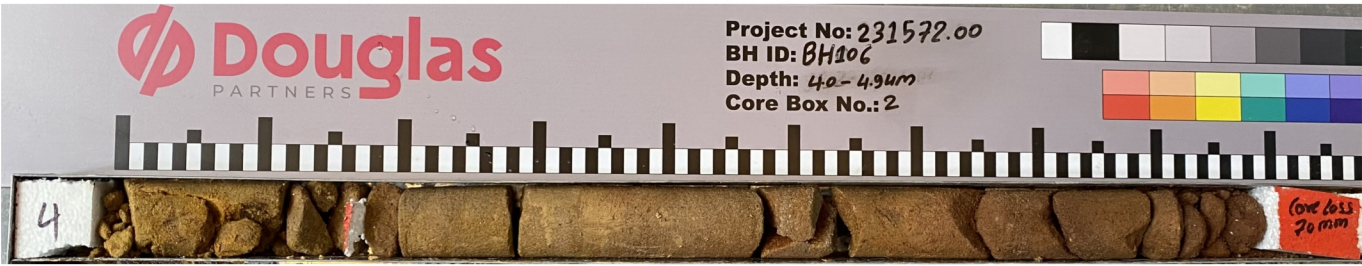
CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333849.6, N:6250430.6
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH106
PROJECT No: 231572.00
DATE: 19/10/24
SHEET: 1 of 1



0.28-4.00 m depth



4.00-4.94 m depth

BOREHOLE LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333839.7, N:6250412.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH105
PROJECT No: 231572.00
DATE: 26/10/24
SHEET: 1 of 1

CONDITIONS ENCOUNTERED														SAMPLE			TESTING								
GROUNDWATER	RL (m)	DEPTH (m)	DESCRIPTION OF STRATA	GRAPHIC	SOIL		ROCK							SAMPLE REMARKS	TYPE	INTERVAL	DEPTH (m)	TEST TYPE	RESULTS AND REMARKS						
					ORIGIN ^(#)	CONSIS. ^(*) DENSITY ^(*)	MOISTURE	WEATH.	DEPTH (m)	STRENGTH	RECOVERY (%)	RQD	FRACTURE SPACING (m)							DEFECTS & REMARKS					
26/10/24 No free groundwater observed whilst augering		0.20	CONCRETE.		NA							100	-		0.00m: , unless otherwise stated below all defects are bedding planar dipping at 0-10°										
		0.29	FILL / CLAY: pale yellow, pale brown; mesh material; unnatural odour.		FILL											D/ES	0.22								
			CONCRETE; (possible footing)																						
					NA							100	-												
		1.43	SANDSTONE: pale brown-yellow, fine to coarse grained, distinct and indistinct bedding , 0 to 10°. Hawkesbury Sandstone						1.43		100	71		1.43-1.54m: JT x4, HE	UCS		1.59	PLT	PL(A)=1.2MPa						
									100	100															
		2																					2	PLT	PL(A)=1.1MPa

PLANT: Concrete Coring Equipment
METHOD: DT (125mmØ) to 0.20m, DT (64mmØ) to 3.88m
REMARKS:

OPERATOR: TJ Core Drilling (NR)

LOGGED: RDS
CASING: Uncased

Refer to explanatory notes for symbol and abbreviation definitions

CORE PHOTO LOG

CLIENT: UOL Group Limited
PROJECT: Proposed Hotel Upgrade
LOCATION: 150 Day Street, Syd, NSW 2000

SURFACE LEVEL: -4.0 AHD
COORDINATE: E:333839.7, N:6250412.8
DATUM/GRID: MGA2020 Zone 56
DIP/AZIMUTH: 90°/---°

LOCATION ID: BH105
PROJECT No: 231572.00
DATE: 26/10/24
SHEET: 1 of 1



0.22-3.88 m depth

Introduction to Terminology, Symbols and Abbreviations

Douglas Partners' reports, investigation logs, and other correspondence may use terminology which has quantitative or qualitative connotations. To remove ambiguity or uncertainty surrounding the use of such terms, the following sets of notes pages may be attached Douglas Partners' reports, depending on the work performed and conditions encountered:

- Soil Descriptions;
- Rock Descriptions; and
- Sampling, insitu testing, and drilling methodologies

In addition to these pages, the following notes generally apply to most documents.

Abbreviation Codes

Site conditions may also be presented in a number of different formats, such as investigation logs, field mapping, or as a written summary. In some of these formats textual or symbolic terminology may be presented using textual abbreviation codes or graphic symbols, and, where commonly used, these are listed alongside the terminology definition. For ease of identification in these note pages, textual codes are presented in these notes in the following style **XW**. Code usage conforms with the following guidelines:

- Textual codes are case insensitive, although herein they are generally presented in upper case; and
- Textual codes are contextual (i.e. the same or similar combinations of characters may be used in different contexts with different meanings (for example `PL` is used for plastic limit in the context of soil moisture condition, as well as in `PL(A)` for point load test result in the testing results column)).

Data Integrity Codes

Subsurface investigation data recorded by Douglas Partners is generally managed in a highly structured database environment, where records "span" between a top and bottom depth interval. Depth interval "gaps" between records are considered to introduce ambiguity, and, where appropriate, our practice guidelines may require contiguous data sets. Recording meaningful data is not always appropriate (for example assigning a "strength" to a concrete pavement) and the following codes may be used to maintain contiguity in such circumstances.

