STATEMENT OF ENVIRONMENTAL EFFECTS

SERVICE STATION

LOT 1 DP 852310
19-23 GASKILL STREET
CANOWINDRA NSW 2804

FOR

CANOWINDRA PETROLEUM Pty Ltd

Edition : **iv**
Date : **20th December 2019**
Project No : **16 - 066**

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01 TABLE OF CONTENTS

02 TABLE OF EDITIONS + REVISIONS

1 TABLE OF EDITIONS + REVISIONS

1.1 GENERAL

This section lists the various editions in which this document has been issued and provides a schedule of the changes to the relevant clauses.

1.2 EDITION / REVISION

i	2019-03-19	Edition i - Draft Issue for Client comment and approval purposes only. Not for Development Approval submission.
ii	2019-06-07	Edition ii – Issued for Development Approval.
iii	2019-07-07	Edition iii – Re-issued for Development Approval.
iv	2019-12-20	Edition iv – Site layout and designs amended. Re-issued for Development Approval.

03 DEVELOPMENT SUMMARY

1 INTRODUCTION

1.1 GENERAL

This report has been prepared to accompany a Development Application to Cabonne Council for the knock down and rebuild of a service station facility.

This report has been prepared under instructions from Canowindra Petroleum Pty Ltd and is based on the drawings and designs enclosed in the application.

2 REPORT FORMAT

2.1 COUNCIL DOCUMENTS

Quotations

Throughout this report quotations from relevant Council documents are shown in grey text and for simplicity, only those chapters or clauses of the Cabonne LEP or DCP that have specific relevance to this development have been discussed and assessed.

Where necessary for brevity and ease of reading, some clauses or text have been truncated or paraphrased.

3 PRE-DA MEETING

3.1 TELECON

A Pre-DA teleconference was held with Senior Town Planner Kate Blackwood on 3rd October 2018.

A full copy of the notes provided by the Council's Heritage Advisor is in Annexure A.

4 EXISTING SERVICE STATION

4.1 ABANDONED

The site previously operated as a service station facility but has been abounded for some time now. The site us currently unused.

5 DEMOLITION

5.1 SALES BUILDING AND CANOPY

The existing sales building and attached refuelling canopy will be demolished to make way for a new service station facility with a modern layout, canopy and sales building structures.

All other structures to the rear of the site not effected by the new facility will remain as per existing.

5.2 EXISTING UPSS

The existing underground petroleum storage tanks (UPSS) are proposed to be removed and disposed of offsite all in accordance with local and EPA requirements.

Photograph No. 1

Photograph No. 1

6 NEW WORKS

6.1 WHOLE OF SITE

New concrete driveway crossovers and internal roadways are proposed to service a new refuelling canopy area and sales building. The whole of the facility will be surrounded by new landscaped areas.

6.2 SALES BUILDING

The new sales building will be constructed of masonry walls and steel framed roof with ACP clad fascias and metal roof. The building will house a console, convenience store, built in cool rooms and freezers, console area and unisex disabled amenity for staff and customers.

6.3 REFEUULING CANOPY

The new refuelling canopy will be constructed of steel framed columns and roof structure with ACP clad fascias and metal roof. It will cater for 6 refuelling bays with 2 x multi-product fuel dispensers and bunded under canopy pavement and drainage to a new pollution control system.

6.4 UNDERGROUND PETROLEUM STORAGE SYSTEM (UPSS)

New double contained Underground Storage Tanks (USTs) and line work, and new fuel dispensers will be provided.

All UPSS work will be carried out in accordance with Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008.

6.5 UNDER CANOPY TRADE WASTE

Bunded Area

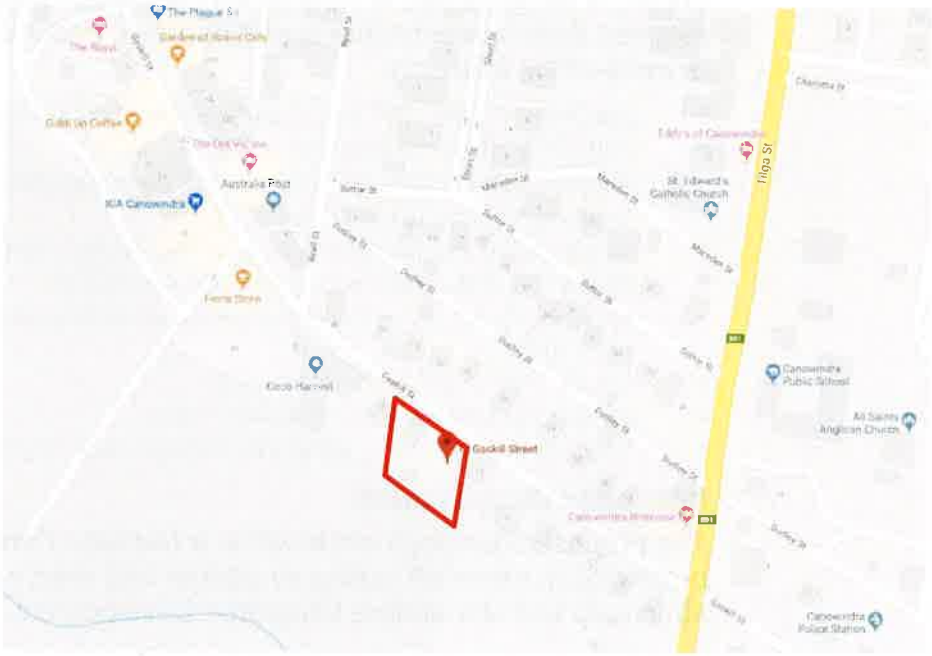
The refuelling area will be fully bunded to ensure any spills are captured, and will drain to a blind sump, and the blind sump serviced by a licenced trade waste contractor.

04 SITE DETAILS

1 SITE LOCATION

1.1 GASKILL STREET

The site is located at 19 – 23 Gaskill Street, Canowindra, on Lot 1 DP 852310.



SITE LOCATION PLAN
(Courtesy Google© Maps)

1.2 ADJACENT DEVELOPMENT

The site is located at the south eastern end of town along the main street leading to the local business centre of Canowindra.

The site is bound on the eastern and northern side by residential properties and rural land which the Belubula River runs through.

Directly adjacent the site, to the west are two residential properties which are zoned the same as the proposed site, B2 Local Centre. Further along are commercial properties such as a motor dealership and local pub.

05 DEVELOPMENT APPLICATION

1 TYPE OF APPLICATION

1.1 INTEGRATED DEVELOPMENT

Environmental Planning & Assessment Act (1979)

Under the provisions of the Environmental Planning & Assessment Act (1979), a development is considered integrated development if it requires development consent and approval under the provisions of one or more of the following:

- *Sections 144, 201, 205 or 219 of the Fisheries Management Act (1994)*
- *Section 58 of the Heritage Act (1977)*
- *Section 15 of the Mine Subsidence Compensation Act (1061)*
- *Sections 63 or 64 of the Mining Act (1992)*
- *Section 90 of the National Parks and Wildlife Act (1974)*
- *Section 16 of the Petroleum (Onshore) Act (1991)*
- *Sections 43, 47, 55 or 122 of the Protection of the Environment Operations Act (1997)*
- *Section 138 of the Roads Act (1993)*
- *Section 100B of the Rural Fires Act (1997)*
- *Sections 89, 90 or 91 of the Water Management Act (2000)*

Integrated Development

The proposed development is within a Heritage Conservation area and proposing to demolish exiting structures and erect new buildings and structures and is therefore Integrated Development.

2 DESIGNATED DEVELOPMENT

2.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 No. 203

The Act defines designated development as:

*77A **Designated development***

(1) Designated development is development that is declared to be designated development by an environmental planning instrument or the regulations.

(2) Designated development does not include State significant development despite any such declaration.

Environmental Planning & Assessment Regulation (2000)

Schedule 3 of the Environmental Planning & Assessment Regulation (2000) outlines the types of development and criteria pertaining to these developments that would qualify as Designated Development.

Schedule 3 - types of development that trigger Designated Development

1 Agricultural produce industries
2 Aircraft facilities
3 Aquaculture
4 Artificial waterbodies
5 Bitumen pre-mix and hot-mix industries
6 Breweries and distilleries
7 Cement works
8 Ceramic and glass industries
9 Chemical industries and works
10 Chemical storage facilities
11 Coal mines
12 Coal works
13 Composting facilities or works
14 Concrete works
15 Contaminated soil treatment works
16 Crushing, grinding or separating works
17 Drum or container reconditioning works
18 Electricity generating stations
19 Extractive industries
20 Limestone mines and works
21 Livestock intensive industries
22 Livestock processing industries
23 Marinas or other related land and water shoreline facilities
24 Mineral processing or metallurgical works
25 Mines
26 Paper pulp or pulp products industries
27 Petroleum works
28 Railway freight terminals
29 Sewerage systems and sewer mining systems
30 Shipping facilities
31 Turf farms
32 Waste management facilities or works
33 Wood or timber milling or processing works
34 Wood preservation works

Not Designated Development

Review of these provisions indicates that the proposed development does not meet any definition or criteria of the developments that are listed within Schedule 3 of the Regulation.

