



PROPOSED WAREHOUSE, LOGISTICS & INDUSTRIAL HUB
657-769 MAMRE ROAD, KEMPS CREEK
RH SEPP ASSESSMENT - MODIFICATION

Frasers-Altis Mamre Road Redevelopment – RH SEPP Assessment Modification
Document No. RCE-19098[MamreRd-Frasers-Altis]-RPTFinal(Rev3)-22Aug22
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Frasers-Altis Mamre Road Redevelopment – RH SEPP Assessment Modification

Prepared by

Riskcon Engineering Pty Ltd
Unit 19/5 Pyrmont Bridge Road
Camperdown, NSW 2050
www.riskcon-eng.com
ABN 74 626 753 820

DETAILS OF SEARS FOR HAZARD AND RISK

The Secretary's Environmental Assessment Requirement (SEAR) No.12, regarding Hazard and Risk, was issued in the Department of Planning, Industry & Environments letter to Frasers Property Australia on 22 February 2021 in relation to SSD-9522-Mod-1. Further to the Mod-1 development an additional modification has been issued regarding the proposed development. The modification, which is assessed in this document, remains subject to the original SEARs which state:

Hazard and risk – including a preliminary risk screening completed in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is “potentially hazardous” a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011).

The table below details the relevant sections of this document where the assessment compliance is met:

Item No.	Specific Requirement of the SEAR	Report section demonstrating where the requirement is met
1	Preliminary Screening conducted in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33 (DoP, 2011), and Clear indication of the Class & quantity of dangerous goods and hazardous materials associated with each warehouse.	Lot 2 – Warehouse 2 - Table 4.1 & Fig. 4.1 Lot 3 - Warehouse 3 - Table 4.3 & Fig. 4.3
2	Clear indication of the Class & location of dangerous goods and hazardous materials associated with each warehouse	Lot 2 – Warehouse 2 - Figure 4.1 Lot 3 - Warehouse 3 - Figure 4.3
3	Conclusion that SEPP33 does not apply to the proposed development and a Preliminary Hazard Analysis is not required for any of the proposed warehouses.	Section 5

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Quality Management

Report No: RCE-19098[MamreRd-Frasers-Altis]-RPTFinal(Rev3)-22Aug22

Rev	Date	Remarks	Prepared By	Reviewed By
A	14 June 19	Draft for Comment	Steve Sylvester Technical Director - RiskCon Engineering	Renton Parker Director, RiskCon Engineering
B	22 Oct 19	Draft, incorporating updates		
C	24 Oct 19	Draft, incorporating updated project name		
D	18 Feb 20	Draft, incorporating updates to Warehouses 15, 16 & 17		
E	23 April 20	Draft, changes to Masterplan (April 2020)		
F	24 July 20	Draft, changes to Masterplan (July 2020)		
0	30 July 20	Final (Masterplan 28 July 20)		
1	24 Feb 2021	Final (warehouse change update)		
2	12 November 21	Final (Modification)		
3	16 August 22	Final (Lots 2 & 3 Development only)		

EXECUTIVE SUMMARY

Introduction

Frasers Property Industrial Constructions Pty Ltd and Altis Property Partners Pty Ltd (Frasers/Altis) proposes to develop land at 657-769 Mamre Road, Kemps Creek, NSW (the Project). The land is subject to a State Significant Development Application for the proposed Warehouse and Industrial Facilities Hub, hence, Secretary's Environmental Assessment Requirements (SEARs) have been issued that require the storage of DGs to be assessed under State Environmental Planning Policy No.33 (SEPP33, Ref.1), now the Resilience and Hazards SEPP (RH SEPP), which requires review of the proposed development using the document "Applying SEPP33" (Ref.1), which continues to apply under the RH SEPP.

An assessment of the original development has been conducted and the results of the assessment indicated that SEPP33 does not apply to the proposed development. Since the original assessment, a number of modification have been proposed, which requires a SEPP33 review and update of the original documentation. The most recent modification includes two (2) warehouse only, located on Lots 2 & 3 of the site.

RiskCon Engineering Pty Ltd (RiskCon) has been commissioned to conduct an RH SEPP assessment and update of the Project modification, the objectives of which are to identify whether the quantities of Dangerous Goods proposed for storage as a result of the modification do not exceed the SEPP33 threshold and, in the event any warehouses exceed the SEPP33 DG storage threshold values, to recommend a Preliminary Hazard Analysis study for the specific warehouse.

Methodology

The Secretary's Environmental Assessment Requirements (SEARs – Application No. 9522-Modification) require a number of conditions to be met as part of the proposed State Significant Development Application. The original SEARs section relating to key issues includes a requirement to address hazards and risks (Dot Point 12). This section states that a preliminary screening must be carried out in accordance with SEPP33, providing details of the proposed storage of Dangerous Goods (DGs) and the location of these goods within each facility. Where the SEPP33 screening thresholds are exceeded, the SEARs require a Preliminary Hazard Analysis (PHA) to be conducted to demonstrate that the risks associated with the operations of facilities do not exceed acceptable risk criteria.

The methodology applied to the RH SEPP assessment of the Project was that recommended in "Applying SEPP33 - Hazardous and Offensive Developments"(Ref.1). The quantity of DGs stored in each warehouse within the Project was reviewed in turn against the threshold levels listed in Applying SEPP33 (Ref.1) to identify whether the threshold levels are exceeded. In the event a threshold level is exceeded, a PHA study is recommended. The results of the assessment are summarised below.

Brief Description of the Project

The Project comprises the following warehouses:

- Warehouse 2 - 27,814 m² (freestanding warehouse, no common wall); and
- Warehouse 3 - 10,145 m² (freestanding warehouse, no common wall).

Note: warehouse locations are shown on **Figure 1.1**.

Summary and Conclusions

An analysis of the application of Chapter 3 of the Resilience and Hazards State Environmental Planning Policy (RH SEPP), Hazardous and Offensive Developments was conducted for a modification to the proposed Frasers-Altis development on a parcel of land located on the western side of Mamre Road, Kemps Creek, NSW. The proposed modification to the development involves the construction of a warehouses on each of 2 lots within the development, with both warehouses being single occupancy. The analysis was conducted based on a limited quantity of Dangerous Goods (DGs) stored and handled at each warehouse, noting that the development has considered the potential for warehouse tenants to store and handle limited DGs as part of their operations.

The analysis identified that the quantity of DGs held at each warehouse did not exceed the storage threshold levels listed in “Applying SEPP33”(Ref.1). It was also identified that based on the relatively low quantity of DGs stored and handled at the warehouses, and the type of operations proposed at the warehouses (i.e. warehouses are not dedicated DG storage facilities), it was unlikely that the maximum permissible transport quantity and number of vehicle operation listed in “Applying SEPP33”(Ref.1) would be exceeded. Hence, based on the assessment conducted for the proposed DG storages identified in in this study, it is concluded that the RH SEPP does not apply to the proposed development.

In addition to the RH SEPP review of Dangerous Goods storage a review of the potential for offensive operations was conducted. It was identified that the proposed warehouses would not require an Environmental Protection Licence (EPL), hence, the offensive developments component of the RH SEPP would not apply.

Based on the assessment conducted in this study and the results indicating that the RH SEPP does not apply to any of the warehouses within the development, it is concluded that the requirements of the Hazard and Risk Section of the SEARs (Key Issues, Dot point 12) have been addressed.

Recommendations

Notwithstanding the conclusion reached above, it is noted that tenants may require to store DGs at quantities exceeding those assessed in this study. Should a tenant require to store and handle additional DGs to those listed for the specific warehouse in this study, it is recommended that a review of the application of SEPP33 should be conducted and where required a Preliminary Hazard Analysis (PHA) study be performed, in accordance with HIPAP No.6 (Ref.3), should it be identified that the RH SEPP applies to the specific warehouse.