Term	Description	Abbreviation Code
Core loss	No core recovery	KL
Unknown	Information was not available to allow classification of the property. For example, when auguring in loose, saturated sand auger cuttings may not be returned.	UK
No data	Information required to allow classification of the property was not available. For example if drilling is commenced from the base of a hole predrilled by others	ND
Not Applicable	Derivation of the properties not appropriate or beyond the scope of the investigation. For example providing a description of the strength of a concrete pavement	NA

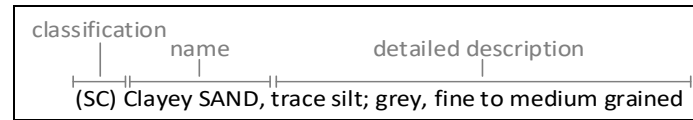
Graphic Symbols

Douglas Partners' logs contain a "graphic" column which provides a pictorial representation of the basic composition of the material. The symbols used are directly representing the material name stated in the adjacent "Description of Strata" column, and as such no specific graphic symbology legend has been provided in these notes.

intentionally blank

Introduction

All materials which are not considered to be “in-situ rock” are described in general accordance with the soil description model of AS 1726-2017 Part 6.1.3, and can be broken down into the following description structure:



The “classification” comprises a two character “group symbol” providing a general summary of dominant soil characteristics. The “name” summarises the particle sizes within the soil which most influence its behaviour. The detailed description presents more information about composition, condition, structure, and origin of the soil.

Classification, naming and description of soils require the relative proportion of particles of different sizes within the whole soil mixture to be considered.

Particle size designation and Behaviour Model

Solid particles within a soil are differentiated on the basis of size.

The engineering behaviour properties of a soil can subsequently be modelled to be either “fine grained” (also known as “cohesive” behaviour) or “coarse grained” (“non cohesive” behaviour), depending on the relative proportion of fine or coarse fractions in the soil mixture.

Particle Size Designation	Particle Size (mm)	Behaviour Model	
		Behaviour	Approximate Dry Mass
Boulder	>200	Excluded from particle behaviour model as “oversize”	
Cobble	63 - 200		
Gravel ¹	2.36 - 63	Coarse	>65%
Sand ¹	0.075 - 2.36		
Silt	0.002 - 0.075	Fine	>35%
Clay	<0.002		

¹ – refer grain size subdivision descriptions below

The behaviour model boundaries defined above are not precise, and the material behaviour should be assumed from the name given to the material (which considers the particle fraction which dominates the behaviour, refer “component proportions” below), rather than strict observance of the proportions of particle sizes. For example, if a material is named a “Sandy CLAY”, this is indicative that the material exhibits fine grained behaviour, even if the dry mass of coarse grained material may exceed 65%.

Component proportions

The relative proportion of the dry mass of each particle size fraction is assessed to be a “primary”, “secondary”, or “minor” component of the soil mixture, depending on its influence over the soil behaviour.

Component Proportion Designation	Definition ¹	Relative Proportion	
		In Fine Grained Soil	In Coarse Grained Soil
Primary	The component (particle size designation, refer above) which dominates the engineering behaviour of the soil	The clay/silt component with the greater proportion	The sand/gravel component with the greater proportion
Secondary	Any component which is not the primary, but is significant to the engineering properties of the soil	Any component with greater than 30% proportion	Any granular component with greater than 30%; or Any fine component with greater than 12%
Minor ²	Present in the soil, but not significant to its engineering properties	All other components	All other components

¹ As defined in AS1726-2017 6.1.4.4

² In the detailed material description, minor components are split into two further sub-categories. Refer “identification of minor components” below.

Composite Materials

In certain situations, a lithology description may describe more than one material, for example, collectively describing a layer of interbedded sand and clay. In such a scenario, the two materials would be described independently, with the names preceded or followed by a statement describing the arrangement by which the materials co-exist. For example, “INTERBEDDED Silty CLAY AND SAND”.

Classification

The soil classification comprises a two character group symbol. The first character identifies the primary component. The second character identifies either the grading or presence of fines in a coarse grained soil, or the plasticity in a fine grained soil. Refer AS1726-2017 6.1.6 for further clarification.

Soil Name

For most soils, the name is derived with the primary component included as the noun (in upper case), preceded by any secondary components stated in an adjective form. In this way, the soil name also describes the general composition and indicates the dominant behaviour of the material.

Component ¹	Prominence in Soil Name
Primary	Noun (eg "CLAY")
Secondary	Adjective modifier (eg "Sandy")
Minor	No influence

¹ – for determination of component proportions, refer component proportions on previous page

For materials which cannot be disaggregated, or which are not comprised of rock or mineral fragments, the names "ORGANIC MATTER" or "ARTIFICIAL MATERIAL" may be used, in accordance with AS1726-2017 Table 14.

Commercial or colloquial names are not used for the soil name where a component derived name is possible (for example "Gravelly SAND" rather than "CRACKER DUST").

Materials of "fill" or "topsoil" origin are generally assigned a name derived from the primary/secondary component (where appropriate). In log descriptions this is preceded by uppercase "FILL" or "TOPSOIL". Origin uncertainty is indicated in the description by the characters (?), with the degree of uncertainty described (using the terms "probably" or "possibly" in the origin column, or at the end of the description).

Identification of minor components

Minor components are identified in the soil description immediately following the soil name. The minor component fraction is usually preceded with a term indicating the relative proportion of the component.

Minor Component Proportion Term	Relative Proportion	
	In Fine Grained Soil	In Coarse Grained Soil
With	All fractions: 15-30%	Clay/silt: 5-12% sand/gravel: 15-30%
Trace	All fractions: 0-15%	Clay/silt: 0-5% sand/gravel: 0-15%

The terms "with" and "trace" generally apply only to gravel or fine particle fractions. Where cobbles/boulders are encountered in minor proportions (generally less than about 12%) the term "occasional" may be used. This term describes the sporadic distribution of the material within the confines of the investigation excavation only, and there may be considerable variation in proportion over a wider area which is difficult to factually characterise due to the relative size of the particles and the investigation methods.

Soil Composition

Plasticity

Descriptive Term	Laboratory liquid limit range	
	Silt	Clay
Non-plastic materials	Not applicable	Not applicable
Low plasticity	≤50	≤35
Medium plasticity	Not applicable	>35 and ≤50
High plasticity	>50	>50

Note, Plasticity descriptions generally describe the plasticity behaviour of the whole of the fine grained soil, not individual fine grained fractions.