For the above reason, the proposed development is not considered to be Designated Development.

06 DEVELOPMENT STANDARDS + COMPLIANCE

1 STATUTORY HEADS OF CONSIDERATION

1.1 GENERAL

In drafting this document, consideration has been given to the following:

- *Environmental Planning & Assessment Act (1979)*
- *Environmental Planning & Assessment Regulation (2000)*
- *Protection of the Environment Operations Act (1997)*
- *Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation (2008)*
- *Heritage Act (1977)*
- *Roads Act (1993)*
- *Cabonne Local Environment Plan (2012)*
- *Cabonne Development Control Plan (2000)*
- *State Environmental Planning Policy (SEPP) No. 33 – Hazardous & Offensive Development*
- *State Environmental Planning Policy (SEPP) No. 55 – Remediation of Land*
- *State Environmental Planning Policy (SEPP) No. 64 – Advertising & Signage*
- *NSW Fair Trading Regulation (2012)*

2 COMPLIANCE

2.1 PROTECTION OF THE ENVIRONMENT OPERATIONS ACT (1997)

Schedule 1 – Clause 9

Schedule 1 of the Protection of the Environment Operations (POEO) Act 1997 lists a number of scheduled activities which require an environmental protection license under the Act.

Under Clause 9 of Schedule 1, the following stored substances are considered to be a scheduled activity:

- *Chemical Waste Storage*
  Involves having on site at any time more than 5 tonnes of prescribed waste, not including excluded material (where 1,000 litres of liquid is taken to weigh 1 tonne)
- *General Chemicals Storage*
  Capacity to store more than 20 tonnes (pressurised gases), 200 tonnes (liquefied gases) or 2000 tonnes (chemicals in any other form)
- *Petroleum Products Storage*
  Capacity to store more than 200 tonnes (liquefied gases) or 2000 tonnes (chemicals in any other form)

In the case of the proposed development, total storage of 110,000 litres of petroleum products is provided in 2 x multiple compartment 55kl USTs, as shown on Drawing No. A - 02. Calculation of weight for the proposed petroleum products has been achieved by means of factoring volumes and standard densities for these substances.

The results of such calculations for the proposed development are as follows:

- Diesel Fuel Products 30,000 litres = 21.2 tonnes approx.
- Petroleum Products 140,000 litres = 61.6 tonnes approx.

As demonstrated above, none of the proposed substances stored in the listed volumes exceed the 2000 tonne limit for general and/or petroleum products that would require a license to be issued for the operation of the development.

With consideration of the above, the proposed development does not require the issuing of an environmental protection license in order to operate and is therefore compliant with this planning control.

2.2 PROTECTION OF THE ENVIRONMENT OPERATIONS (UNDERGROUND PETROLEUM STORAGE SYSTEMS) REGULATION (2008)

General

Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008 is relevant to the operation of the service station.

Leak detection

The regulation requires owners and operators of underground petroleum storage systems (UPSS) to regularly check for leaks in the fuel tanks and pipes used to store and handle petroleum products.

Owners and operators also need to meet minimum standards in their day-to-day environmental management of these storage systems.

- *The owner / operator of a UPSS will be required to have in place:*
- *A system for detecting and monitoring leaks.*
- *Groundwater monitoring wells at sensitive locations and a program to test them.*
- *An Environment Protection Plan for the facility*
- *Systems in place for record keeping, reporting of leaks and notifying the local council when a UPSS is decommissioned.*

The fuel systems on the site for the proposed development will demonstrate adherence to this control through design and construction that is in accordance with appropriate Australian Standards for these systems.

System details

Underground Petroleum Tanks will be double walled fibre glass fitted with a Hydrostatic leak detection system which provides ongoing monitoring, preventing product loss and potential contamination to the environment.

Petroleum product lines in use at the facility will be tested regularly to ensure quality and compliance.

Groundwater monitoring wells will be installed as a part of the underground petroleum storage tank installation.

2.3 SEPP 33 - HAZARDOUS & OFFENSIVE DEVELOPMENT

General

State Environmental Planning Policy No. 33 - Hazardous and Offensive development provides definitions and provisions which govern the identification of *"Hazardous", "Offensive", "Potentially Hazardous" and "Potentially Offensive"* developments.

The above terms are defined by the SEPP as follows:

*"**potentially hazardous industry** means a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:*
(a) to human health, life or property, or
(b) to the biophysical environment,
and includes a hazardous industry and a hazardous storage establishment."

*"**potentially offensive industry** means a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment."*

*"**hazardous industry** means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would pose a significant risk in relation to the locality:*
(a) to human health, life or property, or
(b) to the biophysical environment."

*"**offensive industry** means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land in the locality."*

Assessment against SEPP 33

When assessing the proposed development against the above definitions, it is considered that the design elements included with the application, such as:

- Underground storage of petroleum products,
- Distance between UST fill points and dispensers to boundaries is > 5m,
- There are no adjacent structures or buildings within 20m of the site boundaries.

serve to sufficiently mitigate or eliminate any offensive or potentially offensive aspects.

SEPP 33 not applicable

The proposed development therefore does not meet the definition of *"offensive"* or *"potentially offensive"* under the provisions of the SEPP.

SEPP No. 33 is therefore not considered applicable and further investigations such as a preliminary hazard analysis are unnecessary.

2.4 STATE ENVIRONMENTAL PLANNING POLICY NO. 55

General

SEPP 55 requires consent authorities to consider the potential contamination of lands that may be contaminated, as follows:

Section 7

Contamination and remediation to be considered in determining development application

(1) A consent authority must not consent to the carrying out of any development on land unless:

(a) it has considered whether the land is contaminated, and

(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and

(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

Section 7, Clause (4) of SEPP No. 55 outlines land and activities undertaken upon land, that may require investigation and management for potential contamination.

Land that requires such investigation is:

(4) The land concerned is :

(a) land that is within an investigation area,

(b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out,

(c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital ....

SEPP 55 applicable

Section 7 requires the consent authority to consider the contamination status of the site.

A Preliminary Contamination Report for the site was prepared by Parsons Brinkerhoff in 2013. For a full copy of the report refer to Annexure B of this report.

In summary the preliminary contamination report notes;

> *"Field screening of the nine soil vapour bores placed in the vicinity of the underground tanks and bowser*
> *island showed little indication of petroleum vapours. Laboratory analysis of the sampling tubes confirmed low*
> *impacts of petroleum products in the area of investigation.*
> *Vapour concentrations were at trace or low levels at all sampling locations.*

The location of the highest BTEX concentration, SV6 was located between the tanks and bowser island near the fuel lines. Although low, most of the BTEX comprised ethylbenzene and xylene, with the lighter BTEX compounds and lighter aliphatic non-detect or at trace levels.

Total petroleum hydrocarbons were measured in either the C_6-C_{10} or >C_{10}-C_{16} fractions at all sampling locations, although only marginally greater than the laboratory detection limit.

The impact to the upper soil profile was diffuse, without any areas of high impact. The measured concentrations throughout the area of investigation were similarly low or trace. The very low degree of impact remaining from the light volatile compounds is indicative of old degraded petrol leaks and spills.

Overall the soil vapour concentrations of petroleum hydrocarbon in sub-slab and soil bores, were low or not detected, indicating the upper soil profile around the old fuel facilities has had only minor impacts from former leaks and spills. Alternatively, any past impacts have substantially attenuated within the upper soil profile. It should be noted that the results cannot confirm the degree of impact, if any, to groundwater."

Removal of tanks, etc.

The whole of the underground tank and piping network will be evacuated of all remnant fluids, and all liquid waste treated as contaminated and disposed of by pollution control contractors to a registered waste disposal facility.

Removal of tanks + pipework

All pavements above tanks and pipework will be removed and disposed of to a registered waste disposal facility.

Following removal of pavements, all filling materials around tanks and pipework will be removed and disposed of to a registered waste disposal facility.

All existing tanks and fuel product pipework will be removed and disposed of to a registered waste disposal facility.

Tracking of excavated materials

Prior to removal from site all excavated waste materials will be classified for disposal by a suitably qualified body and materials disposed of in accordance with that classification.

All waste removed from the site will be logged and tracked by the contractor and all disposal receipts submitted to the client on completion of the works.

Suitable for proposed use

Therefore, the site will be suitable for reuse as a service station facility with no remediation works required.

2.5 STATE ENVIRONMENTAL PLANNING POLICY 2007

Mining , petroeluem production and extractive industries

The site is located with a Biophysical and Strategic Agricultural Land. As shown in the LEP Map below.

NSW PANNING PORTAL
STRATEGIC AGRICULTURAL LAND MAP

General

This SEPP requires consent authorities to consider developments that proposing to mine the site or carry out petroleum production.

Section 7

The aims of this Policy are, in recognition of the importance to New South Wales of mining, petroleum production and extractive industries:

(a) to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and

(b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and

(b1) to promote the development of significant mineral resources, and

(c) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources, and

(d) to establish a gateway assessment process for certain mining and petroleum (oil and gas) development:

(i) to recognise the importance of agricultural resources, and
(ii) to ensure protection of strategic agricultural land and water resources, and
(iii) to ensure a balanced use of land by potentially competing

industries, and
(iv) to provide for the sustainable growth of mining, petroleum and agricultural industries.

