

# **PROPOSED DEVELOPMENT**

## **SERVICE STATION UPGRADE (Incorporating a Convenience Store ) & RESIDENTIAL ALTERATIONS**

**370 - 372 CARRINGTON ROAD & 523 LONDONDERRY  
ROAD**

**LONDONDERRY NSW  
DA19/0054**

## **SUPPLEMENTARY TRAFFIC IMPACT ASSESSMENT REPORT**

**For**

**Maria Galis  
370-372 Carrington Road  
LONDONDERRY**

**August 2019**

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*Prepared by*



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(Incorporating a Convenience Store )  
& RESIDENTIAL ALTERATIONS**

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**LONDONDERRY NSW  
DA19/0054**

**SUPPLEMENTARY  
TRAFFIC IMPACT ASSESSMENT REPORT**

**1. Introduction**

The purpose of this report is to seek RMS support and Council approval to demolish the existing Service Station and construct state of the art Service Station (incorporating a convenience store) **DA19/0054**.

Critical to the assessment of this submission are two documents that are to be considered:

1. Council Letter dated 15 April 2019 where concerns were raised with the submitted proposal, that will need to be considered. The main concerns relate to the location of the sales building (zero setback), the widening of the vehicle crossovers and the lack of information supplied.

In response to this letter Council were advised that the submission was to be reviewed and a revised DA submitted.

2. Minutes of a meeting with RMS (SYD19/00237/03 forwarded by e-mail dated 4 July 2019.

The stated outcomes of that meeting were to provide swept path analysis on a aerial overlay and updated plans that include a median in Londonderry road.

This Supplementary Traffic Impact Assessment Report is in support of the revised DA and addresses Council and RMS requirements as detailed in Council's DCP Part C – C10 Transport, Access and Parking and the above referenced RMS/Council correspondence.

This report is to be read in conjunction with initial Traffic Impact Assessment Report (WTS TIA August 2019) should traffic flow data need to be assessed.

The site of the proposed development is confined to an existing area currently occupied and functioning as a Service Station having access, not only to Londonderry Road, an RMS classified Regional Road (RR 2063), but also Carrington Road, a local access road administered by Council (refer Figure 1).



**Figure 1**

It is understood there has been a large amount of communication between RMS, Council and the developer in terms of the traffic implications and assessment of the proposed development and proposed vehicle access.

On the basis of those communications the site development has been revised and is now submitted for RMS/Council approval.

A full description of the site development and its assessment relating to site layout, traffic generation, type of occupancy proposed, vehicle access and parking and assessment of impact of generated traffic by the development on the adjoining road network is provided in the above referenced initial TIR (WTS August 2019) and is discussed further below.

This report addresses the revised proposal in terms of:

- Vehicle Access
- Vehicle Manoeuvrability (Swept paths)
- Parking

This report reviews the relative traffic, parking and road user safety operational aspects of a proposed revised Service Station (incorporating a convenience store) for the site (refer Appendix 1).

It is also understood that residential alterations are proposed in the revised development. The extent of these alterations is to employ a “Landscape Easement” over the adjoining property to the south and is addressed by others.

This report has been prepared by Terry Winning, Director of Winning Traffic Solutions Pty. Ltd. an RMS accredited Level 3 Road safety Auditor (RSA-02-0063) and addresses the above issues as well as the access and parking, road user safety operational aspects of the site accommodating a proposed Service Station (incorporating a convenience store).

Penrith City Council’s Development Control Plan Part C 2014 – C10 Transport, Access and Parking is referenced as the basis for this report.

In addition, reference is made to:

- RTA “Guide to Traffic Generating Developments” (Version 2.2 – 2002)
- AS/NZ Standard 2890.1:2004 – Part 1 Off-street Car Parking, 2890.2 – Part 2 - Off-street Commercial Vehicle Facilities (parking) and 2890.6 – Part 6 Off-street parking for people with disabilities
- Austroads Guide To Road Safety

The above have been applied to the revised site access and parking proposed and presents the assessment undertaken of traffic impacts of the development with due consideration of type of development, customer access needs, traffic generation, vehicle access, parking requirements, surrounding road network, overall road user safety and the current restrictions of the site.

## **2. The Site and Connecting Road Network**

For the purpose of description Londonderry Road is orientated in a north/south direction and Carrington Road east/west passing the subject site (refer Figure 1 above).

The site is located on the south-eastern corner at the junction of Londonderry Road and Carrington Road and identified as 370-372 Carrington Road, Londonderry.

It is understood Londonderry Road is an RMS administered Road (RR 2063) whilst Carrington Road is a classified local road administered by Council.

The site is located within a predominantly residential area with some commercial development occupancy to the east and west (north of Carrington Road).

Londonderry Road serves as a major precinct collector/distributor road between Richmond (in the north) and connecting with The Northern Road, Llindilo (in the south) and carries relative low volumes of traffic past the subject site. The road is RMS approved to accommodate B-double heavy vehicles (HV) up to 26m in length.

Carrington Road is a local access collector/distributor road between Londonderry and Windsor Downs (in the east).

Londonderry Road operates as a two-lane two-way road with kerb and gutter accommodating generally, 3.5m travel lanes with a 3.2m wide northbound right turn storage lane to Carrington Road and unrestricted kerbside parking lanes 3.3m wide traffic calmed with edgeline markings. Footway areas both sides of the road (5.5m eastern side and 3.7m western side) provide concrete paved footpaths 1.2m wide. The road is speed regulated past the site to 60 km/hr with 40K School Zone speed restrictions 8-9:30 AM and 2:30-4 PM School Days.

