



SEPP-RH Assessment

Project Pluto Data Centre

Goodman Property Services (Aust) Pty Limited
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SEPP-RH Assessment

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Goodman Property Services (Aust) Pty Limited

Prepared by

Riskcon Engineering Pty Ltd

37 Pogson Drive
Cherrybrook NSW 2126
www.riskcon-eng.com
ABN 74 626 753 820

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Quality Management

Rev	Date	Remarks	Prepared By	Reviewed By
A	27 September 2024	Draft issued for comment	Ezra Bagaskara	Renton Parker
B	15 January 2025	Updated draft		
C	22 January 2025	Updated draft		
D	4 February 2025	Updated draft		
0	24 February 2025	Final issued		
1	28 April 2025	Final issued		

Executive Summary

Background

Goodman has proposed to develop a data centre at their site located at 132 McCredie Road, Guildford West. The facility will require battery storages and fuel for back-up generators. The Secretary Environmental Assessment Requirements (SEARs) require the preparation of a preliminary risk screening in accordance with Chapter 3 of the State Environmental Planning Policy – Resilience & Hazards (SEPP-RH, Ref. [1]).

Goodman has commissioned Riskcon Engineering Pty Ltd (Riskcon) to review the proposed storage and to prepare a SEPP-RH assessment for submission with the development application (DA). This document provides Riskcon's assessment of the applicability of SEPP-RH to the proposed site at 123 McCredie Road, Guildford West.

Conclusions

The proposed data centre at 132 McCredie Road, Guildford West NSW has been assessed for the application of the Chapter 3 of the State Environmental Planning Policy - Resilience and Hazards (SEPP-RH) based on the proposed storage of DGs at the facility. The analysis conducted in this study included an assessment of the proposed DG storage volumes against generic threshold storage quantities, as well as an assessment of transport operations involved in the storage and handling of DGs.

The results of these assessments identified that lithium-ion batteries (Class 9) and combustible liquids are not assessable against the SEPP-RH thresholds and the quantity of VLRA batteries (Class 8) does not exceed the SEPP-RH storage threshold. Further, the transport of DGs does not exceed the threshold levels, nor do any offensive operations occur at the site which may result in environmental emissions. Therefore, it is concluded that the site would not be regarded as potentially hazardous under the SEPP-RH policy.

Recommendations

The following recommendations have been made:

- Goodman shall re-assess their site against SEPP-RH in the event that storage quantities of DGs increase.
- Documentation required by the Work Health and Safety Regulation 2017 (Ref. [2]) specific to the site classification based upon the quantity of goods stored shall be prepared for the site prior to occupation.

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Abbreviations

Abbreviation	Description
CBD	Central Business District
DGs	Dangerous Goods
EPA	Environmental Protection Agency
NSW	New South Wales
PTU	Power Train Units
SEPP	State Environmental Planning Policy
UPS	Uninterruptable Power Supply

1.0 Introduction

1.1 Background

Goodman has proposed to develop a data centre at their site located at 132 McCredie Road, Guildford West. The facility will require battery storages and fuel for back-up generators. The Secretary Environmental Assessment Requirements (SEARs) require the preparation of a preliminary risk screening in accordance with Chapter 3 of the State Environmental Planning Policy – Resilience & Hazards (SEPP-RH, Ref. [1]).

Goodman has commissioned Riskcon Engineering Pty Ltd (Riskcon) to review the proposed storage and to prepare a SEPP-RH assessment for submission with the development application (DA). This document provides Riskcon's assessment of the applicability of SEPP-RH to the proposed site at 123 McCredie Road, Guildford West.

1.2 Objectives

The objectives of the study are to:

- Determine whether SEPP-RH applies to the proposed data centre at 123 McCredie Road, Guildford West NSW based on the quantity of DGs being stored; and
- Report on the findings of the study in support of the DA.

1.3 Scope of Work

The scope of work is for a SEPP-RH assessment of the quantities of DGs proposed for storage within the site located at 123 McCredie Road, Guildford West NSW to determine whether the SEPP-RH policy applies to the site. Additionally, a review of the quantity of vehicle movements as a result of the DGs being stored will be assessed to determine whether additional traffic assessment is required. The scope does not include any other sites, nor the preparation of any other planning studies should they be required.