The proposed development does not intend to mine or produce petroleum product only to sell petroleum products. Therefore this SEPP is not applicable to this development application.

07 LEP CONTROLS

1 CABONNE LOCAL ENVIRONMENT PLAN 2012

1.1 LAND ZONING

The site is located within Zone B2, Local Centre as shown in the LEP Zoning map below.

NSW PANNING PORTAL - LAND ZONING MAP

The objectives of the zone, as described in the LEP, are :

Zone B2 Local Centre

1 - Objectives of zone

- *To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area.*
- *To encourage employment opportunities in accessible locations.*
- *To maximise public transport patronage and encourage walking and cycling.*
- *To encourage mixed-use development that will promote community activity and safety without compromising business development opportunities.*

ZONE B2 COMMENT

The reopening of the service station facility will provide much needed competition for fuel and convenience store goods within the local area as well as provide new employment opportunity.

1.2 PERMITTED USES

The permitted and prohibited uses in the B2 zone, as described in the LEP, are :

2 - Permitted without consent

Environmental protection works; Home-based child care; Home occupations

3 - Permitted with consent

Boarding houses; Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities;

Function centres; Information and education facilities; Light industries; Medical centres; Oyster aquaculture; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Roads; Service stations; Sewage reticulation systems; Shop top housing; Tank-based aquaculture; Tourist and visitor accommodation; Any other development not specific in item 2 or 4

4 - ***Prohibited***

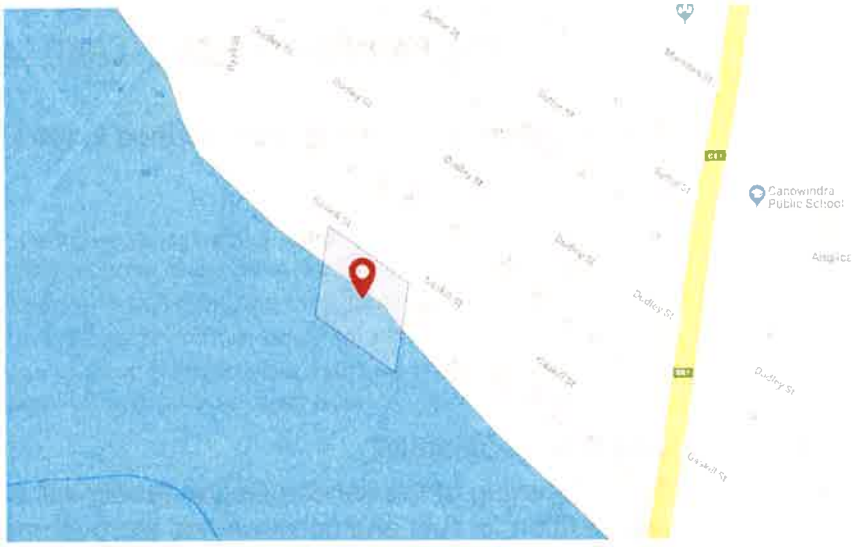
Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Boat building and repair facilities; Boat launching ramps; Boat sheds; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Eco-tourist facilities; Electricity generating works; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Heavy industrial storage establishments; Industries; Jetties; Marinas; Mooring pens; Moorings; Open cut mining; Pond-based aquaculture Recreation facilities (major); Recreation facilities (outdoor); Rural industries; Rural workers' dwellings; Sewerage systems; Storage premises; Vehicle body repair workshops; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities

PERMITTED USES COMMENT

Service stations are permitted with consent use within the B2 Local Centre Zone.

1.3 FLOOD PLANNING

The site is located within flood prone land as shown in the LEP Flood map below.



NSW PANNING PORTAL - FLOOD MAP

The objectives of the LEP, are :

(a) to minimise the flood risk to life and property associated with the use of land,

(b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,

(c) to avoid significant adverse impacts on flood behaviour and the environment.

Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:

(a) is compatible with the flood hazard of the land, and

(b) will not significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and

(c) incorporates appropriate measures to manage risk to life from flood, and

(d) will not significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and

(e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.

FLOOD PLANNING COMMENT

A flood impact review has been carried by ACOR Consultant Pty Ltd which concludes;

"The development walls are not located within the 1% AEP flood extent, ACOR concludes that the impact of the proposed development on flooding is null. Thus, no displacement of flooding and no impact on the adjoining properties or critical areas.

We further note that based on initial investigation of existing flood impacts, we confirm that the effect of the proposed layout on flooding is null, due to the proposed open space areas ability to cater for the flood fringe flows and thus, direct water away from site"

Therefore, the proposed development will not have any adverse impact on the flood behaviour and the environment as well as no negative impact on the risks of life and properties, being fully compliant with the objectives of the LEP and relevant council flood studies.

For a fully copy of the report refer to Annexure D.

1.4 GROUND WATER VULNERABILITY

The site is located within flood prone land as shown in the LEP Ground Water map below.

NSW PANNING PORTAL – GROUND WATER MAP

The Section 6.4 of the LEP, states :

(1) The objectives of this clause are as follows:

(a) to maintain the hydrological functions of key groundwater systems,

(b) to protect vulnerable groundwater resources from depletion and contamination as a result of development.

(2) This clause applies to land identified as "Groundwater vulnerable" on the Groundwater Vulnerability Map.

(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider the following:

(a) the likelihood of groundwater contamination from the development (including from any on-site storage or disposal of solid or liquid waste and chemicals),

(b) any adverse impacts the development may have on groundwater dependent ecosystems,

(c) the cumulative impact the development may have on groundwater (including impacts on nearby groundwater extraction for a potable water supply or stock water supply),

(d) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:

(a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or

(b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or

(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.

GROUND WATER COMMENT

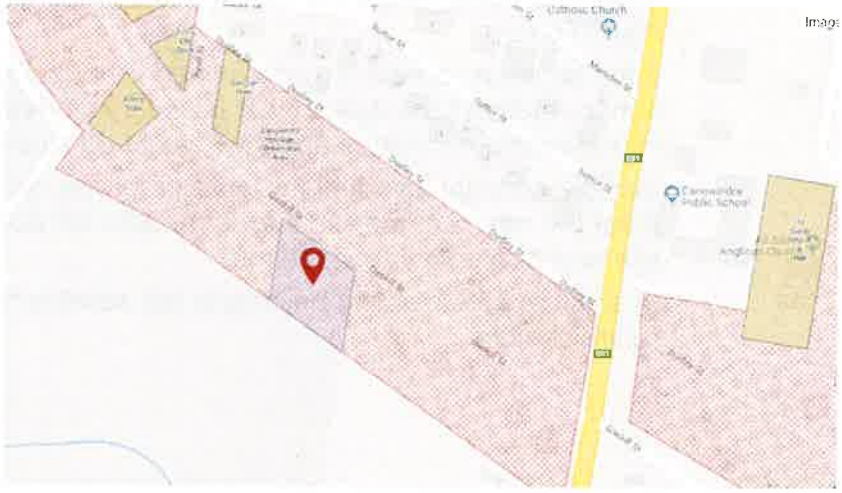
The proposed development levels will generally be similar to the existing allowing the hyrological functions to remain as per existing.

UPSS as previously stated will comprise of double walled and leak detection systems to both the underground storage tanks and fuel pipework. The UPSS will include ground monitoring wells and the high-risk areas for spill such as the fuel dispensers and remote fill points are located within a covered area and connected to a Class 1 pollution control SPEL Puraceptor unit.

Therefore, the proposed facility will suitability manage and protect the ground water with the measures noted and minimise the potential impact on the environment, being fully compliant with the requirements of the LEP.

1.5 HERITAGE

There is no heritage listed items located on the site, but the property is located within a heritage conservations area as shown in the LEP Ground Water map below.



NSW PANNING PORTAL – HERITAGE MAP

HERITAGE REPORT

A Heritage Impact statement has been prepared by Ian Rufus to address all the Heritage requirements of the LEP.

For a full copy of the report refer to Annexure C of this report.

In summary the Heritage Impact Statement notes;

> *The new building will have minimal impact on the significance of nearby heritage items. The listed heritage items in the vicinity of the site do not have curtilages extending onto the proposed development site. The proposal will not materially affect views or shading of the adjacent items.*
> *Therefore, the heritage items in the vicinity will not be detrimentally affected and do not warrant separate heritage investigation.*

An archaeological report would not potentially reveal any useful information. The lack of significance of the site in terms of the previous activities on the lot mitigates against any significant information or relics being found.
The business nature and streetscape impact of the proposal will improve the presentation and viability of the general area and assist in the adjoining and nearby items being conserved into the future.

A supplementary letter as has also been prepared by Ian Rufus for the amended designs. A fully copy of this letter is also included in Annexure C.

EXISTING BUILDING SUITABLILITY

The existing service station building is significantly dilapidated with damaged windows, doors and external walls.