Similarly, Carrington Road operates as a two-lane two-way road with kerb and gutter accommodating generally 12.3m wide road carriageway divided by BB Barrier line with unrestricted kerbside parking. Footway areas both side (approx. 3.7m wide) provide concrete paved footpaths 1.2m wide. The road is speed regulated to 50 km/hr with 40K School Zone speed restrictions 8-9:30 AM and 2:30-4 PM School Days, past the subject site.

The area is located in relatively flat terrain that accommodates good sight lines within the road network and at intersections, relative to the speed of the road that facilitates operational road user safety.

### **3. Revised Proposed Site Development and Vehicle Access**

The existing service station facility is considered by the owners as outdated and in need of refurbishment. The light vehicle fuelling facilities are in need of upgrade and there is limited diesel facilities for the needs of both the local community and potential large vehicle customers.

Currently there are four (4) fuel (petrol) outlet dispensers and one (1) diesel dispenser pumps operating on the existing site. The number of fuel outlet points (pumps) are reduced to four (4) with multi-product capability incorporating both fuel and high flow diesel.

It is proposed to operate under existing approved trading hours 5am to 7pm Mon-Fri; 7am to 5pm Sat and 8am to 5pm Sun for both light vehicle and heavy vehicle fuelling and convenience store operations.

The Owner is looking to demolish the existing premises and upgrade the site and facilities with a focus to customer needs, not only for truck fuelling facilities but to service the increase in the local fleet to diesel driven 4WD, AWD and family SUVs.

Vehicle access of the site proposes to retain existing access of Londonderry Road but modify to restrict right turn movements to and from Londonderry Road by way of a central median and widened driveway to accommodate large vehicle to access the site.

In Carrington Road it is proposed to retain all existing movements but consolidate driveway access from two driveways to one driveway located toward the eastern end of the property (refer Appendix 1)

The site has been configured to allow access of the largest vehicle entering the site and the passing of stationary light vehicles refuelling at the pumps (refer Appendix 3).

In addition, traffic management (traffic cones) is to be employed during “fuel discharge” operations into new underground tanks. The location of the inlets to the underground fuel tanks are situated at the eastern fuel dispensing bowsers to accommodate a tanker (19m AV) discharging into the tanks without greatly impeding access or circulation of other vehicles entering or leaving the site under traffic management (refer Appendix 3).

The building is serviced by a loading bay for a Medium Rigid Vehicle – (8.8m long).

In addition, a function of the proposed new building, an area of approximately 200m<sup>2</sup> GFA, is to accommodate office, console, sales area, cool room, storage area and toilet. The “sales area” is to provide basic staples (bread and milk), drinks and assorted confectionaries and occupies an area of approximately 90 m<sup>2</sup> with Office/Console area 40m<sup>2</sup> that forms the basis for parking assessment discussed below.

Note there are no “work bays” associated with the operation of the service station submitted for the development.

#### **4. Parking**

Parking assessment for the revised proposed new facility is based on Penrith City Council's Development Control Plan Part C 2014 – C10 Transport, Access and Parking; Clause 10.3 Parking, Access and Driveways and Table C10.2 Car Parking Rates.

On the basis of the above, the following parking rates have been applied to the revised new development, noting there are no work bays being considered (refer Appendix 2):

- Service Stations and Convenience Stores - 6 spaces per work bay plus 4 spaces per 100m<sup>2</sup> of gross floor area of convenience store.  
(The proposed GFA of the Convenience Store is approx. 200m<sup>2</sup>)

Therefore, employing the above rates to the new development, the following parking spaces are required:

- Service Station and convenience store = 2. 00 x 4 = **8 spaces**

#### **Applying this rate equates to 8 car spaces car parking spaces.**

It is understood Council expressed concern relating to the application of parking to the overall use of the site.

In response the following is offered for consideration.

The calculated number of car parking spaces is based on Councils DCP Chapter 10 – Transport Access and Parking Table C10.2:Car Parking Rates.

In that table the parking requirement for “Services Stations & Convenience Stores” is “6 spaces per work bay plus 4 spaces per 100m<sup>2</sup> of gross floor area of convenience store”.

This parking rate is similar to RMS Publication “Guide to Traffic Generation Developments – Section 5.7.2 and Table 5.3 states “Requirements are additive: 6 spaces per work bay 5 spaces per 100m<sup>2</sup> GFA of convenience store”.

It is NOT stated in either document that petrol outlet pumps are NOT included in parking assessment for Service Station and convenience store and what is the “loading bay” if not a parking space.

The RMS Guide defines Service Station as “*a building or place used for the fuelling of motor vehicles, involving the retail sale of petrol, oil and other petroleum products*” and “*The term convenience store refers to a drive-in retail facility, usually established by the modification of existing service stations. This type of establishment usually combines the retailing of petrol and other goods, with the hours of operation extending beyond normal retail hours.*”

It is submitted that the purpose of the Service Station (accommodating a convenience store) associated with the site, primarily caters for refuelling of vehicles. As such a “dual purpose” trip to shop at the convenience store, for the purpose of assessing the parking requirements for the site development, is aligned with the primary purpose of the site as a Service Station, and needs to be considered.

Therefore, the submitted development accommodating a Service Station refuelling facility (incorporating a convenience store) proposes the following:

- Car parking (including disabled) = 3 spaces
- Car parking (spaces available at pumps) = 8 spaces
- Loading (Delivery) Bay Truck parking = 1 space

In total **12 car parking spaces** are accommodated within the revised proposed development that caters for cars, heavy vehicles and 19m long articulated vehicles, satisfying both Council and RMS requirements.

All parking modules and access facilities have been designed in accordance with relevant Australian Standards 2890.1, 2890.2 and 2890.6 (refer Appendix 2).