2.0 Methodology

2.1 General Methodology

The methodology used in this study is that which is recommended in *Applying SEPP-33 – Hazardous and Offensive Developments* (Applying SEPP-33, Ref. [1]). The methodology is summarised below:

- A review of the proposed types and quantities of DGs to be stored at the site was conducted.
- The quantities of DGs were compared to the threshold quantities listed in *Applying SEPP-33* to determine whether the storage triggers the SEPP-RH policy.
- Vehicular movements as a result of DGs being stored were reviewed and compared against the applicable thresholds detailed in *Applying SEPP-33*.
- The findings of the SEPP-RH assessment were documented within this report.

3.0 Site Description

3.1 Project Description

A State Significant Development Application (**SSDA**) has been prepared in support of a proposed data centre at 132 McCredie Road, Guildford West NSW 2161. The site is zoned E4 General Industrial and has a road frontage to McCredie Road. The developable site area is 71,710 sq.m.

The proposed development comprises:

- Site preparation works including bulk excavation and removal of existing hard standing and structures on the site, tree and vegetation clearing, and bulk earthworks;
- Construction, fit out and operation of a data centre with an approximate building height of 25.77m and total gross floor area of approximately 29,444 m² comprising:
 - At-grade parking for 53 car parking spaces and 2 accessible car parking spaces
 - Two (2) loading dock spaces.
 - Two (2) levels of technical data hall floor space with incorporating a total of nine (9) data halls
 - Ancillary office space
- Provision of required utilities, including:
 - Fuel storage
 - Two (2) Switch-rooms
 - Four (4) industrial water storage tanks
- Vehicle entry and egress driveways located along McCredie Road
- Internal access road
- Associated landscaping and site servicing
- Installation of services and drainage infrastructure.

This report has been prepared to address the Secretary’s Environmental Assessment Requirements (SEARs) and accompanying cover letter issued for the Project Pluto Data Centre (SSD-69223466) dated 4 April 2024

Specifically, this report has been prepared to respond to the SEARs issued below.

Table 3-1: Summary of Related Requirements

Item	Requirement	Report Section
Preliminary Hazard Analysis (PHA)	<ul style="list-style-type: none"> • Where there are dangerous goods and hazardous materials associated with the development provide a preliminary risk screening in accordance with Chapter 3 of SEPP (Resilience and Hazards) 2021. • Where required by SEPP (Resilience and Hazards) 2021, provide a Preliminary Hazard Analysis prepared in accordance with Hazardous Industry Planning Advisory Paper No.6 – Guidelines for Hazard Analysis and Multi-Level Risk Assessment. • If the development is adjacent to or on land in a pipeline corridor, report on consultation outcomes with the operator of the pipeline, and prepare a hazard analysis. 	Section 4.0

3.2 Site Description

The site is located on Gandangara Land and is in the Smithfield Industrial Area within the Cumberland Local Government Area (LGA). It is bounded by McCredie Road to the north.

The front part of the site adjoins the Guildford Transmission Substation, which is located immediately to the east and fronts onto McCredie Road. Other industrial uses are located further east, with residential properties beyond.

The Guildford West Sports Ground, which comprises several playing fields, is located to the south of the Guildford Transmission Substation. The playing fields bound the southern part of the site to the east. The playing fields / public recreation area also abut the southern boundary of the site.

Prospect Creek is located to the south of the public recreation area and is zoned C2 Environmental Protection. The area to the south of Prospect Creek is predominately characterised by low density single storey residential housing.

The site is located in the south eastern corner of the Smithfield Industrial Estate and is within close proximity of the Cumberland Highway (A28) and M4 and M7 motorways, which provide access to Sydney CBD, western Sydney and the south. A range of large format industrial uses are located to the west and north west of the site. The Smithfield Industrial Estate extends across the A28 to Gipps Road (approximately 3km west of the site). It forms part of the broader Smithfield Wetherill Park industrial area, which is one of the largest of its kind in the Southern Hemisphere and makes a significant contribution to the New South Wales and Australian economies.

The site has a net developable area of 71,710 sqm and is currently vacant. It previously operated as a Castrol Lubricants facility. However, the majority of the site has now been cleared and subject to category 1 remediation works. A single storey office building is located on the northern portion of the site fronting McCredie Road. The building is vacant.

3.3 Quantities of Dangerous Goods Stored and Handled

The classes and quantities of DGs to be stored at the facility are summarised **Table 3-2**.