Grain Size

Type	Particle size (mm)	
	Coarse	Fine
Gravel	19 - 63	6.7 - 19
	6.7 - 19	2.36 - 6.7
	2.36 - 6.7	0.6 - 2.36
Sand	0.6 - 2.36	0.21 - 0.6
	0.21 - 0.6	0.075 - 0.21
	0.075 - 0.21	

Grading

Grading Term	Particle size (mm)
Well	A good representation of all particle sizes
Poorly	An excess or deficiency of particular sizes within the specified range
Uniformly	Essentially of one size
Gap	A deficiency of a particular size or size range within the total range

Note, AS1726-2017 provides terminology for additional attributes not listed here.

Soil Condition

Moisture

The moisture condition of soils is assessed relative to the plastic limit for fine grained soils, while for coarse grained soils it is assessed based on the appearance and feel of the material. The moisture condition of a material is considered to be independent of stratigraphy (although commonly these are related), and this data is presented in its own column on logs.

Applicability	Term	Tactile Assessment	Abbreviation code
Fine	Dry of plastic limit	Hard and friable or powdery	w<PL
	Near plastic limit	Can be moulded	w=PL
	Wet of plastic limit	Water residue remains on hands when handling	w>PL
	Near liquid limit	"oozes" when agitated	w=LL
	Wet of liquid limit	"oozes"	w>LL
Coarse	Dry	Non-cohesive and free running	D
	Moist	Feels cool, darkened in colour, particles may stick together	M
	Wet	Feels cool, darkened in colour, particles may stick together, free water forms when handling	W

The abbreviation code **NDF**, meaning "not-assessable due to drilling fluid use" may also be used.

Note, observations relating to free ground water or drilling fluids are provided independent of soil moisture condition.

Consistency/Density/Compaction/Cementation/Extremely Weathered Material

These concepts give an indication of how the material may respond to applied forces (when considered in conjunction with other attributes of the soil). This behaviour can vary independent of the composition of the material, and on logs these are described in an independent column and are generally mutually exclusive (i.e it is inappropriate to describe both consistency and compaction at the same time). The method by which the behaviour is described depends on the behaviour model and other characteristics of the soil as follows:

- In fine grained soils, the "consistency" describes the ease with which the soil can be remoulded, and is generally correlated against the materials undrained shear strength;
- In granular materials, the relative density describes how tightly packed the particles are, and is generally correlated against the density index;
- In anthropogenically modified materials, the compaction of the material is described qualitatively;
- In cemented soils (both natural and anthropogenic), the cemented "strength" is described qualitatively, relative to the difficulty with which the material is disaggregated; and
- In soils of extremely weathered material origin, the engineering behaviour may be governed by relic rock features, and expected behaviour needs to be assessed based the overall material description.

Quantitative engineering performance of these materials may be determined by laboratory testing or estimated by correlated field tests (for example penetration or shear vane testing). In some cases, performance may be assessed by tactile or other subjective methods, in which case investigation logs will show the estimated value enclosed in round brackets, for example **(VS)**.

Consistency (fine grained soils)

Consistency Term	Tactile Assessment	Undrained Shear Strength (kPa)	Abbreviation Code
Very soft	Extrudes between fingers when squeezed	<12	VS
Soft	Mouldable with light finger pressure	>12 - ≤25	S
Firm	Mouldable with strong finger pressure	>25 - ≤50	F
Stiff	Cannot be moulded by fingers	>50 - ≤100	St
Very stiff	Indented by thumbnail	>100 - ≤200	VSt
Hard	Indented by thumbnail with difficulty	>200	H
Friable	Easily crumbled or broken into small pieces by hand	-	Fr

Relative Density (coarse grained soils)

Relative Density Term	Density Index	Abbreviation Code
Very loose	<15	VL
Loose	>15 - ≤35	L
Medium dense	>35 - ≤65	MD
Dense	>65 - ≤85	D
Very dense	>85	VD

Note, tactile assessment of relative density is difficult, and generally requires penetration testing, hence a tactile assessment guide is not provided.

Compaction (anthropogenically modified soil)

Compaction Term	Abbreviation Code
Well compacted	WC
Poorly compacted	PC
Moderately compacted	MC
Variably compacted	VC

Cementation (natural and anthropogenic)

Cementation Term	Abbreviation Code
Moderately cemented	MOD
Weakly cemented	WEK

Extremely Weathered Material

AS1726-2017 considers weathered material to be soil if the unconfined compressive strength is less than 0.6 MPa (i.e. less than very low strength rock). These materials may be identified as “extremely weathered material” in reports and by the abbreviation code **XWM** on log sheets. This identification is not correlated to any specific qualitative or quantitative behaviour, and the engineering properties of this material must therefore be assessed according to engineering principles with reference to any relic rock structure, fabric, or texture described in the description.

Soil Origin

Term	Description	Abbreviation Code
Residual	Derived from in-situ weathering of the underlying rock	RS
Extremely weathered material	Formed from in-situ weathering of geological formations. Has strength of less than ‘very low’ as per as1726 but retains the structure or fabric of the parent rock.	XWM
Alluvial	Deposited by streams and rivers	ALV
Fluvial	Deposited by channel fill and overbank (natural levee, crevasse splay or flood basin)	FLV
Estuarine	Deposited in coastal estuaries	EST
Marine	Deposited in a marine environment	MAR
Lacustrine	Deposited in freshwater lakes	LAC
Aeolian	Carried and deposited by wind	AEO
Colluvial	Soil and rock debris transported down slopes by gravity	COL
Slopewash	Thin layers of soil and rock debris gradually and slowly deposited by gravity and possibly water	SW
Topsoil	Mantle of surface soil, often with high levels of organic material	TOP
Fill	Any material which has been moved by man	FILL
Littoral	Deposited on the lake or seashore	LIT
Unidentifiable	Not able to be identified	UID

Cobbles and Boulders

The presence of particles considered to be “oversize” may be described using one of the following strategies:

- Oversize encountered in a minor proportion (when considered relative to the wider area) are noted in the soil description; or
- Where a significant proportion of oversize is encountered, the cobbles/boulders are described independent of the soil description, in a similar manner to composite soils (described above) but qualified with “MIXTURE OF”.

intentionally blank

Rock Strength

Rock strength is defined by the unconfined compressive strength, and it refers to the strength of the rock substance and not the strength of the overall rock mass, which may be considerably weaker due to defects.