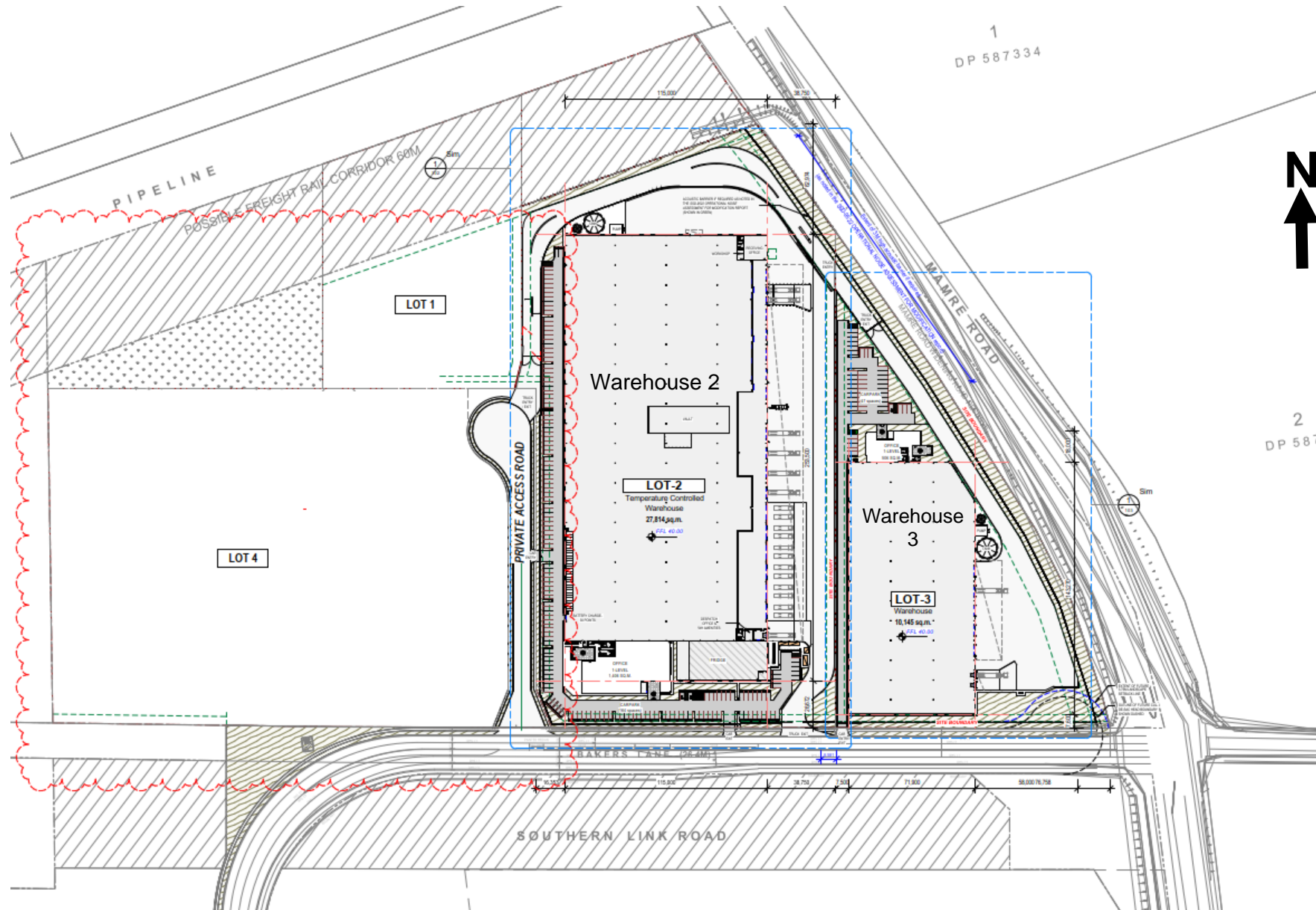


Figure 1.1: Layout of the Proposed Frasers-Altis Development (Application No. 9522-Modification), Mamre Road, Kemps Creek, NSW

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Abbreviations

Abbreviation	Description
DPIE	Department of Planning, Industry and Environment
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
DG	Dangerous Goods
PHA	Preliminary Hazard Analysis
DA	Development Application
m	metres
m ²	square metres
AS	Australian Standard
LPG	Liquefied Petroleum Gas
PG	Packing Group
kg	kilogram
C1	Combustible Materials with a flash point $\geq 60^{\circ}\text{C}$ and $\leq 93^{\circ}\text{C}$
C2	Combustible Materials with a flash point $\geq 93^{\circ}\text{C}$
ADG	Australian Dangerous Goods Code

1.0 INTRODUCTION

1.1 Background

Frasers Property Industrial Constructions Pty Ltd and Altis Property Partners Pty Ltd (Frasers/Altis) proposes to develop land on the western side of Mamre Road, Kemps Creek, NSW. As part of the development, it was necessary to submit a State Significant Development Application for the land for the proposed use, hence, the NSW Department of Planning, Industry and Environment (DPIE) has issued the Secretary's Environmental Assessment Requirements (SEARs) that include a review of the proposed storage and handling of Dangerous Goods (DGs). The SEARs require the DGs to be assessed under State Environmental Planning Policy No.33 (SEPP33, Ref.1)c, now the Resilience and Hazards SEPP (RH SEPP), which requires review of the proposed development using the document "Applying SEPP33" (Ref.1), which is still applicable under the RH SEPP.

As the project has proceeded, a number of modifications have occurred due to specific requirements of tenants, the DPIE and other factors. Buildings on Lots 1 and 4 have been removed from the development and only Buildings on Lots 2 & 3 are included in the RH SEPP assessment.

Frasers/Altis has commissioned RiskCon Engineering Pty Ltd (RiskCon) to update the proposed modification development with regards to the storage and handling of DGs in Warehouse 2 & 3 on Lots 2 & 3 respectively. This document provides RiskCon's RH SEPP assessment of the proposed land use at 657-796 Mamre Road, Kemps Creek, NSW.

1.2 Objectives

The objectives of the RH SEPP assessment for the proposed Warehouse, Logistics and Industrial Facilities Hub at Mamre Road, Kemps Creek, NSW, is to identify whether the quantities of Dangerous Goods proposed for storage at the various warehouses within the site area do not exceed the SEPP33 threshold and, in the event any warehouses exceed the SEPP33 DG storage threshold values, to recommend a Preliminary Hazard Analysis study for the specific warehouse.

1.3 Scope of Services

The scope of work for the study is for an RH SEPP assessment of the warehouses on Lots 2 & 3 at the Logistics & Industrial Hub, at 657-796 Mamre Road, Kemps Creek, NSW (the Project). The scope covers a warehouse on each of 2 lots within the development, with both warehouses being single occupancy buildings as shown on **Figure 1.1**. The scope includes the development of a report including each of the warehouses detailing maximum permissible storage quantities to limit the application of SEPP33 to the development. The following warehouses are included in the assessment;

- Lot 2 – Warehouse 2 (freestanding warehouse); and
- Lot 3 – Warehouse 3 (freestanding warehouse).