Table 3-2: Maximum Classes and Quantities of Dangerous Goods Stored

Class	Packing Group (PG)	Description	Quantity (L or kg)
8	III	Valve-Regulated Lead Acid (VLRA) batteries	15,000
9	n/a	Li-ion batteries	648,000
C1	n/a	Combustible liquids	1,278,000

Provided in **Figure 3-1 to Figure 3-3** is the location of DGs on site. Note, the site layout for levels not containing DGs has been omitted from this report.

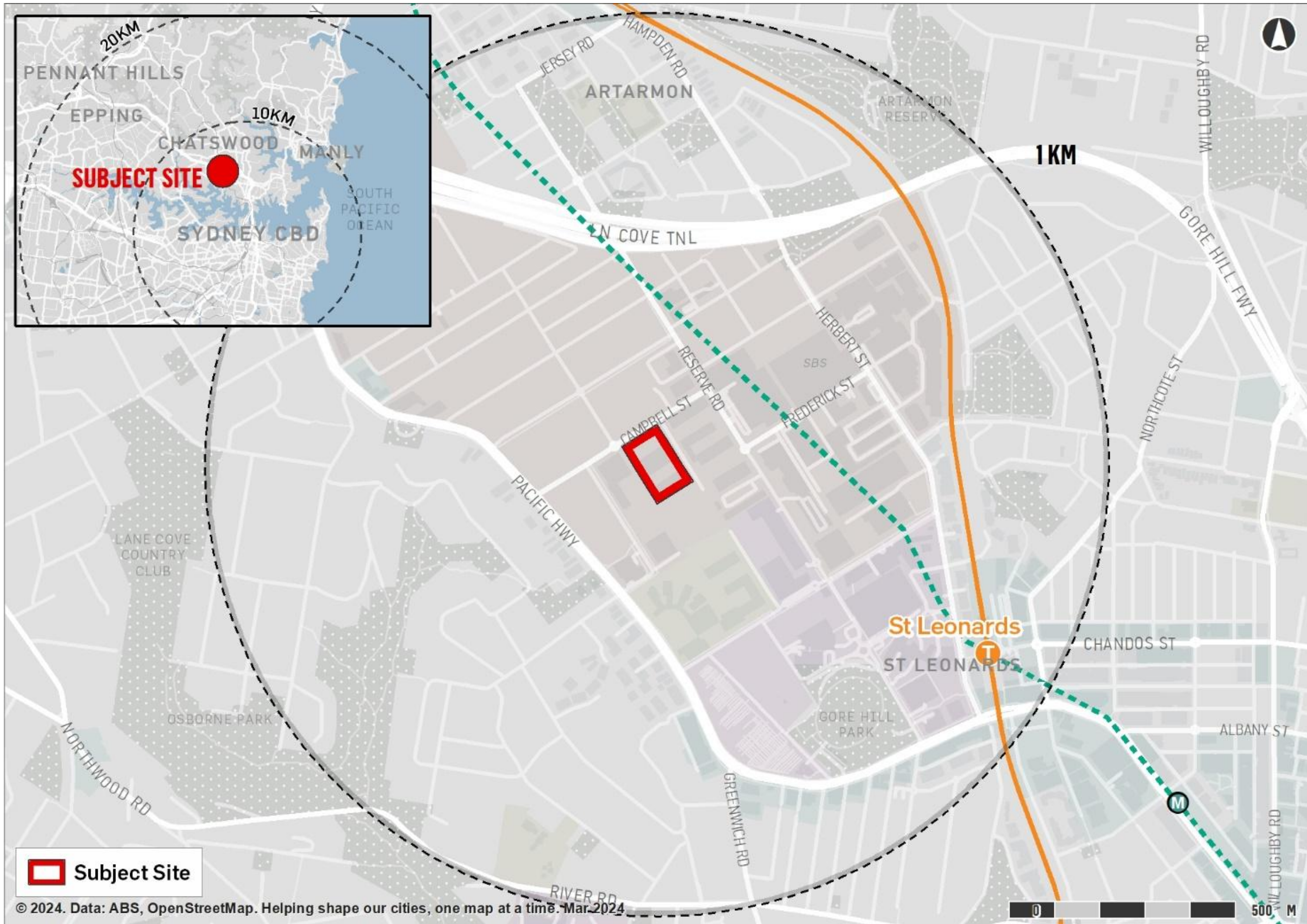


Figure 3-1: Site Layout – Context

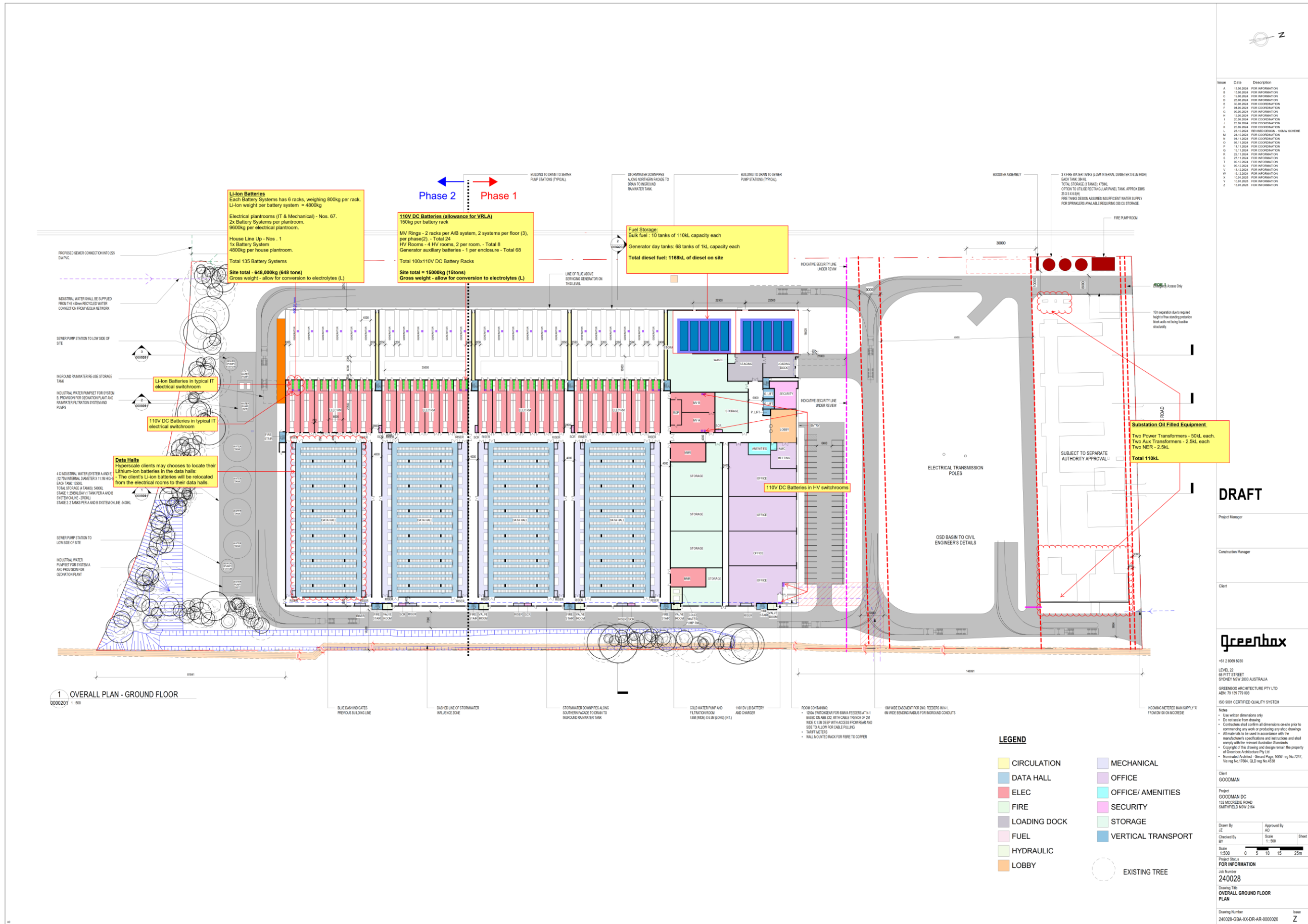
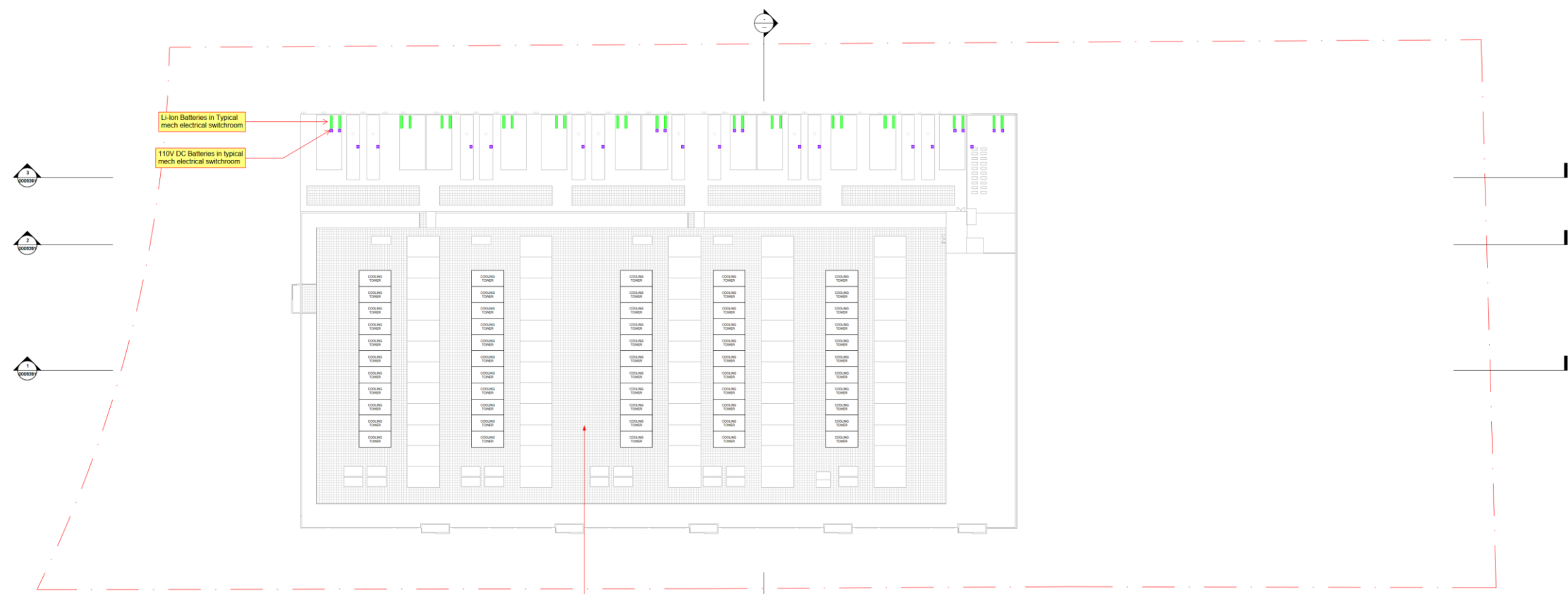