The Point Load Strength Index $I_{s(50)}$ is commonly used to provide an estimate of the rock strength and site specific correlations should be developed to allow UCS values to be determined. The point load strength test procedure is described by Australian Standard AS4133.4.1-2007. The terms used to describe rock strength are as follows:

Strength Term	Unconfined Compressive Strength (MPa)	Point Load Index ¹ $I_{s(50)}$ MPa	Abbreviation Code
Very low	0.6 - 2	0.03 - 0.1	VL
Low	2 - 6	0.1 - 0.3	L
Medium	6 - 20	0.3 - 1.0	M
High	20 - 60	1 - 3	H
Very high	60 - 200	3 - 10	VH
Extremely high	>200	>10	EH

¹ Rock strength classification is based on UCS. The UCS to $I_{s(50)}$ ratio varies significantly for different rock types and specific ratios may be required for each site. The point load Index ranges shown above are as suggested in AS1726 and should not be relied upon without supporting evidence.

The following abbreviation codes are used for soil layers or seams of material “within rock” but for which the equivalent UCS strength is less than 0.6 MPa.

Scenario	Abbreviation Code
The material encountered has an equivalent UCS strength of less than 0.6 MPa, and therefore is considered to be soil (as per Note 1 of Table 20 of AS 1726-2017). The properties of the material encountered over this interval are described in the “Description of Strata” and soil properties columns.	SOIL
The material encountered has an equivalent UCS strength of less than 0.6 MPa, and therefore is considered to be soil (as per Note 1 of Table 20 of AS 1726-2017). The prominence of the material is such that it can be considered to be a seam (as defined in Table 22 of AS1726-2017) and the properties of the material are described in the defect column.	SEAM

Degree of Weathering

The degree of weathering of rock is classified as follows:

Weathering Term	Description	Abbreviation Code
Residual Soil ¹	Material is weathered to such an extent that it has soil properties. Mass structure and material texture and fabric of original rock are no longer visible, but the soil has not been significantly transported.	RS
Extremely weathered ¹	Material is weathered to such an extent that it has soil properties. Mass structure and material texture and fabric of original rock are still visible	XW
Highly weathered	The whole of the rock material is discoloured, usually by iron staining or bleaching to the extent that the colour of the original rock is not recognisable. Rock strength is significantly changed by weathering. Some primary minerals have weathered to clay minerals. Porosity may be increased by leaching or may be decreased due to deposition of weathering products in pores.	HW
Moderately weathered	The whole of the rock material is discoloured, usually by iron staining or bleaching to the extent that the colour of the original rock is not recognisable but shows little or no change of strength from fresh rock.	MW
Slightly weathered	Rock is partially discoloured with staining or bleaching along joints but shows little or no change of strength from fresh rock.	SW
Fresh	No signs of decomposition or staining.	FR
Note: If HW and MW cannot be differentiated use DW (see below)		
Distinctly weathered	Rock strength usually changed by weathering. The rock may be highly discoloured, usually by iron staining. Porosity may be increased by leaching or may be decreased due to deposition of weathered products in pores.	DW

¹ The parent rock type, of which the residual/extremely weathered material is a derivative, will be stated in the description (where discernible).

Degree of Alteration

The degree of alteration of the rock material (physical or chemical changes caused by hot gasses or liquids at depth) is classified as follows:

Term	Description	Abbreviation Code
Extremely altered	Material is altered to such an extent that it has soil properties. Mass structure and material texture and fabric of original rock are still visible.	XA
Highly altered	The whole of the rock material is discoloured, usually by staining or bleaching to the extent that the colour of the original rock is not recognisable. Rock strength is changed by alteration. Some primary minerals are altered to clay minerals. Porosity may be increased by leaching or may be decreased due to precipitation of secondary materials in pores.	HA
Moderately altered	The whole of the rock material is discoloured, usually by staining or bleaching to the extent that the colour of the original rock is not recognisable but shows little or no change of strength from fresh rock.	MA
Slightly altered	Rock is slightly discoloured but shows little or no change of strength from fresh rock	SA
Note: If HA and MA cannot be differentiated use DA (see below)		
Distinctly altered	Rock strength usually changed by alteration. The rock may be highly discoloured, usually by staining or bleaching. Porosity may be increased by leaching or may be decreased due to precipitation of secondary minerals in pores.	DA

Degree of Fracturing

The following descriptive classification apply to the spacing of natural occurring fractures in the rock mass. It includes bedding plane partings, joints and other defects, but excludes drilling breaks. These terms are generally not required on investigation logs where fracture spacing is presented as a histogram, and where used are presented in an unabbreviated format.

Term	Description
Fragmented	Fragments of <20 mm
Highly Fractured	Core lengths of 20-40 mm with occasional fragments
Fractured	Core lengths of 30-100 mm with occasional shorter and longer sections
Slightly Fractured	Core lengths of 300 mm or longer with occasional sections of 100-300 mm
Unbroken	Core contains very few fractures

Rock Quality Designation

The quality of the cored rock can be measured using the Rock Quality Designation (RQD) index, defined as:

$$RQD \% = \frac{\text{cumulative length of 'sound' core sections} > 100 \text{ mm long}}{\text{total drilled length of section being assessed}}$$

where 'sound' rock is assessed to be rock of low strength or stronger. The RQD applies only to natural fractures. If the core is broken by drilling or handling (i.e., drilling breaks) then the broken pieces are fitted back together and are not included in the calculation of RQD.