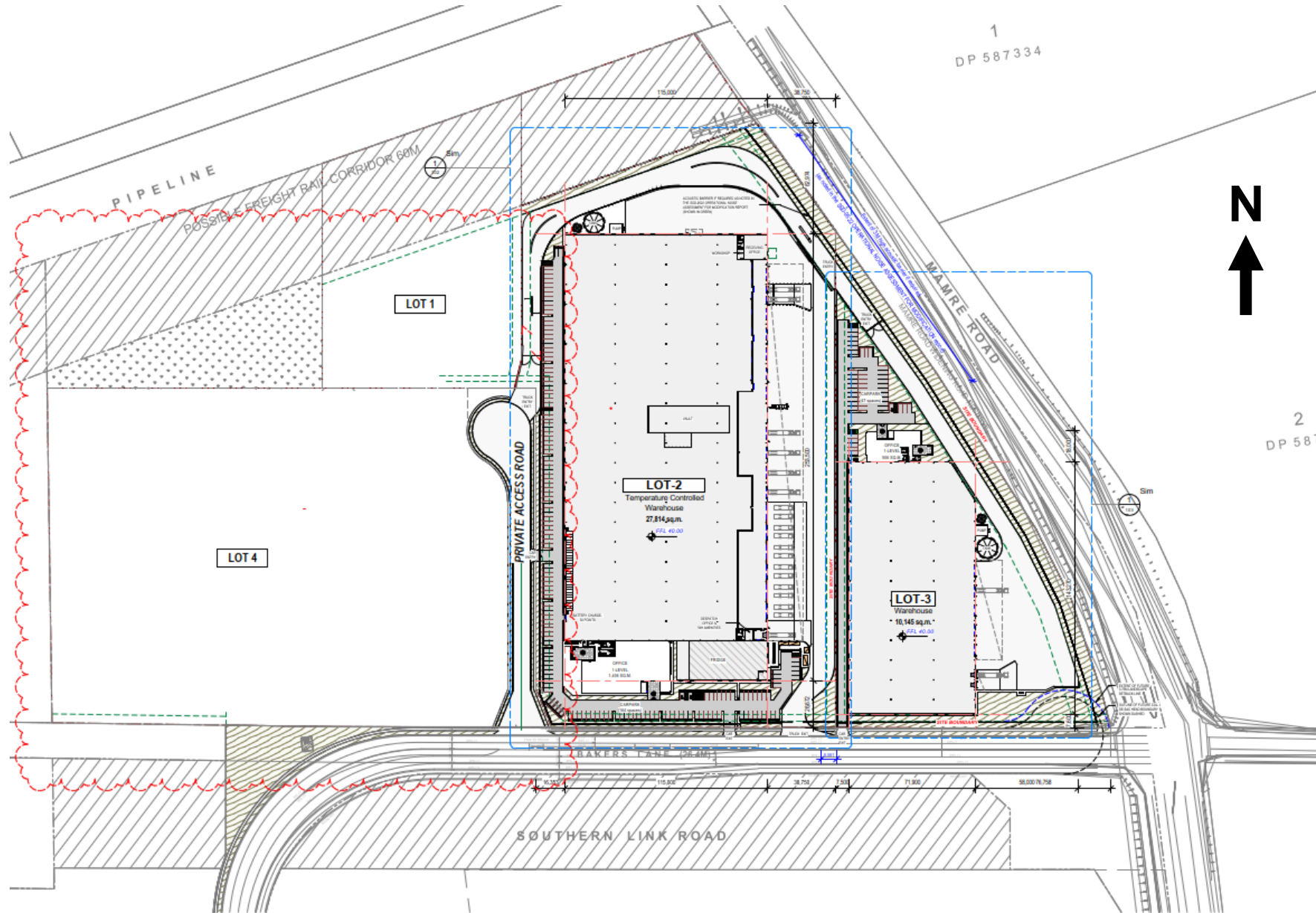


Figure 1.1: Layout of the Proposed Frasers-Altis Development Modification to Lots 1 to 4, Mamre Road, Kemps Creek, NSW

2.0 METHODOLOGY

2.1 Study Requirements (SEARs)

The Secretary's Environmental Assessment Requirements (SEARs – Application No. 9522 - Modification) require a number of conditions to be met as part of the proposed State Significant Development Application. The original SEARs section relating to key issues includes a requirement to address hazards and risks (Dot Point 12). This section states that a preliminary screening must be carried out in accordance with SEPP33 (now the RH SEPP), providing details of the proposed storage of Dangerous Goods (DGs) and the location of these goods within each facility. Where the RH SEPP screening thresholds are exceeded, the SEARs require a Preliminary Hazard Analysis (PHA) to be conducted to demonstrate that the risks associated with the operations of facilities do not exceed acceptable risk criteria.

2.2 Study Background

The proposed development the Project will comprise two (2) Lots with a warehouse on each lot, with both warehouses being single occupancy buildings. The state significant development application is for warehouse facilities to be constructed and operated. At this stage of the developer has advised that a tenant will occupy Warehouse 2 and warehouse 3 would be developed as a speculative warehouse. Quantities of DGs proposed for storage in Warehouse 2 have been advised, however, the exact quantity of Dangerous Goods (DGs) proposed for storage in Warehouse 3 is unknown.

The assessment is therefore conducted for the known quantities in Warehouse 2 and in order to provide operational flexibility for the tenant in Warehouse 3, it is proposed to submit the Development Applications (DA) for an allowance for limited storage of DGs. In many cases, warehouse facilities store limited DGs during logistics operations and short-term storage campaigns, hence, flexibility of storage and the ability to store limited quantities is a key function of efficient logistic operations.

Based on this, Warehouse 2 has been assessed on known quantities and Warehouse 3 will be reviewed, its use assessed and the maximum quantities of DGs selected, that would be stored, to allow a future tenant in this warehouse to select an appropriate DG [quantity](#) under SEPP33 thresholds for their operation.

2.3 Study Approach

The following study approach was be applied:

- An overall review of the development and warehouse layouts was conducted to determine whether permissible quantities can be stored in individual warehouses or whether the close proximity of warehouses will require consolidation of the maximum permissible quantities distributed between the two buildings;
- Once the DG distribution was assessed, location of DGs within the warehouses was allocated, based on required layouts in SEPP33 (Ref.1, e.g. separation of flammable liquids from boundaries and other DGs, etc.);
- A layout for each warehouse was then developed and confirmed with the developer before final report completion;
- Once all DG quantities and layouts were confirmed a draft report was developed containing details of each warehouse location; and

- A final report was issued for submission with the development documentation.

The results of the study and fulfilment of the SEARs requirements are provided in **Section 4**.

3.0 BRIEF DESCRIPTION OF THE WAREHOUSE DEVELOPMENT

3.1 Site Location and Surrounding Land Use

The Project is be located in Kemps Creek, NSW, between Mamre Road and South Creek. The area is predominantly rural, with a warehouse development located across Mamre Road to the north-east and the Twin Creeks Golf & Country Club located across the South Creek buffer zone to the west. The land to the north and south is currently vacant (rural). The Water NSW Pipeline from Warragamba to Prospect is located on the northern side of the development.

Figure 3.1 shows the regional location of the Project and **Figure 3.2** shows the detailed location in the Kemps Creek area.

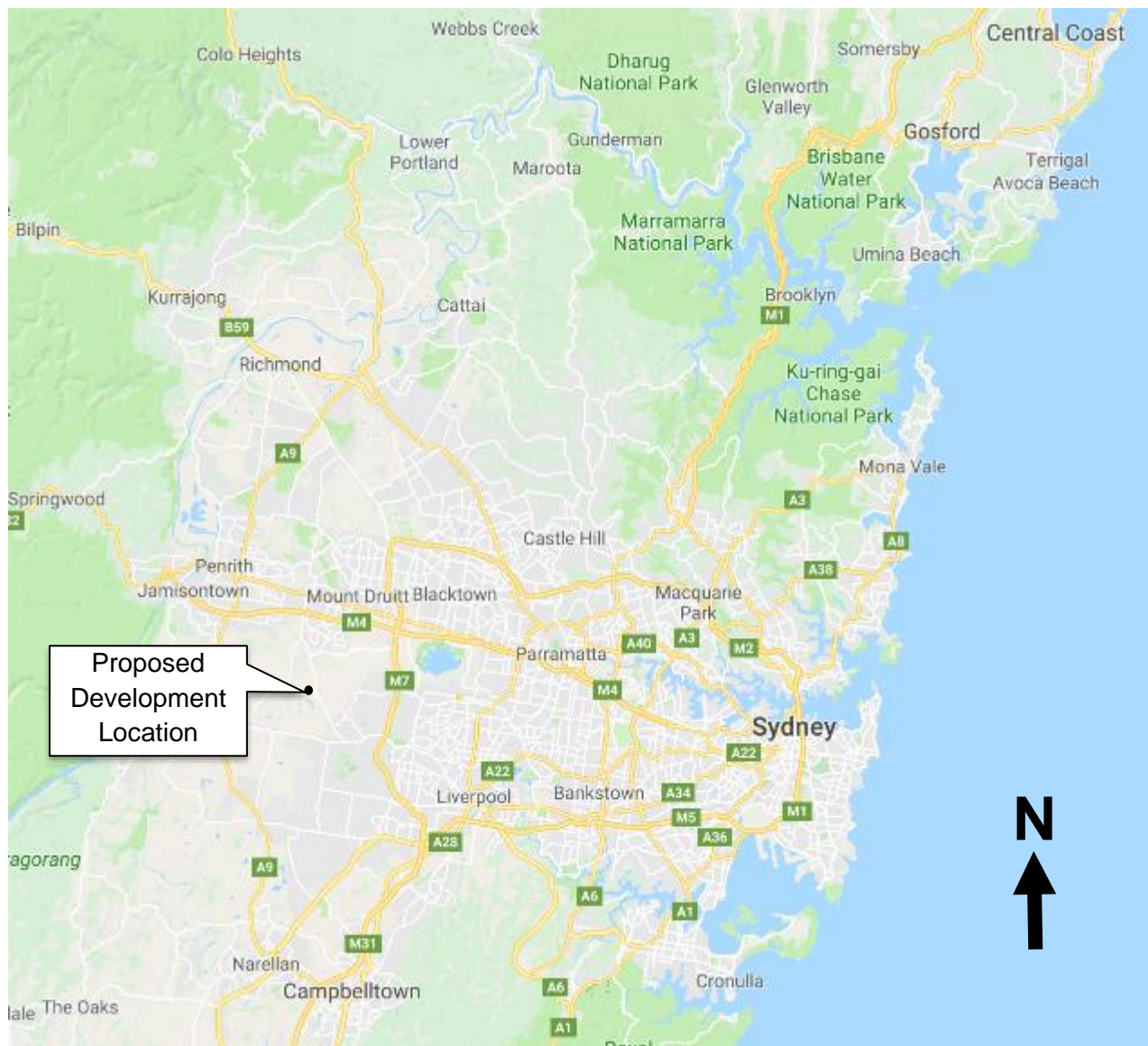


Figure 3.1: Regional Location of the Proposed Frasers-Altis Warehouse Development, Kemps Creek