The size and location of the existing canopy and refuelling structure is the main reason for the structures need to be removed. The refuelling area would only allow one refuelling bay to be covered which would not be suitable to service the local community. The sales building is too small and would not fit the facilities and offers of a modern-day service station offer.

If the structure is retained and reused it would result in an unsustainable service station business, in that it would not meet the need of the current customer needs and they would go elsewhere.

Multiple concept layout plans were prepared, and the current proposal meet the needs of the client for a modern service station facility for the site and its planning constraints.

In summary the existing building is not suitable for retention or refurbishment.

08 OPERATING HOURS + STAFFING

1 SIMILAR TO PREVIOUS

1.1 PROPOSED TRADING HOURS

Service Station

It is proposed that the site will operate as a 24 hour, 7 days per week facility, which will be staffed between the hours of 05:00 to 22:00 Monday through Sunday and vehicle refuelling area will be available for customers after hours 7 days a week through use of credit card facilities on the fuel dispensers.

2 STAFFING REQUIREMENTS

2.1 PROPOSED DEVELOPMENT

Service Station Facility

The service station facility will require the employment of two staff members during peak periods and one staff member during off peak periods, based on the level of customers utilising the similar service station facility.

09 DCP - 2000

1 DCP NO. 13

1.1 ADVERTISING SIGNAGE IN CONSERVATION AREAS

General

The proposed development is within a Heritage Conservation area and therefore is required to comply with the relevant Cabonne Development Control Plans which are reviewed below.

Refer to Elevations and Signage detail drawings included in this application for full signage details.

1.2 LOCATION OF SIGNS

Since signage is a primary consideration in the design of service stations, Cabonne Council have several signage controls in place that need to be adhered to. It is recommended by the Council Heritage Advisor in their Pre-DA notes that monolithic style signage should be used on this particular project for the digital fuel pricing sign.

Signage is not to significantly impact heritage townscape views. Views from the scale of the viewpoint of the car (called townscapes) should be taken into account. This is located under article 6.8 of the Cabonne council signage DCP which states:

- *"In the case of historic country towns such as Molong and Canowindra, it is important that particular attention is given to the view from the road as one enters the conservation area. Careful consideration should be given to the placement of any advertisements so as not to detract from the design and the heritage significance of the historic townscape."*

With this in mind, it is advisable to place the digital flagpole fuel price sign adjacent the property boundary along the road to the boundary line specified by Cabonne Council so as to not encroach on the townscape views to the neighbouring heritage dwellings visible on approach to the service station.

As per the Cabonne Council DCP for advertising signage in conservation areas, in reference to the design needs to display signage on the building façade for branding purposes Article 6.3 states:

- *"Advertising should be placed in locations on the building that traditionally have been used as advertising areas". Options listed in the DCP are:*
- *On the awning fascia (if any)*
- *Suspended under verandah sign*
- *Above the door head or at display window transom level*
- *On piers at ground level*
- *On the window glass or glazing shop fronts*

All signage colours and graphic will be subject to future tenant details.

1.3 NUMBER OF SIGNS

Under article 6.3 of the Cabonne Council DCP the number of signs a business is to have in a heritage conservation area are listed below:

- *Up to three signs located on a building with a verandah or;*
- *Up to two signs on a building without a verandah and;*
- *One hanging sign under the verandah per premise.*

The proposed signs on the sales building and canopy comply with this requirement.

1.4 SIZE OF SIGNS

Under clause 6.4 of the Cabonne Council DCP states that there are no standard sizes for signs in heritage conservation areas. However, the following controls are listed in the DCP:

- *Permanent signs on shop windows should not cover more than 25% of the entire window area, between the window sill and door head.*
- *A Verandah fascia sign should not cover more than 75% of the fascia width.*
- *The total area of signage for any one building will, in general, be less than eight square meters.*

The proposed signs on the sales building and canopy comply with this requirement.

1.5 SIGN COLOURS

Under clause 6.5 of the Cabonne Council DCP states that the external colours historic periods vary and were more limited in range than today. However, the following controls are listed in the DCP:

- *Provide appropriate Colours.*
- *Fluorescent and iridescent paints are inappropriate.*

The proposed sign colours are to future tenant details. No fluorescent or iridescent paint colours are proposed.

1.6 SIGN ILLUMINATION

Under clause 6.6 of the Cabonne Council DCP states:

- *Sign are preferably illuminated by floodlighting.*
- *Internal illuminated wall, above awning projecting and pole signs are not appropriate.*
- *Flashing and revolving signs are not appropriate.*

The canopy logos and I.D signs are proposed to be internally illuminated in acrylic sign boxes which means they will not cause any light spill or glare. They are not proposed to turn or flash.

1.7 SIGN LETTERING

Under clause 6.7of the Cabonne Council DCP states:

- *Heritage lettering sytles may involve shaded letters, the mixing of sizes and styles of letters and ornamental scrolls as relevant to the period of the building.*

Text styles and lettering that is to future tenant details.

1.8 TOWNSCAPE APPROACHES

Under clause 6.8 of the Cabonne Council DCP states:

- *Placement of advertisements are not to detract from the design and the heritage significance of the historic townscape.*

The proposed canopy and sales building are modern structures.

1.9 BUILDING STANDARDS

Under clause 6.9 of the Cabonne Council DCP states:

- *No combustible.*
- *Metal components, including fixings, high grade and either hot dipped galvanised or non-ferrous.*
- *Materials and structures must always be safe distance from electrical supply mains and distribution main in accord with the requirements of the electrical authority.*

The proposed signage is constructed of ACP and acrylic sign boxes which are non-combustible and are quality, modern finishes.

The I.D sign and canopy structure are over 3m away from the existing adjacent powerlines all in accordance with local electrical authority requirements.

1.10 NSW FAIR TRADING REGULATION (2012)

Section 11 – Product Information Standard

Division 3 of the NSW Fair Trading Regulation (2012) contains requirements relating to product information standards for fuel pricing and signage.

Section 11 requirements and compliances are outlined as following:

- *The price of prescribed fuel supplied to retail customers at the petrol station must be displayed at the petrol station on one or more signs that are so positioned and lit that any price and other matter that the signs display will be readily seen by motorists approaching the petrol station at any time that the petrol station is open for business for the supply of prescribed fuel.*

The price of prescribed fuels will be prominently displayed on both street-side signage and at the fuel dispensers. This pricing information will be well lit and readily visible to approaching motorists at all times that the service station is open for business.

The proposal is considered to comply with this requirement.

- *All signs at the petrol station (including signs required by subclause (1)) that display information in relation to the price of prescribed fuel supplied to retail customers at the petrol station may display only the normal price of the prescribed fuel and no other price for that fuel.*

The price of prescribed fuels on the appropriate signage at the fuel dispensers will be the normal price of said fuel.

The proposal complies with this requirement.

- *If no more than 4 types of prescribed fuel are supplied to retail customers at*

the petrol station, subclause (1) applies to each type of prescribed fuel supplied.

More than four types of fuel product are to be supplied by the proposed development (Diesel, E10, ULP, ULP 95, ULP 98).

As more than four types of fuel will be supplied by the proposed development, this clause is not applicable.

- *If more than 4 types of prescribed fuel are supplied to retail customers at the petrol station, subclause (1) applies to 4 types of that prescribed fuel, as follows:*

  the price of 4 types of prescribed fuel must be displayed as required by subclause (1), and

  (b) the 4 types of prescribed fuel for which the price must be displayed must include such of the following types of prescribed fuel as are supplied to retail customers at the service station:

  (i) diesel,

  (ii) lpg,

  (iii) E10.

In accordance with the above clause, the proposed development will display pricing information for a minimum of four fuel types including diesel fuel and E10 petrol (LPG fuel is not to be sold by the operation).

With the intention to display the required pricing as per the provisions of the regulation, the proposed development is considered to comply with this requirement.

Section 12 – Octane Rating Information

This section of the regulation requires that the octane rating of the following types of fuel must be displayed in one or more places on the pump:

- *"E10 Petrol*
- *Each type of unleaded petrol"*

The proposed development will utilise proprietary fuel dispensers. The octane information for all fuels supplied is to be located prominently on the visible facing of all dispensers. This includes octane information for the following types of fuel to be provided by the service station operation:

- *E10 Unleaded Fuel*
- *Standard Unleaded Fuel*
- *95 Octane Unleaded Fuel*
- *98 Octane Unleaded Fuel*

With the inclusion of octane ratings on the fuel dispensers, the proposal is considered to comply with this requirement.

10 ENVIRONMENTAL CONSIDERATIONS

1 GENERAL REQUIREMENTS

1.1 GENERAL

This section discusses general environmental issues due to the absence of specific DCP controls for the site and development.

1.2 SETBACKS

The proposed canopy will have a 1m front setback and the sales building will have a 3m front and side setback from adjacent boundaries.

1.3 VEHICULAR ACCESS AND MANOEUVRING

The site is proposed to have a dedicated entry only driveway at the eastern approach side of the site and a dedicated exit only driveway between the sales building and canopy. This allows for one-way traffic flow within the site which is the best practice design for such a facility.