Stratification Spacing

These terms may be used to describe the spacing of bedding partings in sedimentary rocks. Where used, these terms are generally presented in an unabbreviated format

Term	Separation of Stratification Planes
Thinly laminated	< 6 mm
Laminated	6 mm to 20 mm
Very thinly bedded	20 mm to 60 mm
Thinly bedded	60 mm to 0.2 m
Medium bedded	0.2 m to 0.6 m
Thickly bedded	0.6 m to 2 m
Very thickly bedded	> 2 m

Rock Descriptions

Terminology
Symbols
Abbreviations

Defect Descriptions

Defect Type

Term	Abbreviation Code
Bedding plane	B
Cleavage	CL
Crushed seam	CS
Crushed zone	CZ
Drilling break	DB
Decomposed seam	DS
Drill lift	DL
Extremely Weathered seam	EW
Fault	F
Fracture	FC
Fragmented	FG
Handling break	HB
Infilled seam	IS
Joint	JT
Lamination	LAM
Shear seam	SS
Shear zone	SZ
Vein	VN
Mechanical break	MB
Parting	P
Sheared Surface	S

Rock Defect Orientation

Term	Abbreviation Code
Horizontal	H
Vertical	V
Sub-horizontal	SH
Sub-vertical	SV

Rock Defect Coating

Term	Abbreviation Code
Clean	CN
Coating	CT
Healed	HE
Infilled	INF
Stained	SN
Tight	TI
Veneer	VNR

Rock Defect Infill

Term	Abbreviation Code
Calcite	CA
Carbonaceous	CBS
Clay	CLAY
Iron oxide	FE
Manganese	MN
Pyrite	Py
Secondary material	MS
Silt	M
Quartz	Qz
Unidentified material	MU

Rock Defect Shape/Planarity

Term	Abbreviation Code
Curved	CU
Discontinuous	DIS
Irregular	IR
Planar	PR
Stepped	ST
Undulating	UN

Rock Defect Roughness

Term	Abbreviation Code
Polished	PO
Rough	RF
Smooth	SM
Slickensided	SL
Very rough	VR

Defect Orientation

The inclination of defects is always measured from the perpendicular to the core axis.

intentionally blank



Sampling and Testing

A record of samples retained, and field testing performed is usually shown on a Douglas Partners' log with samples appearing to the left of a depth scale, and selected field and laboratory testing (including results, where relevant) appearing to the right of the scale, as illustrated below:

SAMPLE			DEPTH (m)	TESTING	
SAMPLE REMARKS	TYPE	INTERVAL		TEST TYPE	RESULTS AND REMARKS
	SPT		1.0 1.45	SPT	4,9,11 N=20

Sampling

The type or intended purpose for which a sample was taken is indicated by the following abbreviation codes.

Sample Type	Code
Auger sample	A
Acid Sulfate sample	ASS
Bulk sample	B
Core sample	C
Disturbed sample	D
Environmental sample	ES
Driven Tube sample	DT
Gas sample	G
Piston sample	P
Sample from SPT test	SPT
Undisturbed tube sample	U ¹
Water sample	W
Material Sample	MT
Core sample for unconfined compressive strength testing	UCS

¹ – numeric suffixes indicate tube diameter/width in mm

The above codes only indicate that a sample was retained, and not that testing was scheduled or performed.

Field and Laboratory Testing

A record that field and laboratory testing was performed is indicated by the following abbreviation codes.

Test Type	Code
Pocket penetrometer (kPa)	PP
Photo ionisation detector (ppm)	PID
Standard Penetration Test x/y = x blows for y mm penetration HB = hammer bouncing HW = fell under weight of hammer	SPT
Shear vane (kPa)	V
Unconfined compressive strength, (MPa)	UCS
Point load test, (MPa), axial (A), diametric (D), irregular (I)	PLT(-)
Dynamic cone penetrometer, followed by blow count penetration increment in mm (cone tip, generally in accordance with AS1289.6.3.2)	DCP9/150
Perth sand penetrometer, followed by blow count penetration increment in mm (flat tip, generally in accordance with AS1289.6.3.3)	PSP/150
Dynamic probe super heavy, followed by blow count penetration increment in mm	DPSH/100

Groundwater Observations

	water seepage/inflow
	water seepage/outflow
	standing or observed water level
NFGWO	no free groundwater observed
OBS	observations obscured by drilling fluids

Drilling or Excavation Methods/Tools

The drilling/excavation methods used to perform the investigation may be shown either in a dedicated column down the left-hand edge of the log, or stated in the log footer. In some circumstances abbreviation codes may be used.

Method	Abbreviation Code
Direct Push	DP
Solid flight auger. Suffixes: /T = tungsten carbide tip, /V = v-shaped tip	AD ¹
Air Track	AT
Diatube	DT ¹
Hand auger	HA ¹
Hand tools (unspecified)	HAND
Existing exposure	X
Hollow flight auger	HSA ¹
HQ coring	HQ3
HMLC series coring	HMLC
NMLC series coring	NMLC
NQ coring	NQ3
PQ coring	PQ3
Predrilled	PD
Push tube	PT ¹
Ripping tyne/ripper	R
Rock roller	RR ¹
Rock breaker/hydraulic hammer	EH
Sonic drilling	SON ¹
Mud/blade bucket	MB ¹
Toothed bucket	TB ¹
Vibrocore	VC ¹
Vacuum excavation	VE
Wash bore (unspecified bit type)	WB ¹