Therefore, proposed parking provisions for the submitted revised development and whole of site operation is therefore considered compliant with Australian Standards and Council requirements.

## **5. Conclusion**

It is considered that the revised proposed development will not adversely impact the traffic operations on the surrounding road network during critical peak commuter times based on the initial Traffic Impact Assessment Report (WTS TIA August 2019) should traffic flow data need to be assessed.

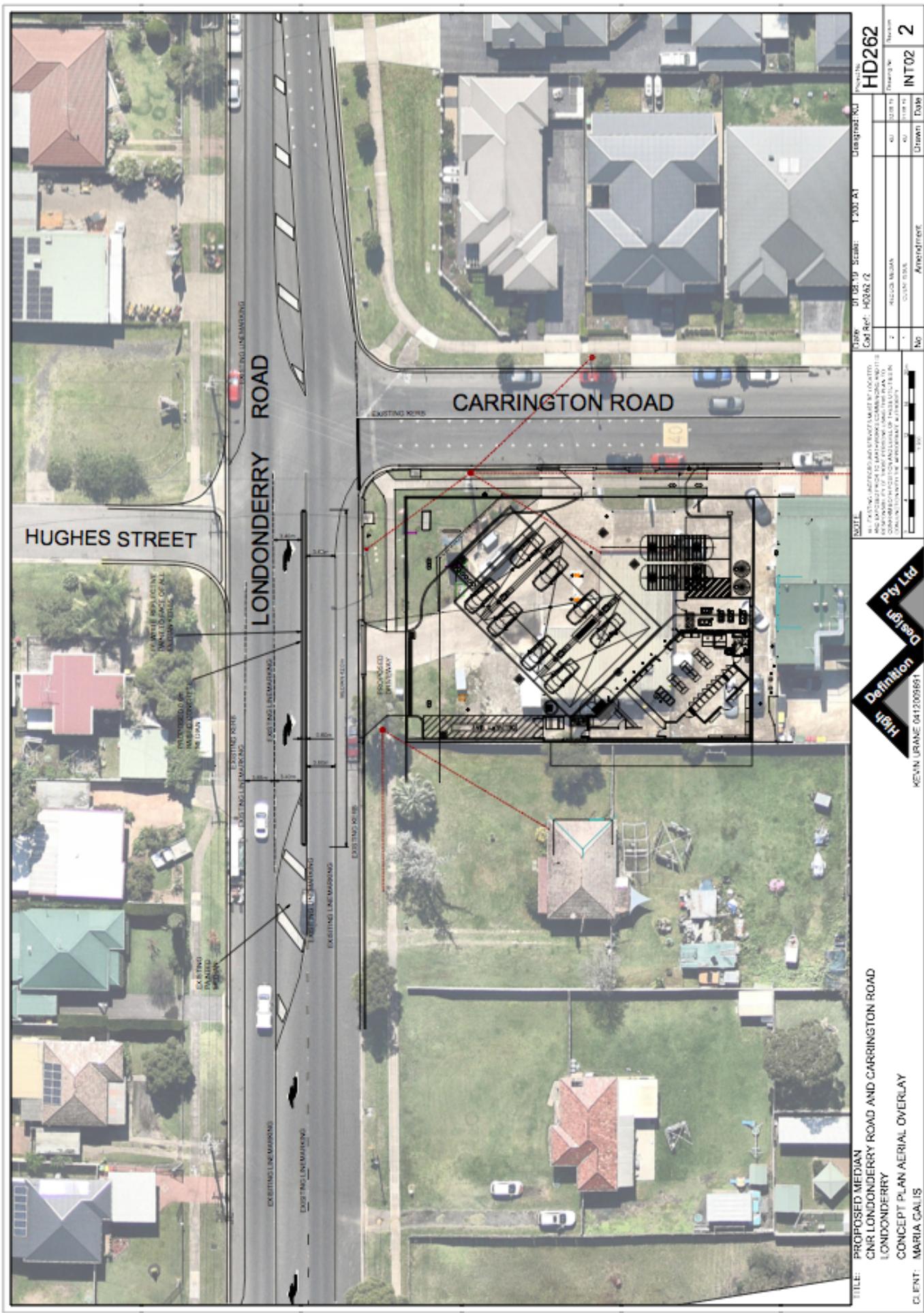
The revised proposed development has applied some restrictions to the site in terms of vehicle access and queuing and that information has been provided to complete Council assessment of the revised DA submission.