The canopy location allows sufficient queuing within the site so as not to affect the adjacent road network on Gaskill Street.

Refer to the turning study drawings included in this application.

1.4 PARKING AND ACCESS

There are proposed to be 7 x vehicle parking spaces including 1 x disable parking space located in front of the sales building. There is also 4 x refuelling bays which are also classified as parking spaces for customers of fuel and convenience store.

Therefore, there is sufficient parking spaces to suit the size and development proposed.

1.5 LOADING FACILITIES

The site is designed with a dedicated delivery bay for sales building deliveries. Refer to the turning study drawings included in this application.

1.6 FUEL DELIVERIES

The site fuel deliveries will be serviced by a maximum 17.2m semi tanker which can suitable access, delivery and exit the site in a forward direction.

Fuel deliveries are carried out under the refuelling canopy in accordance with EPA requirements.

We appreciate that part of Gaskill St has a 10 tonne restriction but believe the above mention tanker is lawfully able to service the site.

A traffic Impact assessment has been carried by Winning Traffic Solutions discussing these issues. Refer to Annexure E for the full report.

1.7 AIR QUALITY

The proposed UPSS will provide vapor recovery systems in accordance with EPA requirements to ensure no negative impact to the air quality from the proposed development operations.

1.8 STORMWATER

Stormwater for the proposed development has been designed to capture all stormwater in pits and downpipes and discharge to the existing natural water course at the south eastern corner of the site.

Roof stormwater capture for the canopy areas and sales building will be directed through downpipe drainage into underground pipes and will be discharged in the same manner.

The site stormwater discharge has been designed to maintain existing stormwater overland flows and discharge to rural land adjacent the site.

Refer to the stormwater concept plan included in this application.

1.9 LANDSCAPING

General

The landscape design is based on recommendations made by the Heritage consultant.

Plant species and layout for the rear of the site are selected to reinforce the endangered Box Gum Woodlands. Yellow Box, Blakely's Red Gum Woodland and White Box Woodland are plant communities characterized by dominance of openly spaced trees including White Box (Eucalyptus albens), Yellow Box (E. melliodora) and / or Blakely's red gum (E. blakelyi). They typically occur on fertile clay or loamy soils on alluvial plains, lower slopes, creek flats, slopes and drainage lines.

The purpose of the planting choice is reintroduction of canopy trees to grassland. Layout should be informed by intact box gum grassy woodlands nearby and with a similar set of environmental characteristics such as aspect, slope, and elevation in the landscape. The configuration of tree placement is to be random, in the two rear corners of the property, leaving a gap between the two groups so that view of the grassland beyond is maintained. In good grassland with good soil moisture and low compaction, control for competition may be limited to spot spraying at planting sites, mulching and tree guards.

Landscaping to street frontage

Low hedging is proposed to the street frontage of the shop building. This responds to the screen hedging in front of the adjacent house, not the same but a similar textured hedging plant.
The proposal is framed by deciduous ornamental pear trees, located and under pruned so they will not impede driver and pedestrian views for traffic safety reasons.

1.10 LOCAL COMMUNITY

The existing service station will provide a critical service to the community and to motorists who use the road every day. The proposed development will provide a greater service and experience to all its customers whilst maintaining local employment opportunities.

1.11 GENERAL WASTE MANAGEMENT

The site will separate and store waste in bins located within the proposed service yard enclosure. They will engage a waste contractor to collect and dispose of general waste and recycled waste on a needs basis.

1.12 NOISE

The proposed development, like many rural and suburban service station, can achieve compliance with requirements of the POEO Act 1997 for offensive noise and NSW EPA's Noise Policy for Industry.

1.13 CRIME PROTECTION - SAFER BY DESIGN CRITERIA

Surveillance

The proposed sales building, service yard, canopy and forecourt area will have CCTV security systems for the safety of staff, customers and the local community. The open nature of the canopy and forecourt area also allows good surveillance of the facility from surrounding areas.

Lighting

The canopy and all of the forecourt area will be lit with the use of undercanopy lighting and area lighting in accordance with the area lighting design prepared by Rubidium Light which is included in this application.

The lighting design is in accordance with AS4282:1997 *Control of the obtrusive effects of outdoor lighting* has been produced, demonstrating that the site can be operated during non-curfew and curfew hours (i.e. 24 houroperation).

Territorial Reinforcement

The site will bordered with new and well maintained landscaping to identify its territory. The sale building shop front parking and canopy refueling area are key features to identify the area as a public space and visual CCTV cameras throughout are used as visual presence of defenses and access control.

Environmental maintenance

The site will always be well maintained and clean by staff and tenants. Landscaped area will also be well maintained. Waste facilities are keep in the service yard area and emptied on a regular basis.

Space/Activity Management

The site will bordered with new and well maintained landscaping to identify its territory. The sale building shop front parking and canopy refueling area are key features to identify the area as a public space and visual CCTV cameras throughout are used as visual presence of defenses and access control.

Access control

The site access is open in nature due to the access to vehicles required as part of the functions of the facility. CCTV systems will be used as surveillance and defense against in appropriate behaviors within the site.

The sales building auto sliding doors will have overriding controls as the console for staff to manage access and egress of customers.

Design, Definition/Designation

The sales building is self aims to integrate with the heritage nature of the surrounding area whilst having commercial features such a fascia which business identification signage to define itself as a service station facility. The ID sign and refueling canopy further define this use.

11 CONCLUSION

1 CABONNE COUNCIL

1.1 CABONNE LEP

General

In preparing this report we have considered the relevant planning requirements of the Cabonne Local Environment Plan, Cabonne DCP, together with other pertinent planning and design requirements.

Compliance with Planning Instruments

We believe that the proposed development meets all of the relevant requirements of the planning controls as assessed in this report.

2 RECOMMENDATION

2.1 APPROVAL

Based on the assessments carried out by this office, we believe that this application should be considered by Council on its merits and approval be granted.

12 ANNEXURE A: PRE-DA HERITAGE NOTES

13 ANNEXURE B: ENVIRONMENTAL SITE ASSESSMENT

14 ANNEXURE C: HERITAGE IMPACT STATEMENTS

15 ANNEXURE D: FLOOD REVIEW

16 ANNEXURE E: TRAFFIC IMPACT STATEMENT

1. Proposed Service Station in Gaskill Street, Canowindra

Significance
Gaskill Street and the character of the town centre in Canowindra is rare within regional NSW with the following distinctive features:

- The street and conservation area retains a large number of early buildings
- It has few bad ugly and modern buildings to detract from the overall character
- The streetscape and public space are low key and have generally not been engineered to contemporary standards and character

A localised site analysis:

Photo 1
One of the other two garage and petrol outlets in Canowindra. Generally a large shed type of garage with pumps in the foreground. The arrangement and number of signs are noted.

Photo 2 View of the subject site from the north ie from the town side. Roof profile important as the open site offers views beyond and generally green background.

Photo 3 The range of buildings opposite the site: one contemporary house, two traditional houses and one former commercial building to the north.

Photo 4 The adjoining property to the NW boundary. Brick and iron traditional dwelling set low on the site. No existing boundary planting to the adjoining boundary. Screen hedge planting along the front boundary.

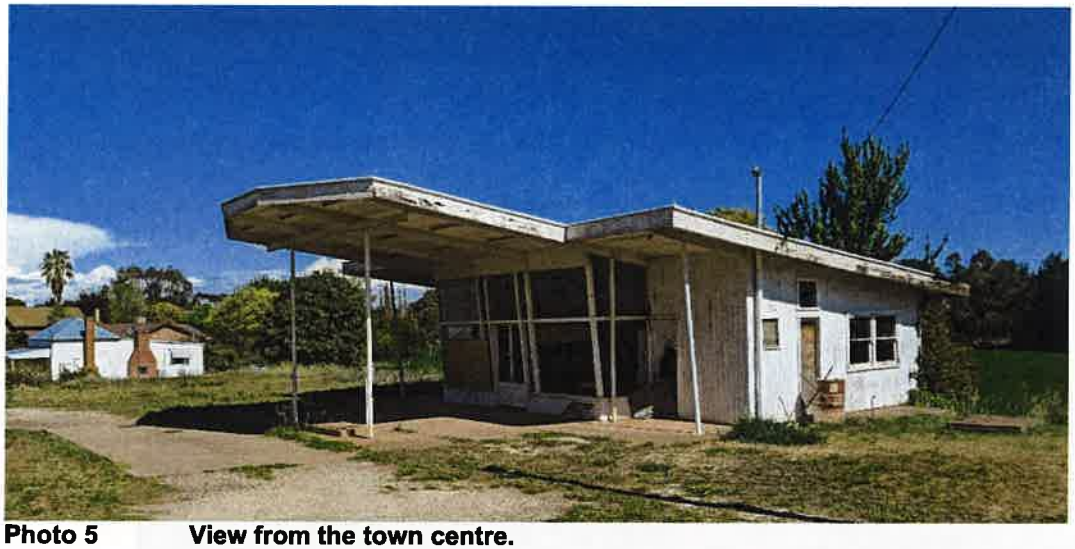


Photo 5 **View from the town centre.**

The distinctive elements are the store building, the canted glazed shopfront, one single skillion roof and the shaped front on the roof.