¹ – numeric suffixes indicate tool diameter/width in mm

Appendix I

Summary Results Table

Lab result

HIL/HSL value

■ HIL/HSL exceedance ■ ML exceedance ■ ML and HIL/HSL exceedance

■ Indicates that asbestos has been detected by the lab, refer to the lab report ■ Blue = DC exceedance ■ HSL 0-1 Exceedance

Bold = Lab detections - = Not tested or No HIL/HSL (as applicable) or Not applicable NL = Not limiting NAD = No Asbestos detected

HIL = Health investigation level HSL = Health screening level (excluding DC) ML = Management Limit DC = Direct Contact HSL

Site Assessment Criteria (SAC):

SAC based on generic land use thresholds for Commercial/ industrial D

Refer to the SAC section of report for information of SAC sources and rationale. Summary information as follows:

HIL	HIL-D (NEPC, 2013 or HEPA, 2020 (PFAS only))
HSL (vapour intrusion)	HSL-D (NEPC, 2013)

Site Assessment Criteria (SAC):

SAC based on generic land use thresholds for Commercial/ industrial D

Appendix J

Laboratory Certificate of Analysis, Chain of Custody
Documentation, Sample Receipt Advice

CERTIFICATE OF ANALYSIS 364982

Client Details

Client	Douglas Partners Pty Ltd
Attention	Irha Riaz
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	<u>231572.01 Sydney</u>
Number of Samples	9 Soil
Date samples received	29/10/2024
Date completed instructions received	29/10/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	05/11/2024
Date of Issue	26/11/2024
Reissue Details	This report replaces R00 created on 05/11/2024 due to: Sample ID Amended (Client Request)
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Diego Bigolin, Inorganics Supervisor
 Dragana Tomas, Senior Chemist
 Giovanni Agosti, Group Technical Manager
 Liam Timmins, Organics Supervisor
 Timothy Toll, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil

Our Reference		364982-1	364982-3	364982-4	364982-7	364982-8
Your Reference	UNITS	S01	BH102	BH103	BH106	BH105
Depth		0.32-0.35	1.5-1.6	1.5-1.6	1.8-1.9	0.28-0.29
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024
Date analysed	-	04/11/2024	04/11/2024	04/11/2024	04/11/2024	04/11/2024
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	110	110	111	102	82

vTRH(C6-C10)/BTEXN in Soil

Our Reference		364982-9
Your Reference	UNITS	BD1
Depth		-
Type of sample		Soil
Date extracted	-	30/10/2024
Date analysed	-	04/11/2024
TRH C ₆ - C ₉	mg/kg	<25
TRH C ₆ - C ₁₀	mg/kg	<25
vTRH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	108

svTRH (C10-C40) in Soil						
Our Reference		364982-1	364982-3	364982-4	364982-7	364982-8
Your Reference	UNITS	S01	BH102	BH103	BH106	BH105
Depth		0.32-0.35	1.5-1.6	1.5-1.6	1.8-1.9	0.28-0.29
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024
Date analysed	-	31/10/2024	31/10/2024	31/10/2024	31/10/2024	31/10/2024
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	85	83	83	85	89

svTRH (C10-C40) in Soil		
Our Reference		364982-9
Your Reference	UNITS	BD1
Depth		-
Type of sample		Soil
Date extracted	-	30/10/2024
Date analysed	-	31/10/2024
TRH C ₁₀ - C ₁₄	mg/kg	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C ₁₀ -C ₁₆	mg/kg	<50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	mg/kg	<50
TRH >C ₁₆ -C ₃₄	mg/kg	<100
TRH >C ₃₄ -C ₄₀	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	82

PAHs in Soil						
Our Reference		364982-1	364982-3	364982-4	364982-7	364982-8
Your Reference	UNITS	S01	BH102	BH103	BH106	BH105
Depth		0.32-0.35	1.5-1.6	1.5-1.6	1.8-1.9	0.28-0.29
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024
Date analysed	-	30/10/2024	31/10/2024	31/10/2024	31/10/2024	31/10/2024
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	0.1	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	99	107	106	105	116

PAHs in Soil		
Our Reference		364982-9
Your Reference	UNITS	BD1
Depth		-
Type of sample		Soil
Date extracted	-	30/10/2024
Date analysed	-	31/10/2024
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	113

Organochlorine Pesticides in soil			
Our Reference		364982-1	364982-8
Your Reference	UNITS	S01	BH105
Depth		0.32-0.35	0.28-0.29
Type of sample		Soil	Soil
Date extracted	-	30/10/2024	30/10/2024
Date analysed	-	30/10/2024	31/10/2024
alpha-BHC	mg/kg	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Mirex	mg/kg	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1
Total Positive Aldrin+Dieldrin	mg/kg	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	101	121

Organophosphorus Pesticides in Soil			
Our Reference		364982-1	364982-8
Your Reference	UNITS	S01	BH105
Depth		0.32-0.35	0.28-0.29
Type of sample		Soil	Soil
Date extracted	-	30/10/2024	30/10/2024
Date analysed	-	30/10/2024	31/10/2024
Dichlorvos	mg/kg	<0.1	<0.1
Mevinphos	mg/kg	<0.1	<0.1
Phorate	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1
Disulfoton	mg/kg	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1
Parathion-Methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1
Fenthion	mg/kg	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Methidathion	mg/kg	<0.1	<0.1
Fenamiphos	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Phosalone	mg/kg	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1
Coumaphos	mg/kg	<0.1	<0.1
Surrogate 4-Chloro-3-NBTF	%	101	121

PCBs in Soil			
Our Reference		364982-1	364982-8
Your Reference	UNITS	S01	BH105
Depth		0.32-0.35	0.28-0.29
Type of sample		Soil	Soil
Date extracted	-	30/10/2024	30/10/2024
Date analysed	-	30/10/2024	31/10/2024
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate 2-Fluorobiphenyl	%	94	108