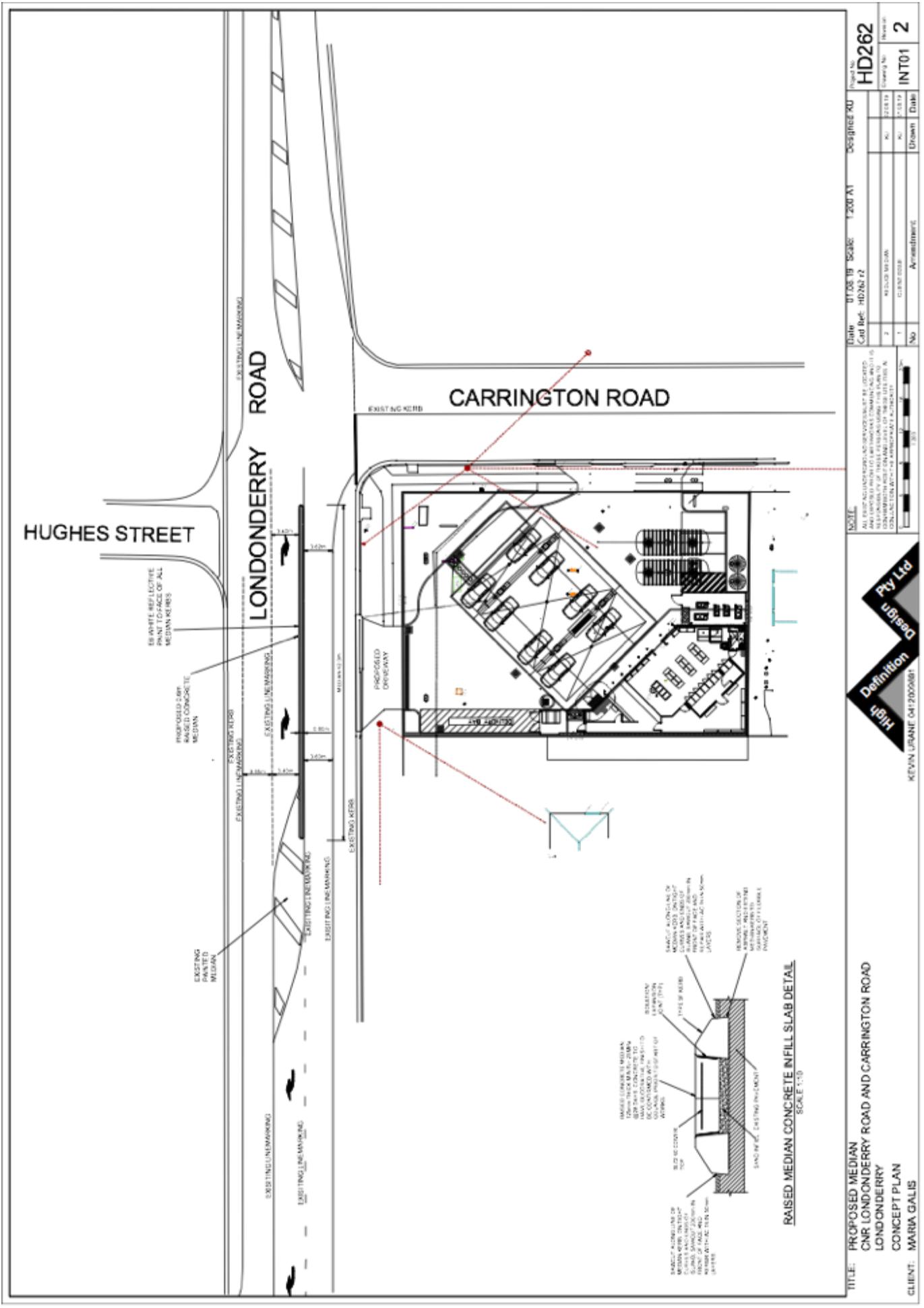
On the basis of this Supplementary Traffic Impact Assessment, it is considered that the assessment of the traffic and parking impacts and the assumptions and calculations made in determining those impacts are considered valid.

Therefore, it is submitted the revised proposed development of the subject site as a Service Station Refuelling Facility (incorporating a convenience store) will not impact the existing Level of Service provided on the adjoining road network nor will access or road user safety be compromised by the operation shown in the submitted plans.

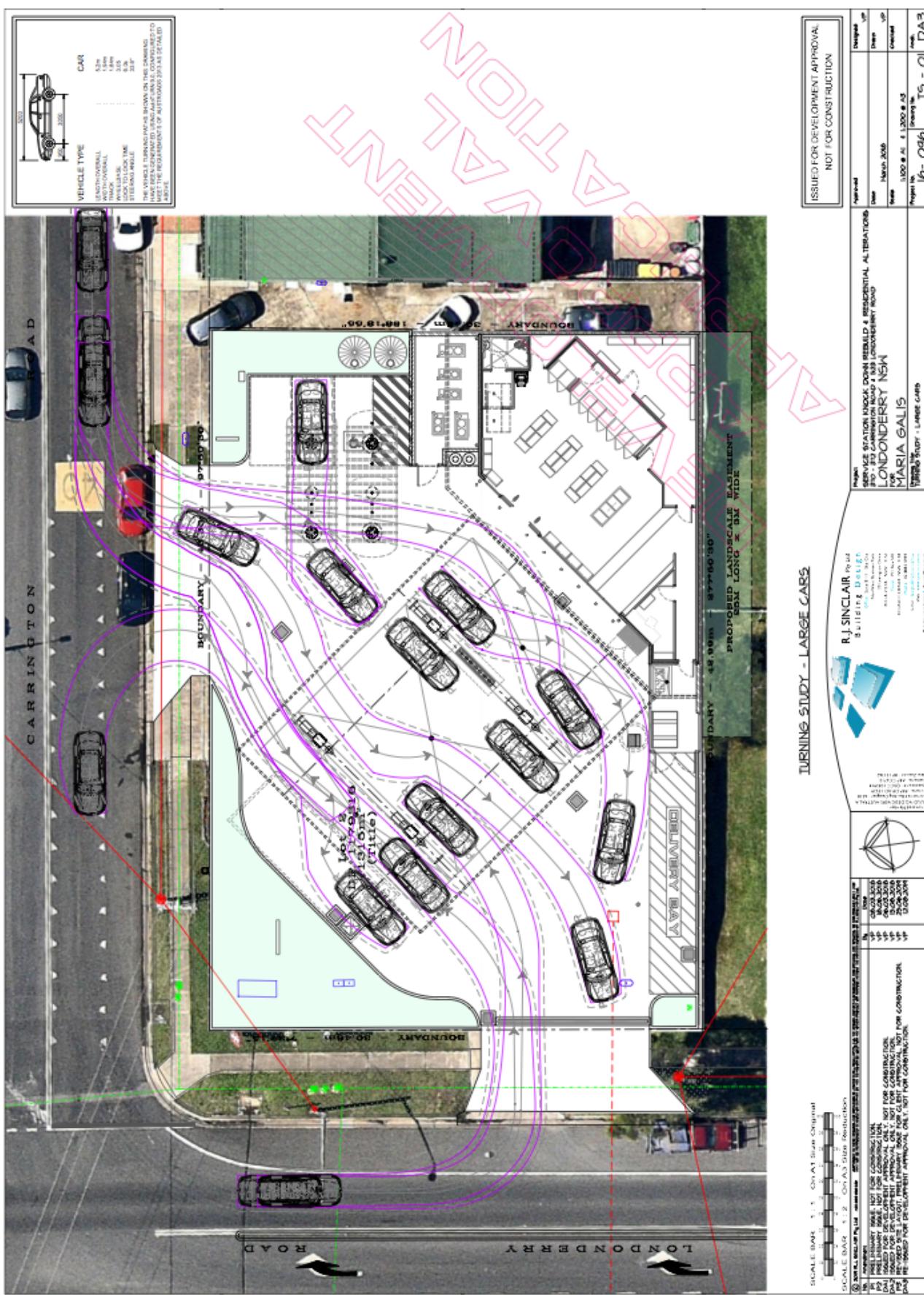
Overall it is considered that traffic/pedestrian flows and circulation, the vehicular access and parking provisions within and outside of the proposed development during peak activity times and the impact on the existing road network level of service would not be adversely effected by the revised proposal.