Photo 6 **The front elevation**
Distinctive building form remains despite the removal of the signs and graphics.

Photo 7 **View on the main approach from Cowra towards the main business area. From this vantage point, the townscape provides the backdrop**

The character of the building:

- a simple outline with a canopy integrated into the design and capping the building form;

- The facility faces the street consistent with the traditional orientation in commercial areas and
- There is extended glazing to the front and sides of the building

The character of the setting and landscape:

- The planting in the vicinity is generally deciduous as it relates to gardens and consists of lower scale hedges and taller scale trees
- The distant planting is mixed and consists of deciduous and native and is at the scale of trees. These are both towards the rear of Gaskill Street buildings and the SW portion of the subject site.

Photo 1 A local example of a new pylon ID sign in Molong which is generally acceptable. It includes one top ID panel, 4 price panels and two sub brand offers. The colours are also sympathetic with this setting.

A second example of a simple pylon panel sign .

The Proposal

A written site analysis has been provided utilising the DCP and the checklist from Design in Context.

There is no discussion of whether retention and refurbishment of the existing building was considered as a possibility. Given the building has several visually attractive design features and occupies a similar footprint to the proposed C store it is recommended that the retention option plus additional fuelling area and canopy be discussed.

The drawn proposal
Plans and elevations
Sign details
Waste details
Vehicle movements
Demolition plan for the 'rebuild' notes that all existing structures are to be demolished – building, shed and remnant slabs

The C store is located hard against the diagonal NW boundary so that the fuelling area and canopy fronts the key customer direction from the SE.
The canopy includes a link element to the C store and the fuelling area at rightangles.

The left over diagonal spaces to the NW and the SE are shaded green for landscaping while an1800mm strip to the rear of the site offers a green area at the top of the battered slope. The lower portion of the site is unutilised.

Setbacks
The existing building is set some 1500-1800mm from the boundary which is similar to the front edge of the existing canopy.
The existing building appears nominally 9-10m from the front boundary
The C store building appears to be nominally 2m forward of the adjoining residence to the NW while it is some 10m apart.

Drawing A-13 illustrates the scale and elevations. It does not illustrate the two adjoining buildings or the existing. This makes comparison difficult. The C Store is 4m in height which is nominally 1 3m building with a 1m parapet façade.
The presentation to the street of the C store is a block wall with three advertising panels.

The canopy is 4600mm to the soffit with a 1m parapet façade supported on 2 columns to the C store and 3 columns at rightangles to the street corresponding to the fuel points. The canopy has a three colour including white horizontal bands. The colours differ from the written statement which includes blue.

The ID pylon is 6m in height and located some 2m forward of the C store nominally on the front boundary. It includes The corporate brand, 4 black price points and 3 sub brand graphics. The legs are expressed at the base.

The dado level of the C store is clad in graphic panels.
The pump pints include three graphic indicator panels.

It is noted that the traditional existing petrol station is a white designed structure and typical of the late 1950s period. The current proposal is a considerably larger structure with the major elements shaped from a practical point of view as opposed to a design point of view. Therefore the use of a colours and design cues which seek to make the building visually recessive is better strategy than using the existing white colour scheme.

Analysis

- The proposal generally respects the locations of the existing elements on the site with the C store located to the northern corner. The additional elements are the ID pylon and T shaped canopy.

- The setback of the C store is not comparable with the existing building and not consistent with the adjoining buildings.

- The heights or scale of the C store and canopies are generally consistent with the use and industrial type with the exception of the ID pylon.

- The forms relate to the generic type of development and there is no evidence that the local conditions or vernacular have been interpreted.

- The materials and colours do not exhibit clear relationships or references to the local context.

- Details. The open expressed legs on the ID pylon are inconsequential in this setting. The remaining building elements appear to be standard for this development nation wide.

Further information is requested in order that a more detailed assessment and advice can be provided to Council and the community:

- An option to refurbish and extend the existing building with a fuelling canopy and ID pylon is recommended for provision. The assessment of alternatives is a standard part of the heritage Impact Statement process;

For the current proposal:

- An elevation to the street including the two adjoining buildings in outline plus the development is required to assess the streetscape impact;

Recommended modifications:

- In the further development of the current proposal, the NE elevation of the C store should be fully glazed to reflect the traditional 'active' commercial presentations to the street;
- The front setback of the C store to be modified to a line no further forward than the adjoining building with a site plan illustrating the setbacks of the subject and two adjoining sites/buildings for analysis and comparison
- The coloured graphic panels on the SE elevation of the C store should be replaced with ACP cladding in silver grey to reduce the visual prominence and utilise a traditional steel/galvanised iron type colour
- Colorbond gates and fencing in Windspray are generally acceptable
- Raw concrete blockwork is acceptable subject to all horizontal joints being ironed/ruled, all vertical joints being flushed and mortar colour matched to the block colour
- The ID pylon to be reduced in height through limiting the elements to the corporate brand, four price points and the fast-ezy graphic. Internal illumination to be limited to the corporate ID top brand and generally as per the BP example provided
- A planting plan to provide deciduous/exotic planting to the foreground areas and native trees to the rear of the batter strip. Along the rear a central gap in the planting should allow for through site distant views as per the existing.
- A lighting plan, in particular the narrow cone lighting units in the canopy soffit, will need to illustrate light spill so as not to disturb the residential properties in the vicinity
- The background/base colour to the parapets and elevations to be silver grey or shale grey to reduce the visual impact of the large structure in the setting and utilise a local traditional colour interpreting the galvanised iron.

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Planning / Heritage / Development

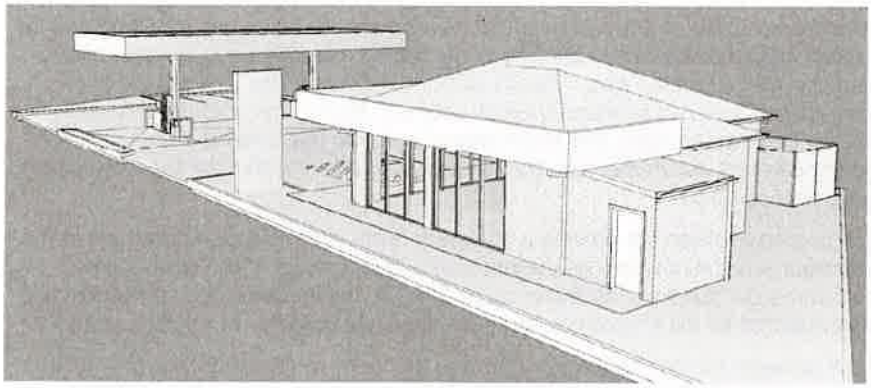
20 December 2019
Harry Sialapis
CANOWINDRA PETROLEUM Pty Ltd
C/O R.J. SINCLAIR Pty Ltd Building Design
vaughn@rjsinclair.com.au

Plan Changes: 19 - 23 Gaskill Street, Canowindra

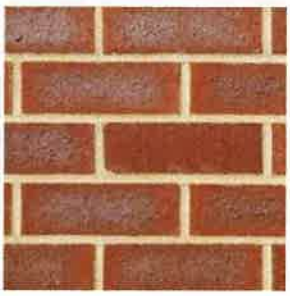
Dear Vaughn,

This letter concerns the latest changes to the plans for the proposed service station. After many conversations with the client, yourself, Council and the heritage advisor we believe the plans produced provide a solution that satisfies all parties.

As discussed, the pitched roof of the service station sales building reflects the roof shapes of the adjoining and nearby residential buildings. The proposal now provides over half of the proposed main building front as glazed area, which will allow view of products and staff activity.



Roofing on the hip is to be custom-orb Shale Grey. The proposed face brick is Boral – traditional.



These detailed photographs show the similar red-brown bricks in buildings nearby. The shale grey is a reasonable colour which references zinc corrugated galvanised iron when weathered. These choices are considered to be consistent with the heritage values of the area, especially for a cottage shape.

The recommendations from Council and the heritage adviser below are summarised:

> *The purpose of the Heritage Advisor in recommending a pitched roof to the Sales building was to provide a traditional element on this building in order that it be clearly seen to be offering a response to the traditional context of Canowindra and Gaskill Street. Currently the proposal is a standard development utilised generally for sites whether they be in contemporary settings, in conservation areas or near heritage items. A key issue for the proposal is that it be seen to be responding to this context. A traditional pitched roof is one such concept which the Heritage Advisor recommends for the small cottage scale building within the proposal.*

Comment: The proposal now includes a pitched roof to complement and reflect the surrounding buildings.

> *The background/base colour to the parapets and elevations to be silver grey or Shale grey to reduce the visual impact of the large structure in the setting and utilise a local traditional colour interpreting the galvanised iron. The use of black & White in the streetscape of the Heritage Conservation area is a substantial visual contrast. Black is not a colour evident on this scale in the Conservation Area. The visual impact is due to the contrast between the material and the background. In this case the general background is the sky given the height of the canopies and parapets.*

Comment: The applicants have chosen to provide a brickwork finish which blends with others in the area. The proposed colour scheme now echoes the red-brown brick colours of the surrounding residential and some commercial buildings, as shown above. The style and colour are compatible and fit the streetscape as evidenced by the photos of nearby cottage style buildings of heritage value.