Figure 3.2: Location of the Proposed Frasers-Altis Warehouse Development in Kemps Creek

3.2 Brief Description of the Proposed Project

Figure 3.3 shows the overall development layout. At this stage of the site development modification, only 4 lots will be modified. A brief description of the modification is provided below.

Lot 2 - Warehouse 2 is a freestanding warehouse located between the possible rail corridor and Bakers Lane. The possible freight rail corridor and the Water for NSW pipeline are located on the northern side of the proposed lot. Warehouse 2 will be 27,814 m² + 1,406 m² office space. The long axis of the building is located north/south, with a property setback from the rail corridor by 22m and around 80 m from the pipelines corridor. Warehouse 2 is separated from adjacent warehouse (Lot 3) by vehicle (truck) access corridors and operating forecourt (total ≈45m). The site is accessed by an internal access road on the western side of the site. The following distances are provided between Warehouse 2 and the adjacent warehouse buildings/sites:

- Warehouse Building 2 and adjacent Lot 4 boundary (west)– 15 m;
- Warehouse Building 2 and adjacent Lot 3 Warehouse (east) – 45 m;
- Warehouse Building 2 office and Bakers Lane (south)– 22 m; and
- Warehouse Building 2 and Freight Rail Corridor (north) – 25 m.

The distance from Warehouse 2 building to the various boundaries is provided below:

- North – 25 m from the building wall to the boundary fence (internal truck access road);
- West – 15 m from the warehouse building to the western boundary (internal truck access road and car park);
- South – 22 m from the office building to the southern boundary (Car Park); and

- East – 39 m from the warehouse to the southern boundary (forecourt & truck access road).

The warehouse is proposed to be occupied by a pharmaceutical logistics company, storing a range of pharmaceutical products, including Dangerous Goods. The proposed Dangerous Goods storage Classes and quantities are provided in below:

DG	Class	Quantity (Total)	SEPP33 Threshold
LPG in Aerosols	2.1/2.2	6,000 L/kg	10,000 kg
LPH in cylinders	2.1	500 kg	
Flammable Liquids	3	10,000 kg	80,000 kg (10m boundary separation)
Flammable Solids	4.1	100 kg	5,000 kg
Oxidisers	5.1	1,000 kg	5,000 kg
Toxics	6.1	500 kg	2,500 kg
Corrosives	8	5,000 kg	25,000 kg (based on PGII)
Miscellaneous DG	9	10,000 kg	Not subject to SEPP33 (Ref.1)
Combustible Liquid	C1/C2	10,000 kg	Not subject to SEPP33 (Ref.1)

Lot 3 - Warehouse 3 is a freestanding warehouse located in the eastern section of the modification area, adjacent to Mamre Road on the eastern side of the development. Warehouse 3 will be 10,145 m² + 506 m² office space. The long axis of the building is located north/south, with a property setback from Mamre Road (being the Mamre Road widening reserve) of 20m. Warehouse 3 is separated from the adjacent warehouse (Lots 2) by the forecourt in Warehouse 2. The site is accessed by an internal access roads on the eastern and western side of the site. The following distances are provided between Warehouse 3 and the adjacent warehouse building:

- Warehouse Building 3 and Warehouse Building 2 – 45 m.

The distance from the building to the various boundaries is provided below:

- North East – 20 m from the building wall to the boundary fence (internal access road);
- South – 7.5m from the warehouse building to the southern boundary (land scaping); and
- West – 7.5 m from the closest point on the warehouse to the eastern boundary (forecourt).

A tenant has not been sourced for Warehouse 3, hence. DG quantities are unknown. The analysis has been based on a range of DGs and quantities that would allow a tenant flexibility in operations should DGs required to be stored as part of that tenancy.

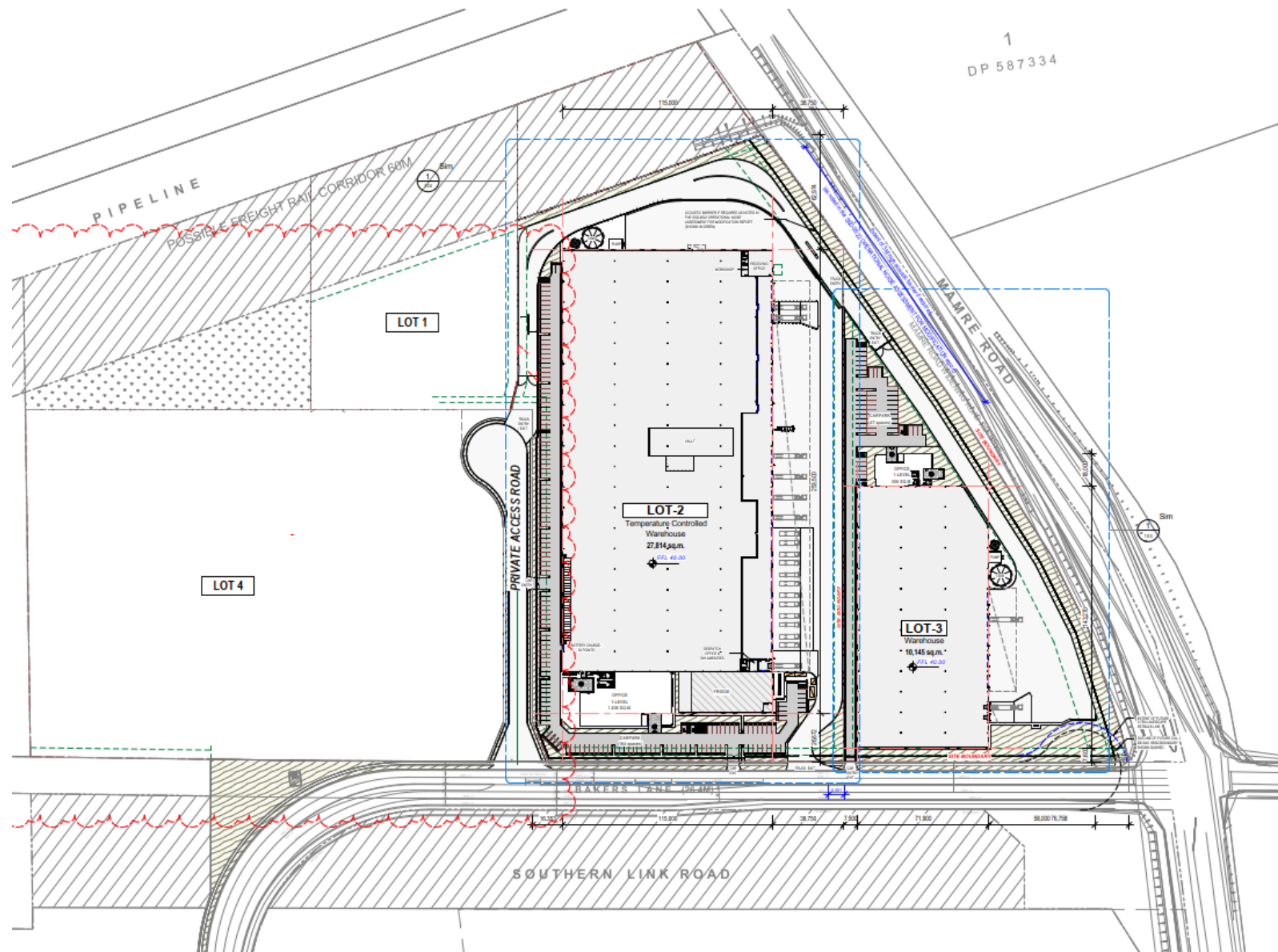


Figure 3.3: Mamre Road Development Modification showing Lots 2 to 3 and Warehouse Locations

4.0 STUDY RESULTS

The applicable screening thresholds for the warehouses have been extracted from Applying SEPP33 (Ref.1) and are included at **Appendix A**. These screening thresholds have been used to determine acceptable levels of DGs that may be held in each warehouse.