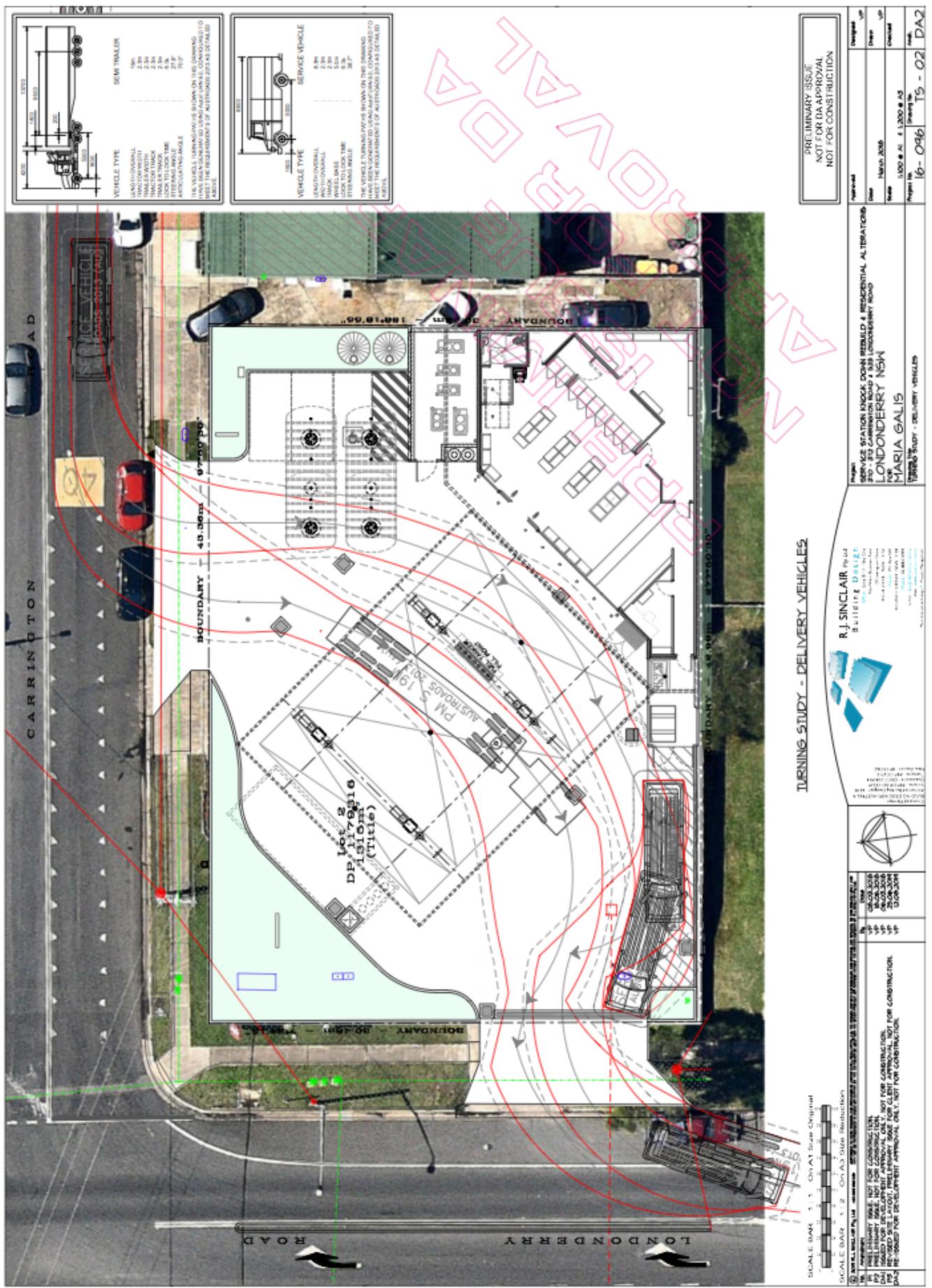
## APPENDIX 1

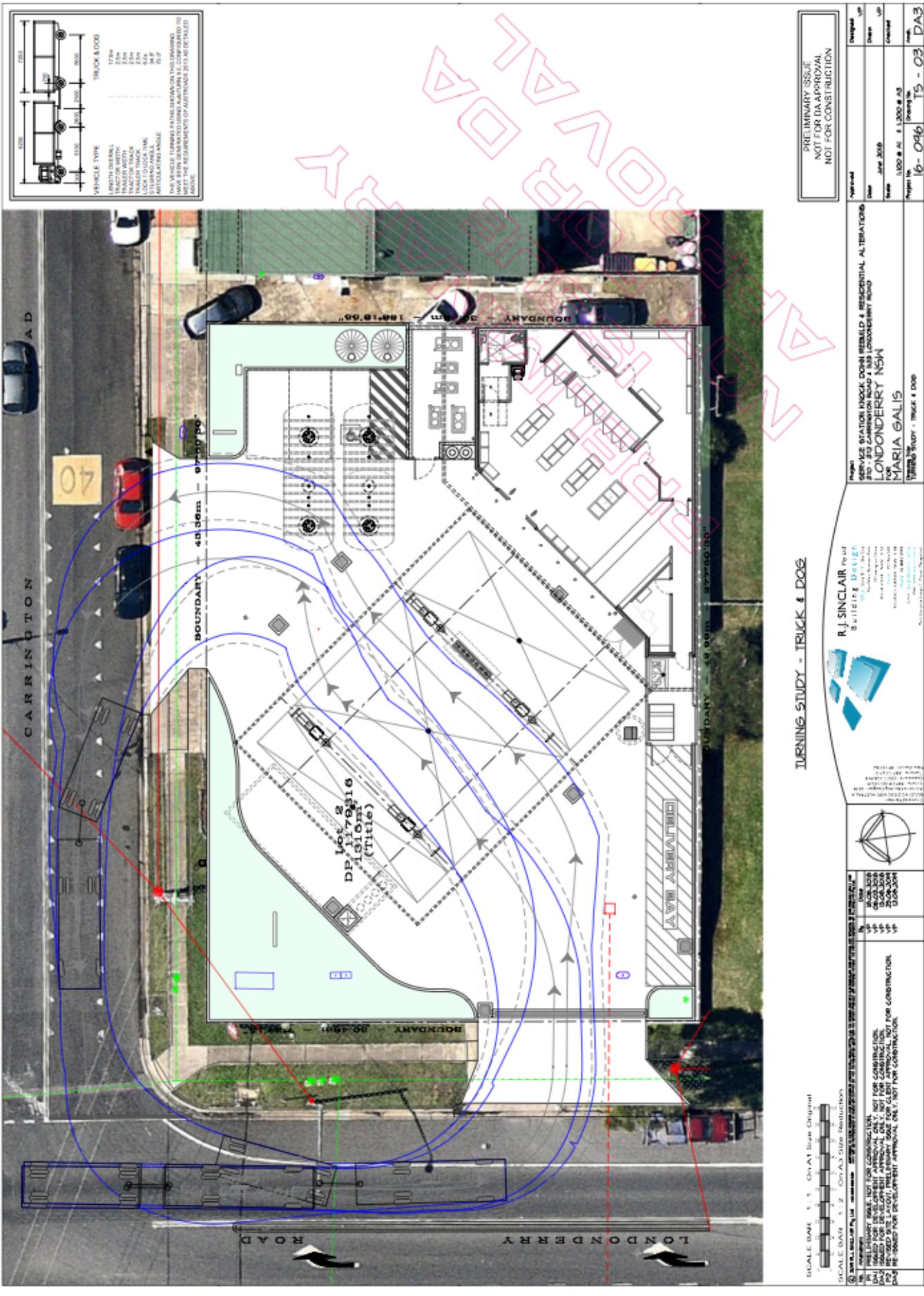




## AERIAL SWEPT PATH ANALYSIS

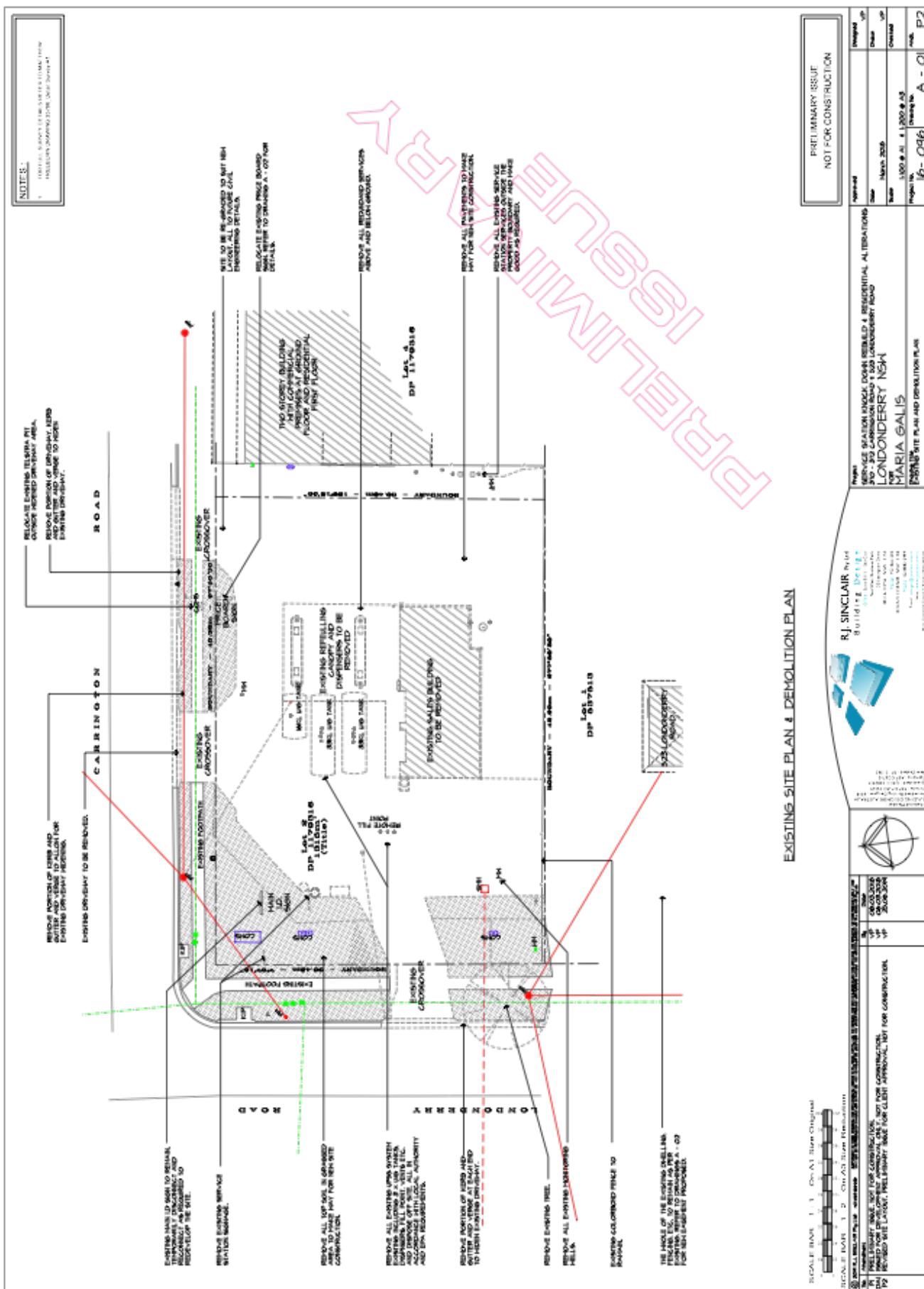






## **APPENDIX 2**

## RELEVANT ARCHITECTURAL PLANS



CARINGTON

ROAD

HEI CONCRETE PAVING TO  
SURFACE SLOPES FORECAST AND  
PROVIDE  
EARTHWORKS AND  
LANDSCAPING TO SAT  
FOOTBED REQUIREMENT.  
PROVIDE HIGH LEVEL AND  
GUTTER TO REPLACE  
REARDOOR LATRACK.  
PROVIDE FOOTPATH