The removal of the link between the two structures improves the views to the landscape beyond and therefore reduces the visual impact. It is understood that the Heritage Advisor and Council believes this approach provides minimal impact overall. This in addition to the proposed smaller building, pitched roof and new colour scheme helps to soften the visual, streetscape and heritage impact.

The use of non-internally illuminated digital numerals is recommended as the use of internal digital illuminated numerals is totally out of character in the Conservation Area.

Comment: The developer does not have a tenant as yet, but expects that any tenant will require a digital pricing sign so that changes can be clearly seen from the street. This is an essential part of service station operation and success. The pylon size has been absolutely minimised by the designer to Councils particular requirements. While no detail is available, we would suggest the pricing part would be such a small proportion of the overall sign, separate from the building and is a reasonable item to allow, given all the major heritage issues have been resolved.

In summation, as a result of much in the way of direct negotiations between us, the designers, Council's planning staff and heritage adviser, we believe the current proposal complements the streetscape and is worthy of Council approval. Please keep us in mind for any of your future planning, heritage and development needs. This has been an interesting project. We find great satisfaction in finding solutions to complex development issues.

Regards,

Ian Rufus MPIA BTP MHC

Ref: SY190899

19 December 2019

Canowindra Petroleum Pty Ltd,
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Dear Vaughn

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ENGINEERS
MANAGERS
INFRASTRUCTURE PLANNERS
DEVELOPMENT CONSULTANTS

RE: PRELIMINARY FLOOD INVESTIGATION – Proposed Service Station at 19 – 23 Gaskill Street, Canowindra, NSW

1.0 INTRODUCTION

ACOR Consultants have been engaged to prepare flooding advice for Canowindra Petroleum Pty Ltd proposed Service Station development at 19 – 23 Gaskill Street, Canowindra.

This report has been undertaken with the intention of providing preliminary advice with regards to the development application for Canowindra Service Station. Cabonne Shire Council have identified that the site is within the Belubula River Catchment and is affected by mainstream flooding.

2.0 SITE CHARACTERISTICS

2.1 Existing Site Conditions

The existing site consists of multiple concrete slabs, sheds and general commercial buildings located within the vicinity of Gaskill Street. The site is bounded to the north by Gaskill Street, to the east and west by residential housing to the south by Belubula River.

ACOR Consultants Pty Ltd, ACN 079 306 246 ABN 40 079 306 246.

Figure 1 Site Locality Plan

2.2 Proposed Works

The site is the subject of a proposed service station to be constructed at 19 – 23 Gaskill Street, Canowindra. Specific to the site, it would include maintain the existing grades of the land.

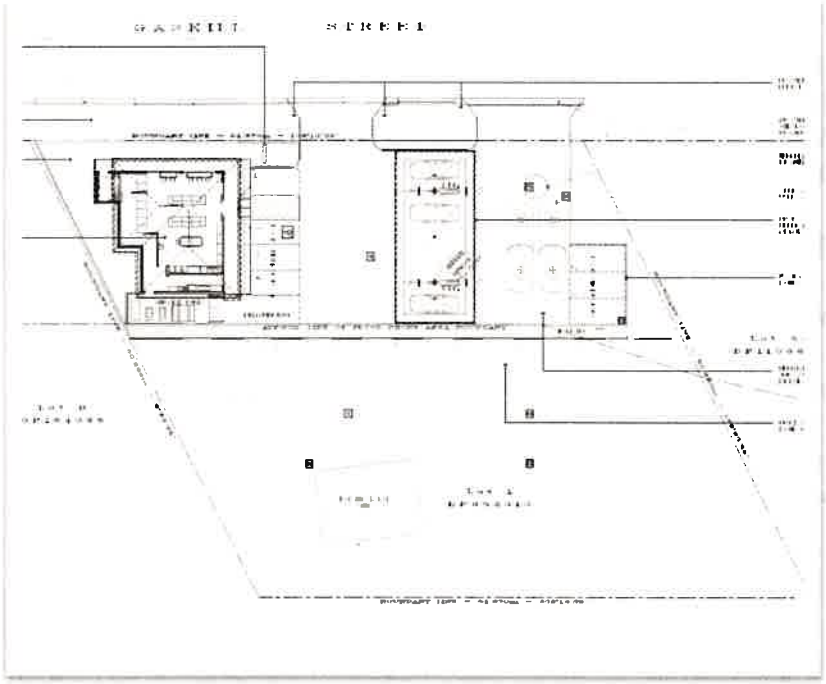

Figure 2 General Masterplan prepared by R. J. SINCLAIR

3.0 FLOOD INFORMATION

3.1 Flood Behaviour

The subject site is located within the Belubula River Catchment in Cabonne LGA. An overland flood study of Cabonne Council has been previously prepared by Lyall and Associates Consulting Water Engineers (October 2007) to define overland flood behaviour for the study area.

The Overland Flood Study has identified that the subject site is partially within the intermediate floodplain precinct, being land below the 1% AEP flood event that is not subject to a high hydraulic hazard. The site remains largely unaffected by overland flows except within the southern portion of the site.

We note that the Overland Flood Study undertaken generally aligns with our site observations of the catchment, as shown in the flow path from Flood Planning Map extract in Figure 3 below.

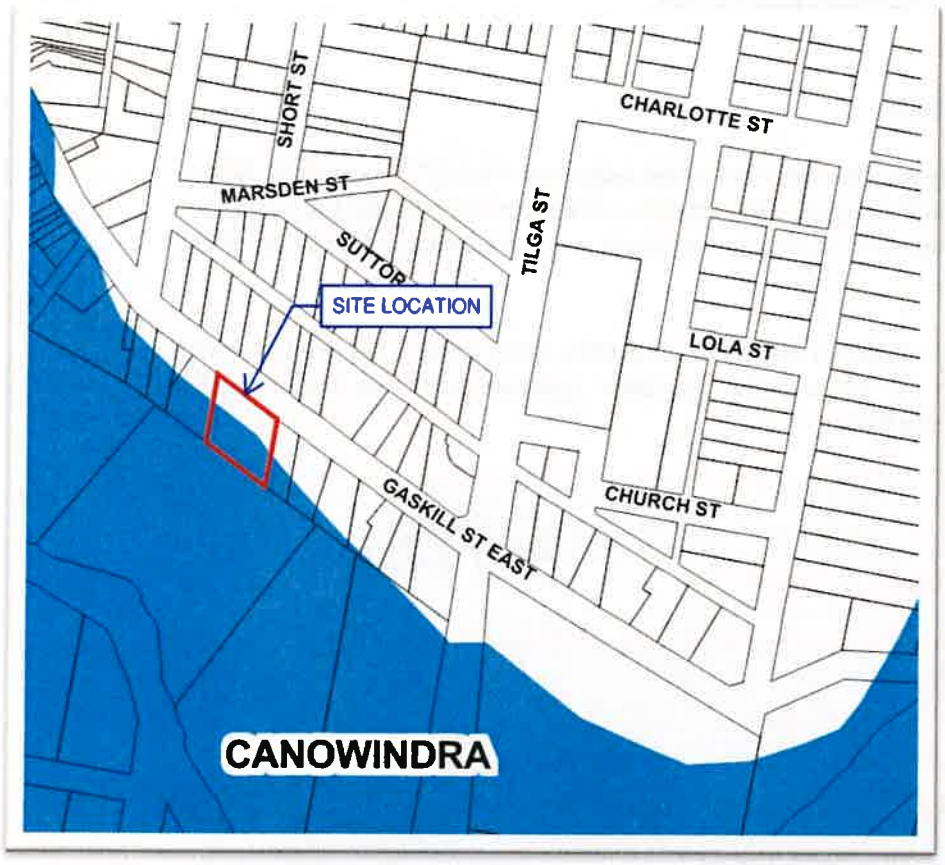

Figure 3 Flood Planning Map (Cabonne Local Environmental Plan 2012)

3.2 Flood Levels

A previous Flood Information Sheet for the subject site has been issued out by Lyall and Associates for Cabonne Council dated October 2007.

The Flood Information Sheet provides overland flood levels (m AHD) for the 1% AEP of the site at 289.3m AHD

Cabonne Council's Flood Risk Management Study (October 2007) identifies the following for Business and Commercial/Industrial areas:

1. The Flood Planning Level (FPL) should be equal to or greater than the 1% AEP flood level (289.3m AHD) plus 500mm freeboard which will be (289.8m AHD);
2. All structures to have flood compatible building components below 1% AEP flood level plus 500 mm freeboard; and
3. Reliable access for pedestrians required in the event of flood levels equal to 1% AEP flood plus 500 mm.

3.4 Flood Impact

The development walls are not located within the 1% AEP flood extent, ACOR concludes that the impact of the proposed development on flooding is null. Thus, no displacement of flooding and no impact on the adjoining properties or critical areas.