4.1 Lot 2 – Warehouse 2

4.1.1 SEPP 33 Storage Assessment (Warehouse 2)

Figure 4.1 shows the layout of Warehouse 2, including an example of the location of DGs within the warehouse. The figure also shows the location of the warehouse in relation to the surrounding land uses, including separation distances between the warehouses and the boundaries.

Threshold limits for the application of SEPP 33 (Ref.1) to Warehouse 2 are presented in **Table 4.1** along with maximum DG quantities that will be stored in the warehouses. **Figure 4.2** shows the maximum permissible quantity of flammable liquids that may be stored in the warehouse, as listed in SEPP33, based on the specific separation distances of the flammable liquids storages areas from the boundary (Ref.1).

Table 4.1 shows that threshold quantities are not exceeded at Warehouse 2 and **Figure 4.2** shows that the maximum permissible storage quantities of flammable liquids is not exceeded, hence, SEPP 33 does not apply, as all DGs are under the storage screening threshold.

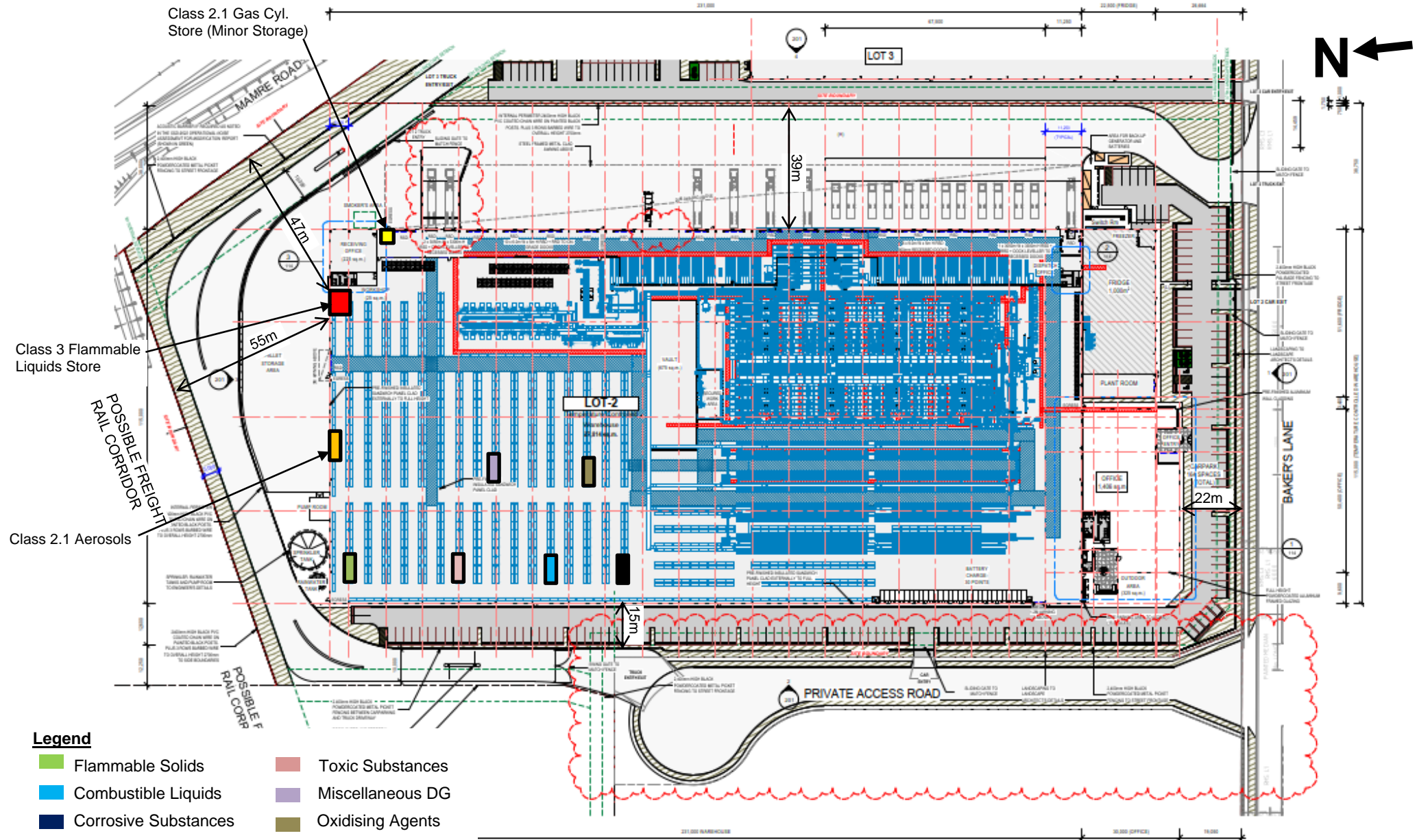


Figure 4.1: Lot 2 – Warehouses 2 Layout showing DG Locations

Table 4.1: Quantities Stored in W/house 2 & RH SEPP Threshold Values for the DGs Stored

Class	Description	PG	Quantities Stored Warehouse 2	SEPP 33 Threshold (Ref.1)	Does SEPP33 Apply?
2.1	Aerosols	-	<6,000 kg (LPG)	10,000 kg	NO
	Cylinders	-	<500 kg (LPG)		
3	Flammable Liquids	II & III	10,000 kg	4,000,000 kg (4,000t)	NO (See Fig. 4.4 & Note 1 below)
4.1	Flammable Solids	II & III	100 kg	5,000 kg	NO
5.1	Oxidising Substances	II & III	1,000 kg	5,000 kg	NO
6.1	Toxic Substances	II & III	500 kg	2,500 kg	NO
8	Corrosives	II & III	5,000 kg	25,000 kg ^(Note 2)	NO
9	Miscellaneous	II & III	10,000 kg	Not subject to SEPP33	
C1/C2	Combustible Liquids	-	10,000 kg	Not subject to SEPP33	

- Notes: 1. The flammable liquids store is located on the north-eastern corner of Warehouse 2, with the closest boundary to the north east being 47m to the bund of the flammable liquids store. The distances to the other boundaries from the storage area is greater than the distances to the north, hence, the boundaries are well separated from the warehouse and the facility is therefore not within the potentially hazardous region of Figure 9 of Applying SEPP33 (see **Figure 4.2**).
2. The threshold value for Class 8 products has been selected as the lower value of PG II & III, being 25,000 kg (noting that PG III corrosives can be stored up to a quantity of 50,000 kg).