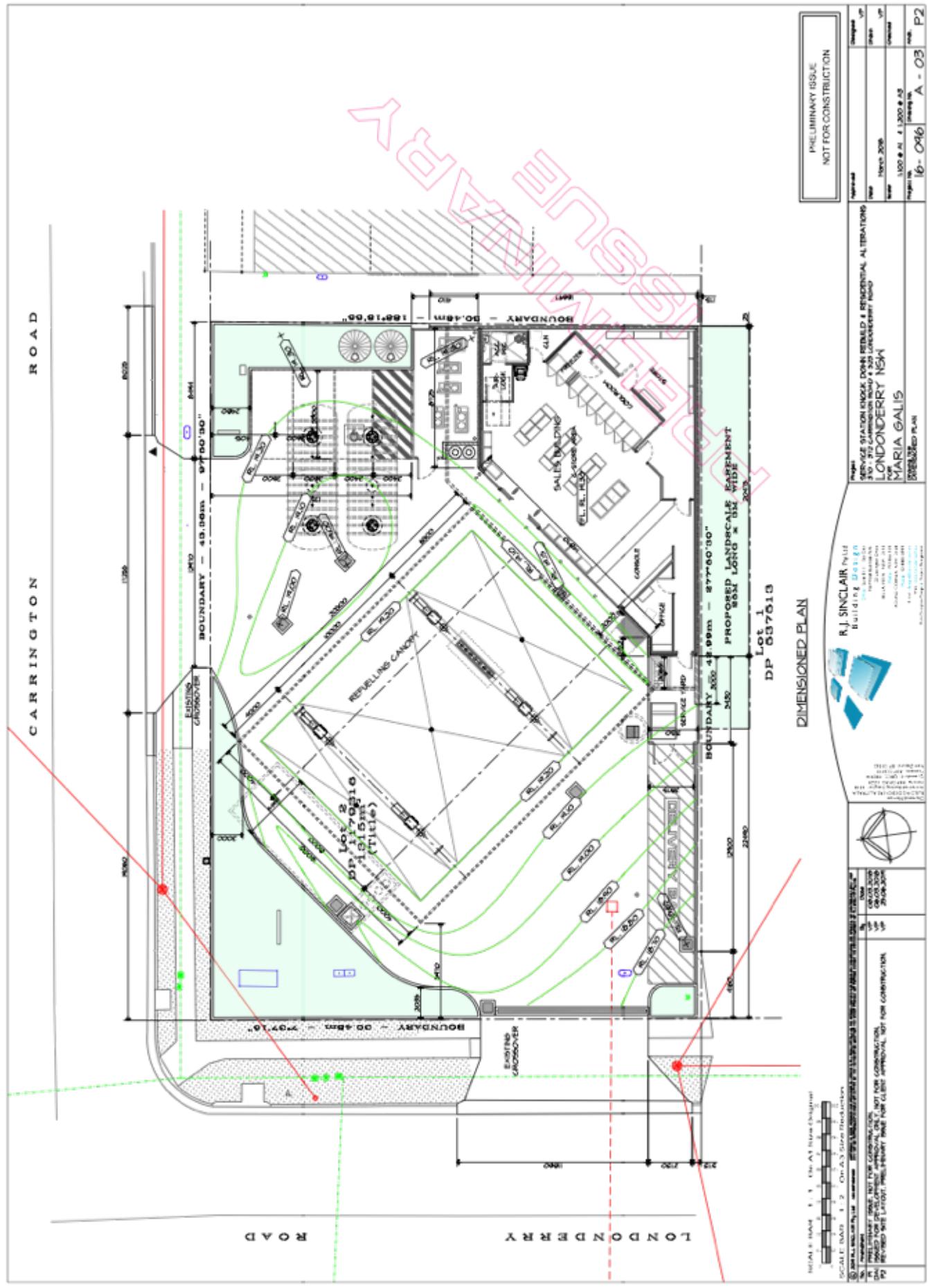
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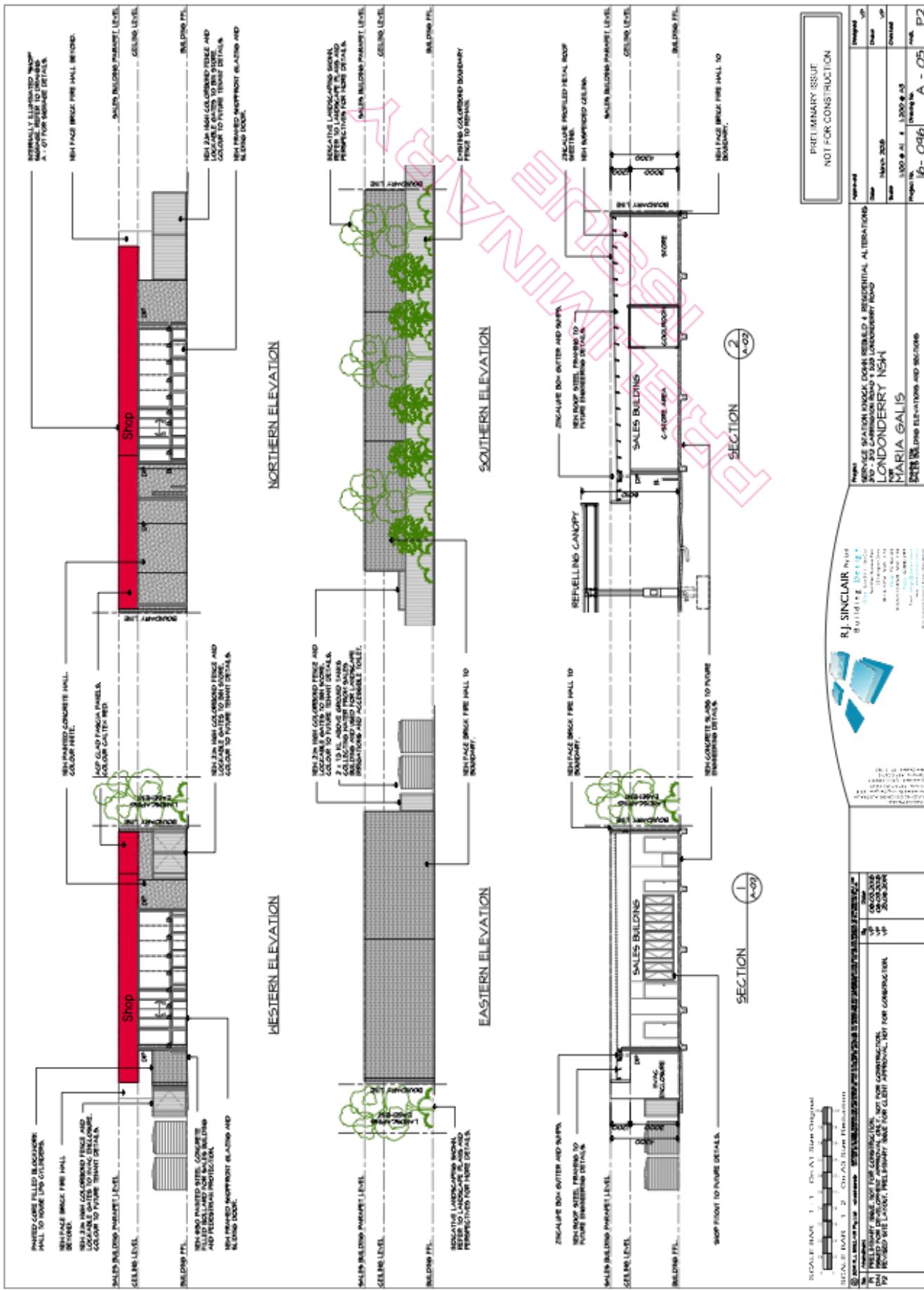
## PROPOSED SITE PLAN

PRELIMINARY ISSUE  
NOT FOR CONSTRUCTION

Report ID	Device ID	Device	Unit
Report 1	Device 1	Unit 1	Unit 1
Report 2	Device 2	Unit 2	Unit 2
Report 3	Device 3	Unit 3	Unit 3
Report 4	Device 4	Unit 4	Unit 4

TOTAL BUDGET: \$1,000,000	
1. <b>Land</b>	1.00
2. <b>Architect</b>	1.00
3. <b>General Contractor</b>	1.00
4. <b>Subcontractors</b>	1.00
5. <b>Equipment</b>	1.00
6. <b>Material</b>	1.00
7. <b>Utilities</b>	1.00
8. <b>Permits</b>	1.00
9. <b>Transportation</b>	1.00
10. <b>Storage</b>	1.00
11. <b>Insurance</b>	1.00
12. <b>Profit</b>	1.00
13. <b>Contingency</b>	1.00
<b>TOTAL BUDGET</b>	<b>\$1,000,000</b>





## **SWEPT PATH ANALYSIS**