Figure 3-2: Site Layout – Ground Level



Issue	Date	Description
A	08.11.2024	FOR COORDINATION
B	08.12.2024	FOR INFORMATION
C	12.02.2025	FOR INFORMATION
D	10.01.2025	FOR INFORMATION
E	10.01.2025	FOR INFORMATION



1 ROOF MAINTENANCE LEVEL
1:500

NOTE:
54 CHILLERS AND 54 COOLING TOWERS
COOLING TOWER DIMENSIONS (MILK) 7320X2400X800MM
CHILLER DIMENSIONS (MILK) 7320X2400X800MM
CHILLER CONTAINMENT UNIT DIMENSIONS (MILK) 7320X2400X800MM
100% DIMENSIONS SHOWN ROUNDED UP TO THE NEAREST 0.5MM

DRAFT

Project Manager

Construction Manager

Client



#12 8888 8930
LEVEL 22
88 PITT STREET
SYDNEY NSW 2000 AUSTRALIA
GREENBOX ARCHITECTURE PTY LTD
ABN: 79 139 779 098
ISO 9001 CERTIFIED QUALITY SYSTEM

Notes:
• Use written dimensions only
• Contractors shall confirm all dimensions on-site prior to commencing any work or producing any shop drawings
• All materials to be used in accordance with the manufacturer's specifications and instructions and shall comply with the relevant Australian Standards
• Copyright of this drawing and design remains the property of Greenbox Architecture Pty Ltd
• Noted Architect - Goodman DC, NSW reg No. 7247, VIC reg No. 17164, QLD reg No. 4338