Misc Soil - Inorg			
Our Reference		364982-1	364982-8
Your Reference	UNITS	S01	BH105
Depth		0.32-0.35	0.28-0.29
Type of sample		Soil	Soil
Date prepared	-	30/10/2024	30/10/2024
Date analysed	-	31/10/2024	31/10/2024
Total Phenolics (as Phenol)	mg/kg	<5	<5

Acid Extractable metals in soil

Our Reference		364982-1	364982-3	364982-4	364982-7	364982-8
Your Reference	UNITS	S01	BH102	BH103	BH106	BH105
Depth		0.32-0.35	1.5-1.6	1.5-1.6	1.8-1.9	0.28-0.29
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024
Date analysed	-	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024
Arsenic	mg/kg	<4	<4	<4	<4	10
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	<1	2	7	5	3
Copper	mg/kg	36	1	4	2	13
Lead	mg/kg	2	<1	2	3	38
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	5	<1	<1	1	6
Zinc	mg/kg	29	22	3	9	68

Acid Extractable metals in soil

Our Reference		364982-9
Your Reference	UNITS	BD1
Depth		-
Type of sample		Soil
Date prepared	-	30/10/2024
Date analysed	-	30/10/2024
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	4
Copper	mg/kg	2
Lead	mg/kg	4
Mercury	mg/kg	<0.1
Nickel	mg/kg	1
Zinc	mg/kg	6

Moisture						
Our Reference		364982-1	364982-3	364982-4	364982-7	364982-8
Your Reference	UNITS	S01	BH102	BH103	BH106	BH105
Depth		0.32-0.35	1.5-1.6	1.5-1.6	1.8-1.9	0.28-0.29
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	30/10/2024	30/10/2024	30/10/2024	30/10/2024	30/10/2024
Date analysed	-	31/10/2024	31/10/2024	31/10/2024	31/10/2024	31/10/2024
Moisture	%	2.1	6.6	6.1	4.7	49

Moisture		
Our Reference		364982-9
Your Reference	UNITS	BD1
Depth		-
Type of sample		Soil
Date prepared	-	30/10/2024
Date analysed	-	31/10/2024
Moisture	%	9.6

Metals from Leaching Fluid pH 2.9 or 5		
Our Reference		364982-1
Your Reference	UNITS	S01
Depth		0.32-0.35
Type of sample		Soil
Date extracted	-	01/11/2024
Date analysed	-	01/11/2024
pH of soil for fluid# determ.	pH units	8.8
pH of soil TCLP (after HCl)	pH units	1.6
Extraction fluid used		1
pH of final Leachate	pH units	4.9
Arsenic	mg/L	<0.05
Cadmium	mg/L	<0.01
Chromium	mg/L	<0.01
Copper	mg/L	0.13
Lead	mg/L	<0.03
Mercury	mg/L	<0.0005
Nickel	mg/L	<0.02
Zinc	mg/L	<0.02

PAHs in TCLP (USEPA 1311)		
Our Reference		364982-1
Your Reference	UNITS	S01
Depth		0.32-0.35
Type of sample		Soil
Date extracted	-	01/11/2024
Date analysed	-	01/11/2024
Naphthalene in TCLP	mg/L	<0.0001
Acenaphthylene in TCLP	mg/L	<0.0001
Acenaphthene in TCLP	mg/L	<0.0001
Fluorene in TCLP	mg/L	<0.0001
Phenanthrene in TCLP	mg/L	<0.0001
Anthracene in TCLP	mg/L	<0.0001
Fluoranthene in TCLP	mg/L	<0.0001
Pyrene in TCLP	mg/L	<0.0001
Benzo(a)anthracene in TCLP	mg/L	<0.0001
Chrysene in TCLP	mg/L	<0.0001
Benzo(b,j,k)fluoranthene in TCLP	mg/L	<0.0002
Benzo(a)pyrene in TCLP	mg/L	<0.0001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.0001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.0001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.0001
Total +ve PAH's	mg/L	NIL (+)VE
Surrogate <i>p</i> -Terphenyl-d14	%	108

Method ID	Methodology Summary
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using AS 4439. Please note that the mass used may be scaled down from default based on sample mass available. Samples are stored at 2-6oC before and after leachate preparation.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-020	Determination of various metals by ICP-AES following buffer determination as per USEPA 1311 and hence AS 4439.3. Extraction Fluid 1 refers to the pH 5.0 buffer and Extraction Fluid 2 is the pH 2.9 buffer.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-021	Determination of Mercury by Cold Vapour AAS following buffer determination as per USEPA 1311 and hence AS 4439.3. Extraction Fluid 1 refers to the pH 5.0 buffer and Extraction Fluid 2 is the pH 2.9 buffer.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021/022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD and/or GC-MS/GC-MSMS. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.

Method ID	Methodology Summary
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Leachates are extracted with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Date analysed	-			04/11/2024	[NT]	[NT]	[NT]	[NT]	04/11/2024	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	103	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	103	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	106	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	100	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	113	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	99	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	96	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Date analysed	-			31/10/2024	[NT]	[NT]	[NT]	[NT]	31/10/2024	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	111	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	109	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	111	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	109	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
Surrogate o-Terphenyl	%		Org-020	88	[NT]	[NT]	[NT]	[NT]	93	[NT]

QUALITY CONTROL: PAHs in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Date analysed	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	82	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	80	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	99	[NT]	[NT]	[NT]	[NT]	105	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Date analysed	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	76	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Mirex	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	97	[NT]	[NT]	[NT]	[NT]	100	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Date analysed	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Mevinphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Phorate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Disulfoton	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Parathion-Methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Fenthion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Methidathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fenamiphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Phosalone	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Coumaphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 4-Chloro-3-NBTF	%		Org-022/025	97	[NT]	[NT]	[NT]	[NT]	100	[NT]

QUALITY CONTROL: PCBs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date extracted	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Date analysed	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Aroclor 1016	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	91	[NT]
Aroclor 1260	mg/kg	0.1	Org-021/022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate 2-Fluorobiphenyl	%		Org-021/022/025	97	[NT]	[NT]	[NT]	[NT]	100	[NT]