Heat Radiation Effects

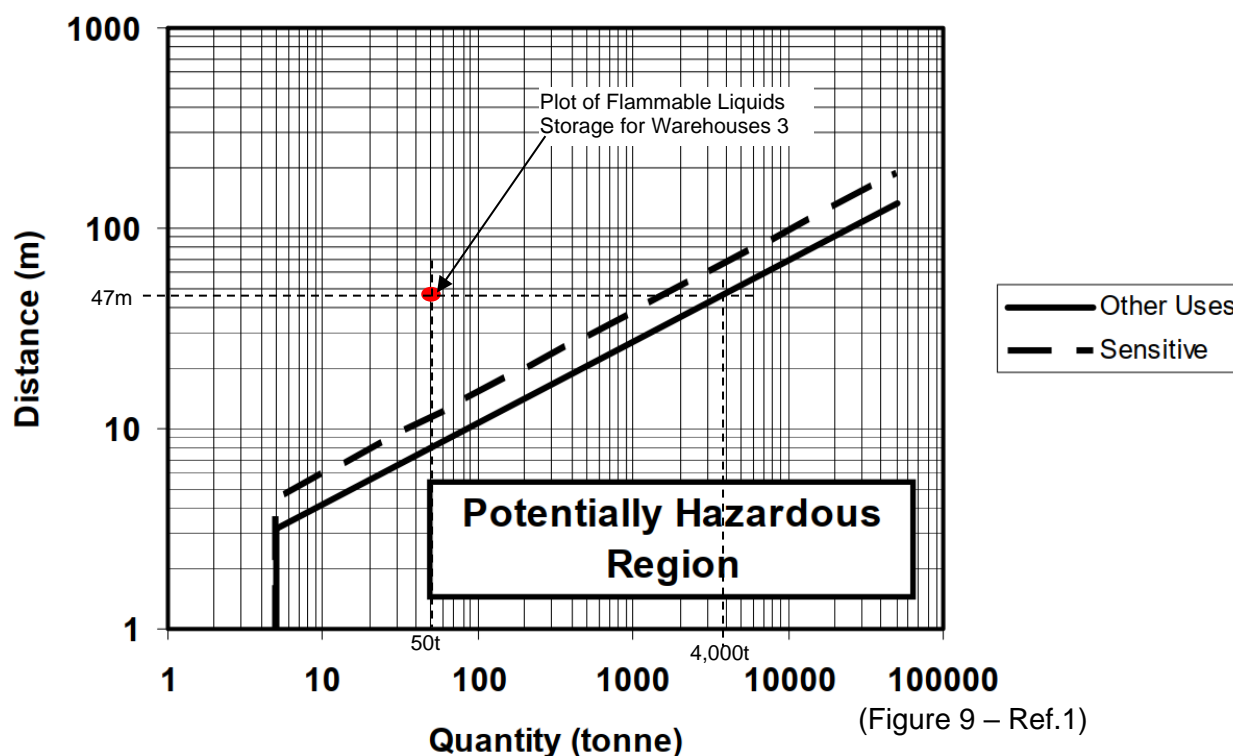


Figure 4.2: Lot 2 – Warehouses 2 DG Plot Class 3 Quantity Vs Distance from Boundary

4.1.2 SEPP 33 Transport Assessment (Warehouses 2)

It is necessary to assess the impact of transporting DGs on the surrounding arterial roads to and from Warehouse 2. As the total quantities to be stored in the warehouse is below SEPP 33, it can be assumed that the frequency of movements would be low. Therefore, it is considered prudent to review the SEPP 33 transport criteria on the basis of minimum transport load listed in the guideline (Applying SEPP33, Ref.1). **Table 4.2** has been developed based on the minimum load of goods to compare the maximum storage quantity within the warehouse to conceptualise whether the loads would be likely to be exceeded based on the maximum storage quantities.

Table 4.2: SEPP33 Transport Quantity vs Warehouse Storage Limits - Warehouses 2

Class	Minimum Load Quantity	Maximum Storage within Warehouse 2
2.1	4.5 tonnes	6.5 tonnes
3(II)	10 tonnes	10 tonnes
3(III)	No limits	
4.1	2 tonnes	0.1 tonnes
5.1	5 tonnes	1 tonnes
6.1	3 tonnes	0.5 tonnes
8	5 tonnes	5 tonnes
9	No Limit	10 tonnes
Comb. Liquid	No Limit	10 tonnes

Based on the maximum quantity to be stored in the warehouse (Warehouse 2) and the SEPP33 load limits, the quantities are unlikely to be exceeded as that would indicate very high turnover of product which would be unlikely to be achieved considering that vehicle movements will be predominantly non-DG products, resulting in the majority of vehicles not carrying DGs. In addition, those movements where DGs are transported as a combined load (Non-DGs and DGs together), the majority of loads would be below the transport placard quantity, which does not exceed the maximum load quantities listed in **Table 4.4**.

Therefore, it is considered that the SEPP33 limits for transport would not be exceeded; hence, additional traffic management plans would not be required. It is noted, that the transport of DGs is covered by the Australian Dangerous Goods Code (ADG, Ref.2) Therefore, incident response will be covered by the transport of DGs via the ADG as appropriate with the loads being carried.

4.2 Lot 3 – Warehouses 3

4.2.1 SEPP 33 Storage Assessment (Warehouses 3)

Figure 4.3 shows the layout of Warehouses 3, including the location of DGs within the warehouses. The figure also shows the location of the warehouse in relation to the surrounding land uses, including separation distances between the warehouses and the boundaries.

The quantity of DGs that are proposed for storage in Warehouse 3 is shown in **Table 4.3**, along with maximum DG quantities that will be stored in the warehouse. **Figure 4.3** shows the maximum permissible quantity of flammable liquids that may be stored in the warehouse, as listed in SEPP33, based on the specific separation distances of the flammable liquids storages areas from the boundary (Ref.1).

Table 4.3 shows that threshold quantities are not exceeded at Warehouses 3 and **Figure 4.4** shows that the maximum permissible storage quantities of flammable liquids is not exceeded, hence, SEPP 33 does not apply to the DG storage, as all DGs are under the storage screening threshold.

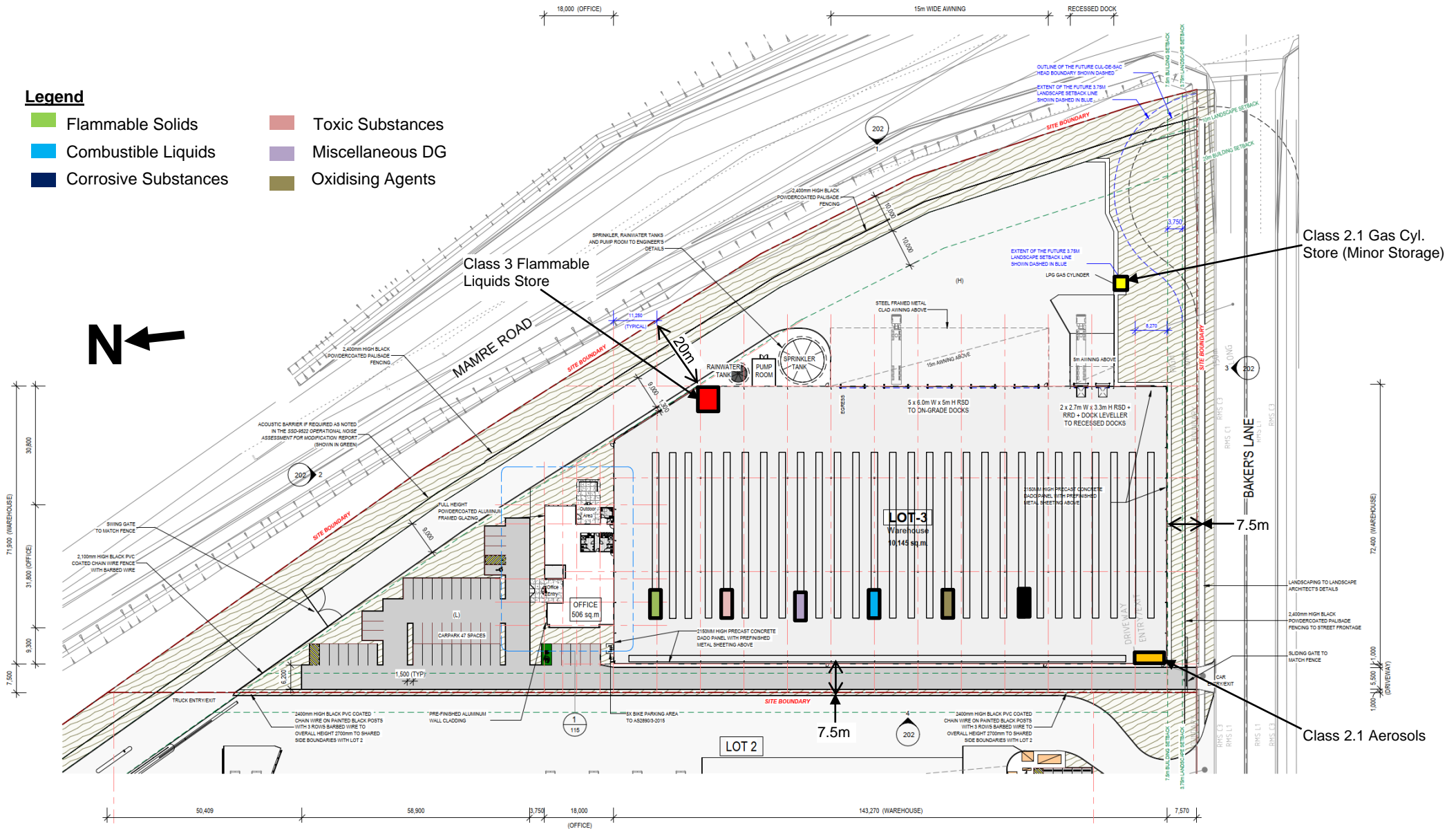


Table 4.3: Quantities Stored in Warehouses 3 and SEPP33 Threshold Values for the Specific DGs Stored