Client
GOODMAN

Project
GOODMAN DC
132 MCCREDDIE ROAD
SMITHFIELD NSW 2144

Drawn By JZ	Approved By AD	Scale 1:500	Sheet 1 of 1
Checked By BY		Scale 1:500	Sheet 1 of 1
Scale 1:500	0 5 10 15 20m		

Project Status
PRELIMINARY
Job Number
240028
Drawing Title
OVERALL ROOF MAINTENANCE LEVEL

Drawing Number
240028-GBA-XX-DR-AR-0000024
Issue
E

Figure 3-3: Site Layout – Roof

4.0 SEPP-RH Assessment

4.1 SEPP RH Application and Assessment

The proposed data centre will store class 9 substance (Li-ion batteries) and combustible liquids for use in generators and transformers.

The initial screening of Dangerous Goods (DGs) was conducted using Table 1 in *Applying SEPP-33* (Ref. [1]) to determine if the classes are assessable against SEPP-RH thresholds. The results of the assessment are summarised in **Table 4-1**.

Table 4-1: DG Classes and SEPP-RH Applicability

Class	Description	Assessable against SEPP-RH?
8	VLRA batteries (sulphuric acid)	Yes
9	Li-ion batteries	No
C1	Combustible Liquid	No

As shown in **Table 4-1**, Table 1 of *Applying SEPP-33* indicates that combustible liquids and class 9 substances are not assessable against the SEPP-RH thresholds.

4.2 Assessment of Hazards

Threshold limits for the application of SEPP-RH are presented in **Table 4-2**, along with maximum DG quantities that will be stored at the site. The results summarised in the table indicates the SEPP-RH criteria is not exceeded; hence, does not require further assessment in the form of a PHA study.

Table 4-2: Quantities Stored and SEPP-RH Threshold

Class	Description	PG	Quantity (kg)	SEPP Threshold (kg)
8	VRLA batteries (sulphuric acid)	III	15,000	50,000

4.3 Transport Assessment

In addition to the storage of DGs, SEPP-RH also requires a review of the transport of DGs to the site. Similarly, to **Section 4.1**, combustible liquids and class 9 substances are not subject to SEPP-RH transport assessment. Hence, the traffic movements and quantities transported to and from the site do not exceed the thresholds listed in *Applying SEPP 33* (Ref. [1]) and the site is considered to be low risk.

4.4 Offensive Operations Assessment

Applying SEPP 33 (Ref. [1]) also contains a requirement for review of operations that may cause offense in the form of emissions, odour or other environmental impact. An indication of whether “offensiveness” may occur at the facility is whether an Environmental Protection Authority (EPA) license is required for specific operations at the site.

A review of the site operations relevant to the diesel tank storage indicates that there are no processes that would result in the manufacture, production or transfer of materials in a form that may result in the release of bulk materials at the site. Hence, an EPA license would not be required for this site.

Further, there would be no unusual operations that would cause potential emissions, odours, or noise outside of normal warehouse type operations. Therefore, there is no potential for offensive operations at the site and SEPP 33 does not apply.

5.0 Conclusions and Recommendations

5.1 Conclusions

The proposed data centre at 132 McCredie Road, Guildford West NSW has been assessed for the application of the Chapter 3 of the State Environmental Planning Policy - Resilience and Hazards (SEPP-RH) based on the proposed storage of DGs at the facility. The analysis conducted in this study included an assessment of the proposed DG storage volumes against generic threshold storage quantities, as well as an assessment of transport operations involved in the storage and handling of DGs.

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5.2 Recommendations

The following recommendations have been made:

- Goodman shall re-assess their site against SEPP-RH in the event that storage quantities of DGs increase.
- Documentation required by the Work Health and Safety Regulation 2017 (Ref. [2]) specific to the site classification based upon the quantity of goods stored shall be prepared for the site prior to occupation.

6.0 References

- [1] NSW Department of Planning and Environment, "Applying SEPP33 – Hazardous and Offensive Developments," NSW Department of Planning and Environment, Sydney, 2011.
- [2] SafeWork NSW, "Work Health and Safety Regulation," SafeWork NSW, Lisarow, 2017.
- [3] Standards Australia, "AS 1940:2017 - Storage and Handling of Flammable and Combustible Liquids," Standards Australia, Sydney, 2017.