QUALITY CONTROL: Misc Soil - Inorg					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date prepared	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Date analysed	-			31/10/2024	[NT]	[NT]	[NT]	[NT]	31/10/2024	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	[NT]	[NT]	[NT]	[NT]	101	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-7	[NT]
Date prepared	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Date analysed	-			30/10/2024	[NT]	[NT]	[NT]	[NT]	30/10/2024	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	121	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	111	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	116	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	113	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	114	[NT]

QUALITY CONTROL: Metals from Leaching Fluid pH 2.9 or 5					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			01/11/2024	[NT]	[NT]	[NT]	[NT]	01/11/2024	[NT]
Date analysed	-			01/11/2024	[NT]	[NT]	[NT]	[NT]	01/11/2024	[NT]
Cadmium	mg/L	0.01	Metals-020	<0.01	[NT]	[NT]	[NT]	[NT]	112	[NT]
Chromium	mg/L	0.01	Metals-020	<0.01	[NT]	[NT]	[NT]	[NT]	109	[NT]
Copper	mg/L	0.01	Metals-020	<0.01	[NT]	[NT]	[NT]	[NT]	115	[NT]
Lead	mg/L	0.03	Metals-020	<0.03	[NT]	[NT]	[NT]	[NT]	108	[NT]
Mercury	mg/L	0.0005	Metals-021	<0.0005	[NT]	[NT]	[NT]	[NT]	113	[NT]
Nickel	mg/L	0.02	Metals-020	<0.02	[NT]	[NT]	[NT]	[NT]	105	[NT]
Zinc	mg/L	0.02	Metals-020	<0.02	[NT]	[NT]	[NT]	[NT]	110	[NT]

QUALITY CONTROL: PAHs in TCLP (USEPA 1311)					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			01/11/2024	[NT]	[NT]	[NT]	[NT]	01/11/2024	[NT]
Date analysed	-			01/11/2024	[NT]	[NT]	[NT]	[NT]	01/11/2024	[NT]
Naphthalene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	87	[NT]
Acenaphthylene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	76	[NT]
Fluorene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	81	[NT]
Phenanthrene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	77	[NT]
Anthracene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	77	[NT]
Pyrene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	81	[NT]
Benzo(a)anthracene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	71	[NT]
Benzo(bjk)fluoranthene in TCLP	mg/L	0.0002	Org-022/025	<0.0002	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	76	[NT]
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene in TCLP	mg/L	0.0001	Org-022/025	<0.0001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	80	[NT]	[NT]	[NT]	[NT]	78	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Project No: 231572.01		Suburb: Sydney		To: Envirolab Services	
Project Manager: Joel James-Hall		Order Number:		Sampler: JC	
Email: irha.riaz@douglaspartners.com.au				Attn: Sample Receipt	
Turnaround time: ☒ Standard ☐ 72 hour ☐ 48 hour ☐ 24 hour ☐ Same day				(02) 9910 6200 samplereceipt@envirolab.com	
Prior Storage: ☒ Fridge ☐ Freezer ☒ Esky ☐ Shelf		Do samples contain 'potential' HBM? ☐ No ☐ Yes (if YES, then handle, transport and store in accordance with FPM HAZID)			

Lab ID	Sample ID			Date Sampled	Sample Type	Container Type	Analytes										Notes/ Preservation/ Additional Requirements
	Location / Other ID	Depth From	Depth To		S - soil W - water M - Material	G - glass P - plastic	Combo 8	Combo 3	TCLP metals and PAH								
1	S01	0.32	0.35		S	G	x		x								
2	BH101	1.4	1.5		S	G											hold
3	BH102	1.5	1.6		S	G		x									
4	BH103	1.5	1.6		S	G		x									
5	BH104	1.5	1.6		S	G											hold
6	BH105	1.5	1.6		S	G											hold
7	BH106	1.8	1.9		S	G		x									
8	BH106	0.28	0.29		S	G	x										
9	BD1							x									

ENVIROLAB
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 364982

Date Received: 29/10/24
Time Received: 1200

Received By: KC

Temp: Cool/Ambient

Cooling: Icepack

Security: Intact/Broken/None

Metals to analyse:		LAB RECEIPT	
Number of samples in container:		Lab Ref. No: 364982	
Send results to: Douglas Partners Pty Ltd		Received by: KC	
Address: 96 Hermitage Road, West Ryde NSW 211		Date & Time: 29/10/24 1200	
Relinquished by:		Signed: KC	
Phone: (02) 9809 0666		Signed: [Signature]	
Date:		Signed:	

SAMPLE RECEIPT ADVICE

Client Details

Client	Douglas Partners Pty Ltd
Attention	Irha Riaz

Sample Login Details

Your reference	231572.01 Sydney
Envirolab Reference	364982
Date Sample Received	29/10/2024
Date Instructions Received	29/10/2024
Date Results Expected to be Reported	05/11/2024

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	9 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	8
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: ahie@envirolab.com.au

Jacinta Hurst

Phone: 02 9910 6200
Fax: 02 9910 6201
Email: jhurst@envirolab.com.au

Analysis Underway, details on the following page:



Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Misc Soil - Inorg	Acid Extractable metals in soil	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	PAHs in TCLP (USEPA 1311)	On Hold
S01-0.32-0.35	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
BH101-1.4-1.5																						✓
BH102-1.5-1.6	✓	✓	✓					✓														
BH103-1.5-1.6	✓	✓	✓					✓														
BH104-1.5-1.6																						✓
BH105-1.5-1.6																						✓
BH106-1.8-1.9	✓	✓	✓					✓														
BH106-0.28-0.29	✓	✓	✓	✓	✓	✓	✓	✓														
BD1	✓	✓	✓					✓														

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.