Class	Description	PG	Quantities Stored Warehouse 3	SEPP 33 Threshold (Ref.1)	Does SEPP33 Apply?
2.1	Aerosols	-	<7,500 kg (LPG)	10,000 kg	NO
	Cylinders	-	<1,000 kg (LPG)		
3	Flammable Liquids	II & III	20,000 kg (PGII) 30,000 kg (PGIII)	500,000 kg (500t)	NO (See Fig. 4.2 & Note 1 below)
4.1	Flammable Solids	II & III	4,000 kg	5,000 kg	NO
5.1	Oxidising Substances	II & III	4,000 kg	5,000 kg	NO
6.1	Toxic Substances	II & III	2,000 kg	2,500 kg	NO
8	Corrosives	II & III	24,000 kg	25,000 kg ^(Note 2)	NO
9	Miscellaneous	III	40,000 kg	Not subject to SEPP33	
C1/C2	Combustible Liquids	-	40,000 kg	Not subject to SEPP33	

- Notes: 1. The flammable liquids stores are located on the north-eastern side of Warehouse 3, with the closest boundary to the north-east being 20m from the bund of the flammable liquids store. The distances to the other boundaries from the storage areas are equal to or greater than the distances to the north-eastern boundary, hence, the boundaries are well separated from the storage and the facility is therefore not within the potentially hazardous region of Figure 9 of Applying SEPP33 (see **Figure 4.6**).
2. The threshold value for Class 8 products has been selected as the lower value of PG II & III, being 25,000 kg (noting that PG III corrosives can be stored up to a quantity of 50,000 kg).

Heat Radiation Effects

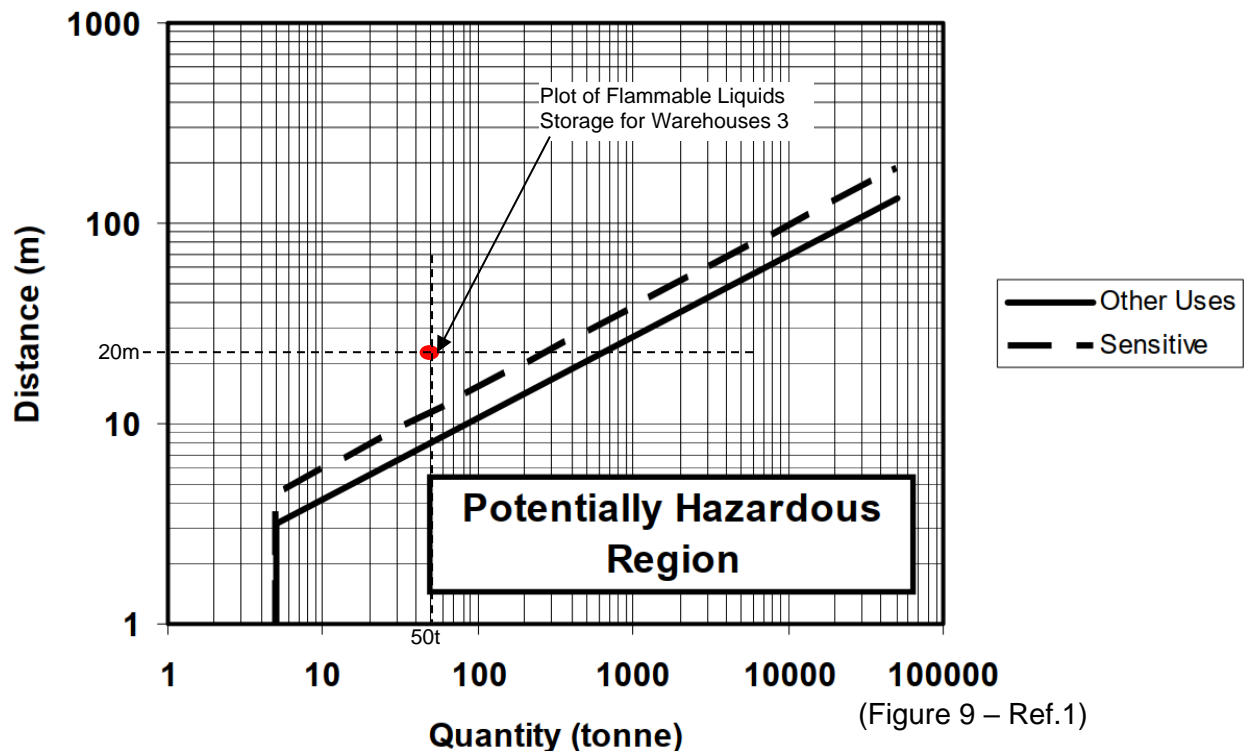


Figure 4.4: Lot 3 – Warehouses 3 DG Plot Class 3 Quantity Vs Distance from Boundary

4.2.2 SEPP 33 Transport Assessment (Warehouses 3)

It is necessary to assess the impact of transporting DGs on the surrounding arterial roads to and from Warehouse 3. As the total quantity of DGs to be stored in the warehouse is below the RH SEPP threshold(s), it can be assumed that the frequency of movements would be low. Therefore, it is considered prudent to review the RH SEPP transport criteria on the basis of minimum transport load listed in the guideline (Applying SEPP33, Ref.1). **Table 4.4** has been developed based on the minimum load of goods to compare the maximum storage quantity within the warehouses to conceptualise whether the loads would be likely to be exceeded based on the maximum storage quantities.

Table 4.4: SEPP33 Transport Quantity vs Warehouse Storage Limits - Warehouses 3

Class	Minimum Load Quantity	Maximum Storage within Each Warehouse
2.1	4.5 tonnes	8.5 tonnes
3(II)	10 tonnes	20 tonnes
3(III)	No limits	30 tonnes
4.1	2 tonnes	4 tonnes
5.1	5 tonnes	4 tonnes
6.1	3 tonnes	2 tonnes
8	5 tonnes	20 tonnes
9	No Limit	20 tonnes
Comb. Liquid	No Limit	20 tonnes

Based on the maximum quantity to be stored in the warehouse (Warehouse 3) and the RH SEPP load limits, the quantities are unlikely to be exceeded as that would indicate very high turnover of product which would be unlikely to be achieved considering that vehicle movements will be predominantly non-DG products, resulting in the majority of vehicles not carrying DGs. In addition, those movements where DGs are transported as a combined load (Non-DGs and DGs together), the majority of loads would be below the transport placard quantity, which does not exceed the maximum load quantities listed in **Table 4.4**.

Therefore, it is considered that the RH SEPP limits for transport would not be exceeded; hence, additional traffic management plans would not be required. It is noted, that the transport of DGs is covered by the Australian Dangerous Goods Code (ADG, Ref.2) Therefore, incident response will be covered by the transport of DGs via the ADG as appropriate with the loads being carried.

4.3 Potentially Offensive Developments

In addition to the hazards associated with the storage of Dangerous Goods, a review of the potentially offensive Developments component of SEPP33 has been made. Applying SEPP33 (Ref.1) indicates that where an Environmental Protection Licence (EPL) is required, there is a potential for environmental impact and the “offensive” requirements of the RH SEPP should be assessed.

Noting that the proposed development at 657-769 Mamre Road, Kemps Creek, NSW, comprises warehouses and storage of goods in sealed packages, with the Dangerous Goods quantities below the threshold levels listed in the Protection of Environmental Operations Regulation (Ref.4), there would be no requirement to obtain an EPL and hence, the offensive component of the SEPP does not apply.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

An analysis of the application of the Resilience and Hazards State Environmental Planning Policy, Hazardous and Offensive Developments (RH SEPP) was conducted for a modification to the proposed Frasers-Altis development on a parcel of land located on the western side of Mamre Road, Kemps Creek, NSW. The proposed modification to the development involves the construction of a warehouses on each of 2 lots within the development, with both warehouses being single occupancy. The analysis was conducted based on a known (proposed) tenancy in Warehouse 2 and a limited quantity of Dangerous Goods (DGs) stored and handled in Warehouse 3, noting that the development has considered the potential for Warehouse 3 tenants to store and handle limited DGs as part of its operations.

The analysis identified that the quantity of DGs held at each warehouse did not exceed the storage threshold levels listed in “Applying SEPP33”(Ref.1). It was also identified that based on the relatively low quantity of DGs stored and handled at the warehouses, and the type of operations proposed at the warehouses (i.e. warehouses are not dedicated DG storage facilities), it was unlikely that the maximum permissible transport quantity and number of vehicle operation listed in “Applying SEPP33”(Ref.1) would be exceeded. Hence, based on the assessment conducted for the proposed DG storages identified in in this study, it is concluded that SEPP33 does not apply to the proposed development.

In addition to the RH SEPP review of Dangerous Goods storage a review of the potential for offensive operations was conducted. It was identified that the proposed warehouses would not require an Environmental Protection Licence (EPL), hence, the offensive developments component of the RH SEPP would not apply.

Based on the assessment conducted in this study and the results indicating that SEPP33 does not apply to any of the warehouses within the development, it is concluded that the requirements of the Hazard and Risk Section of the SEARs (Key Issues, Dot point 12) have been addressed.

5.2 Recommendations

Notwithstanding the conclusion reached above, it is noted that tenants may require to store DGs at quantities exceeding those assessed in this study. Should a tenant require to store and handle additional DGs to those listed for the specific warehouse in this study, it is recommended that a review of the application of the RH SEPP should be conducted and where required a Preliminary Hazard Analysis (PHA) study be performed, in accordance with HIPAP No.6 (Ref.3), should it be identified that the RH SEPP applies to the specific warehouse.

6.0 REFERENCES

1. Applying SEPP 33 (2011), “Hazardous and Offensive Development Application Guidelines”, NSW Department of Planning and Infrastructure.
2. “The Australian Code for the Transport of Dangerous Goods by Road and Rail”, known as The Australian Dangerous Goods Code or ADG, ed. 7.3, 2015, Federal Office of Road Safety, Canberra, ACT
3. Hazardous Industry Planning Advisory Paper No.6 (2011) – Guidelines for Hazard Analysis, NSW Department of Planning & Industry.
4. Protection of the Environment Operations (General) Regulation 2021, administered by The NSW Environmental Protection Authority.

Appendix A

DATA EXTRACTED FROM “APPLYING SEPP33”

A1. SCREENING METHODS

Figure A.1, extracted from “Applying SEPP33” provides details on the application of Figures or Tables from the same document to determine the applied screening Threshold. It shows that:

- for LPG, Table 3 shall be used;
- for Class 3 PG II and III, Figure 9 shall be used (note: Class 3 PGI materials will not be stored at the facility);
- for Class 4, Class 5, Class 6, and Class 8, Table 3 shall be used;
- Class 9 is not subject to SEPP33;
- Combustible Liquids is not subject to SEPP33; and
- For transport, Table 2.

Class	Method to Use/Minimum Quantity
1.1	Use graph at Figure 5 if greater than 100 kg
1.2-1.3	Table 3
2.1 — pressurised (excluding LPG)	Figure 6 graph if greater than 100 kg
2.1 — liquefied (pressure) (excluding LPG)	Figure 7 graph if greater than 500 kg
LPG (above ground)	table 3
LPG (underground)	table 3
2.3	table 3
3PGI	Figure 8 graph if greater than 2 tonne
3PGII	Figure 9 graph if greater than 5 tonne
3PGIII	Figure 9 graph if greater than 5 tonne
4	table 3
5	table 3
6	table 3
7	table 3
8	table 3

Figure A.1: Screening Method to be Used

Figure 9 and Table 3 from “Applying SEPP33” have been extracted and are shown in **Figure A.2**, and **Figure A.3** respectively.

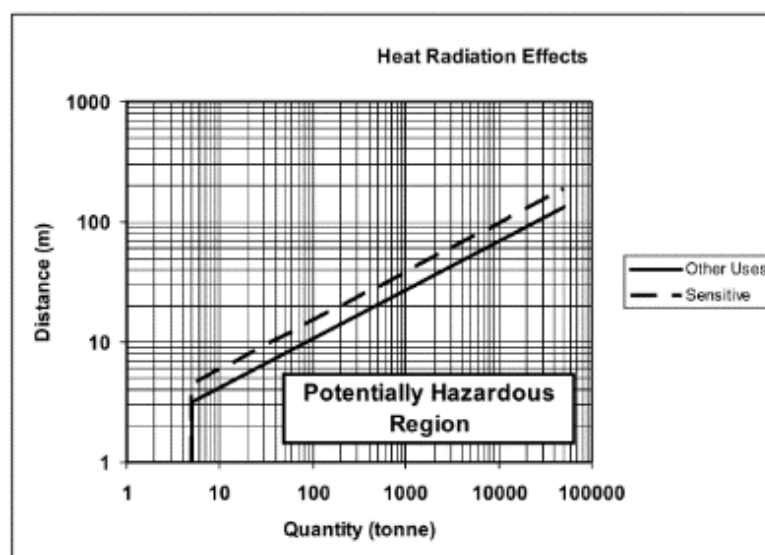


Figure A.2: Class 3 PGII and PGIII Flammable Liquids

Table 3: General Screening Threshold Quantities

Class	Screening Threshold	Description
1.2	5 tonne	or are located within 100 m of a residential area
1.3	10 tonne	or are located within 100 m of a residential area
2.1	(LPG only — not including automotive retail outlets ¹)	
	10 tonne or 16 m ³	if stored above ground
	40 tonne or 64 m ³	if stored underground or mounded
2.3	5 tonne	anhydrous ammonia, kept in the same manner as for liquefied flammable gases and not kept for sale
	1 tonne	chlorine and sulfur dioxide stored as liquefied gas in containers <100 kg
	2.5 tonne	chlorine and sulphur dioxide stored as liquefied gas in containers >100 kg
	100 kg	liquefied gas kept in or on premises
	100 kg	other poisonous gases
4.1	5 tonne	
4.2	1 tonne	
4.3	1 tonne	
5.1	25 tonne	ammonium nitrate — high density fertiliser grade, kept on land zoned rural where rural industry is carried out, if the depot is at least 50 metres from the site boundary
	5 tonne	ammonium nitrate — elsewhere
	2.5 tonne	dry pool chlorine — if at a dedicated pool supply shop, in containers <30 kg
	1 tonne	dry pool chlorine — if at a dedicated pool supply shop, in containers >30 kg
	5 tonne	any other class 5.1
5.2	10 tonne	
6.1	0.5 tonne	packing group I
	2.5 tonne	packing groups II and III
6.2	0.5 tonne	includes clinical waste
7	all	should demonstrate compliance with Australian codes
8	5 tonne	packing group I
	25 tonne	packing group II
	50 tonne	packing group III

Note: The classes used are those referred to in the Australian Dangerous Goods Code and are explained in Appendix 7.

Figure A.3: General Screening Threshold Quantities

Product will be transported to and from the warehouses/industrial facility; hence, it is necessary to review the implications the transport of DGs will have on the surrounding arterial roads. Table 2 from “Applying SEPP33” has been extracted and is shown in **Figure A.4**.

Class	Vehicle Movements		Minimum quantity*	
	Cumulative	Peak	per load (tonne)	
	Annual	or Weekly	Bulk	Packages
1	see note	see note	see note	
2.1	>500	>30	2	5
2.3	>100	>6	1	2
3PGI	>500	>30	1	1
3PGII	>750	>45	3	10
3PGIII	>1000	>60	10	no limit
4.1	>200	>12	1	2
4.2	>100	>3	2	5
4.3	>200	>12	5	10
5	>500	>30	2	5
6.1	all	all	1	3
6.2	see note	see note	see note	
7	see note	see note	see note	
8	>500	>30	2	5
9	>1000	>60	no limit	

Figure A.4: SEPP33 Transport Thresholds

*If quantities are below this level, the potential risk is unlikely to be significant unless the number of traffic movements is high.

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