To assess the impact of the proposed building development, the overland flood extent within the subject site has been superimposed over the proposed architectural site plans.

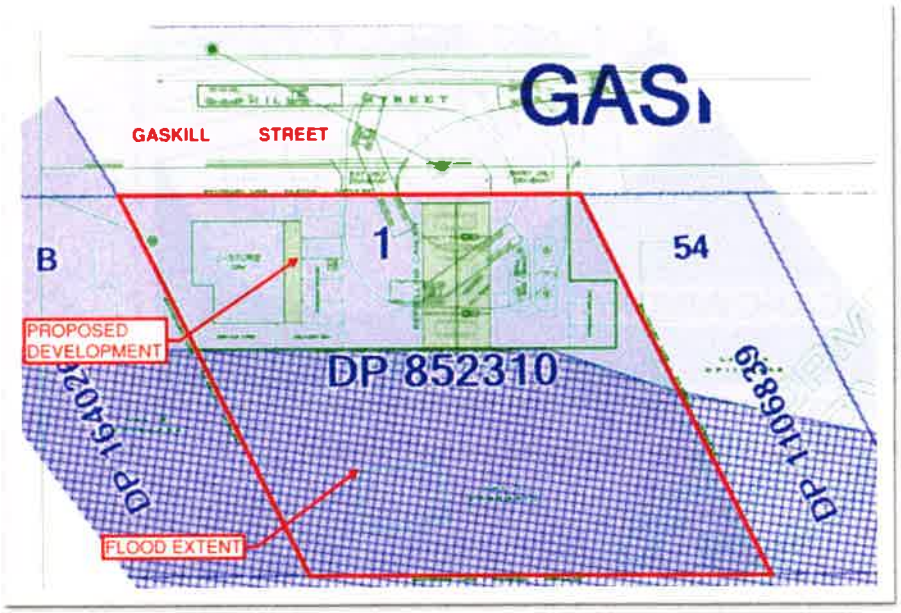

Figure 4 Flood Extent and Impact on Master Planning Layout

Further to Figure 4 above, the proposed layout will be outside the 1% AEP flood extent (i.e. the intermediate floodplain precinct, shown in dark blue on Figure 3 above).

We note that during the pre-development flood scenario, the 1% AEP flood extent will travel along the South boundary of the subject site

In the post-development scenario, flooding will also follow this same flow path as the proposed development will not form any obstructions to the flood flow.

We further note that based on initial investigation of existing flood impacts, we confirm that the effect of the proposed layout on flooding is null, due to the proposed open space areas ability to cater for the flood fringe flows and thus, direct water away from site.

We trust the above satisfies the preliminary investigation of flood impacts upon the proposed service station in regard to R. J. Sinclair layouts. If there are any queries or wish to discuss anything further, please do not hesitate to contact the undersigned.

Yours faithfully,
ACOR Consultants Pty Ltd

Gregory Lyell
Senior Civil Engineer

NSW Environment Protection Authority

Derelict Underground Petroleum Storage System Pilot Program - Former Service Station, Gaskill Street, Canowindra, NSW

18 October 2013

PARSONS BRINCKERHOFF

Document information
Client: NSW Environment Protection Authority Title: Derelict Underground Petroleum Storage System Pilot Program - Former Service Station, Gaskill Street, Canowindra, NSW Document No: 2189303A_Former Service Station_Rev1 Date: 18 October 2013

Rev	Date	Details
0	11/10/2013	Draft
1	18/10/2013	Final

Author, Reviewer and Approver details			
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1. Introduction

1.1 Background

In June 2013, the New South Wales (NSW) Environment Protection Authority (EPA) engaged Parsons Brinckerhoff Australia Pty Ltd (Parsons Brinckerhoff) to undertake a preliminary contamination investigation at selected sites containing derelict underground petroleum storage systems (UPSS). The work was commissioned by the EPA under its Environmental Trusts Contaminated Land Management Program. The derelict UPSS pilot program is a proactive scheme to investigate and remediate legacy contamination from derelict UPSS sites located in environmentally sensitive areas. It was for this program that the preliminary environmental investigations reported herein were undertaken.

The first stage of the 2013 program was carried out by Parsons Brinckerhoff in August and September 2013. The program comprised identification and documentation of existing tanks at each site and carrying out soil vapour surveys in the vicinity of fuel infrastructure to evaluate the degree of hydrocarbon contamination in surrounding soils thus providing a phase 1 environment assessment of the sites.

Twenty-five sites were investigated in the 2013 program within five local government areas of regional New South Wales NSW.

1.2 Project objective

The objective of the investigations at the derelict UPSS sites was to assess the likelihood of past leakages having caused contamination. The investigation was designed to provide data that could assist in the evaluation of the relative degree to which respective sites have become contaminated and thus facilitate prioritisation of any further investigations that may be deemed necessary.

The method used in the investigation, that of measuring soil vapour impacts in the shallow soil horizon, or directly below pavement or roads, provides a measure of the degree of remaining fuel impacts in the upper soil profile. The data provide a good indication of the extent and degree of leaks and spillages that resulted from the operating of the fuel facility. Nevertheless, in cases where leaks were from the bases of underground tanks, impacts may be largely undetected or underestimated by shallow soil vapour measurements, and any such leaks may have caused impacts to groundwater.

A secondary objective was to provide more certainty, to the extent possible, as to the number of underground tanks present at each site and their size and content.

1.3 Scope of work

In order to meet the objective, the works undertaken were split into three tasks, which are summarised below.

1.3.1 Task 1 - Project preliminaries

Task 1 consisted of project management, fieldwork preliminaries and coordination of works. This comprised development of a sampling, analysis and quality plan (SAQP), collection of dial before you dig (DBYD) plans, preparation of site-specific health and safety plans, preparation of traffic management plans, if required, and organisation of a project commencement meeting with EPA.

1.3.2 Task 2 - Fieldwork

Task 2 comprised:

- identification and inspection of underground tanks present at the site, wherever possible
- ground penetrating radar (GPR) scans of the underground tanks
- scanning (various techniques) for underground fuel lines
- locating underground services to allow for safe drilling through pavement and natural surfaces
- drilling of boreholes to a maximum depth of 1 m below ground level (m BGL) in the vicinity of the UPSS
- installation of passive soil vapour samplers, (Waterloo Membrane Sampler – Low Uptake (WMS^{TM}– LU) sampling tubes) into the drilled hole with subsequent temporary sealing
- recovery of the sampling tubes from the temporarily sealed boreholes
- laboratory analysis of the sampling tubes.

1.3.3 Task 3 - Reporting

Individual reports presenting interpretation of the results were prepared for each site.

2. Site setting

2.1 Site location and identification

The site is located in the town of Canowindra, NSW, in the Cabonne local government area (LGA). The general site identification details are provided in Table 2.1

Table 2.1 Summary of general site information

Site name	Former Service Station[1]
Site address	Gaskill Street, Canowindra, NSW
Legal identification	Lot 1 DP 852310
Dangerous Good Licence	No licence
Local government area	Cabonne
Former site use	Service station
Current site use	Vacant with former service station facilities

Note
1. Site name used for the purpose of the UPSS investigation

2.2 Site description

The site was located in Canowindra on the main street of town in a mixed residential/commercial area.

Situated between two residential properties, the site was vacant and for sale. At the time of investigation, the service station shop was present, along with the concrete forecourt, canopy, bowser island and two vent pipes. A further description is presented in section 4.

The site was last operated as a service station in 1963 (as advised by the EPA).

3. Methodology

3.1 UPSS identification and inspection

Identification and inspection of each underground tank was carried out, where possible, by accessing the tank through a dip or fill point to determine tank size and content. The number of tanks present at each site was also determined, to the extent possible.

3.2 GPR

A GPR scan was conducted at each site to identify the number, size and orientation of underground tanks, if possible. This non-destructive method uses radio waves which are pulsed into the ground. If a subsurface structure is present, the waves may be reflected allowing the underground asset to be located.

3.3 Services clearance

A desktop search for underground services using DBYD plans was undertaken prior to intrusive works. All utilities plans were referenced on-site when selecting final locations for the intrusive works. The sampling locations were cleared for the presence of underground services by a professional locating subcontractor.

3.4 Sampling methodology

3.4.1 Passive sampling tubes

In accordance with the technical requirements of the project's objectives and specifications, the methodology used to provide an initial assessment of the spatial extent and degree of contaminant impact around the UPSS systems was the measurement of soil vapours in the sub-slab and shallow soil horizons. The soil vapour sampling tubes used were the WMS^{TM}– LU, developed by the University of Waterloo.

The WMS^{TM}– LU sampler is a passive sampler, containing an absorptive carbon medium within a small glass vial with a permeable membrane at the end of the glass vial. It has been specifically designed and developed to allow quantification of volatile organic compounds in the soil pore space. The method allows for the calculation of actual concentrations in the soil gas on account of two critical features of the method. Firstly, the samplers are designed to maintain a constant but low uptake rate which, consequently, establishes the second critical factor – prevention of the depletion of the target analyte concentrations (the VOCs in the soil voids), i.e., a 'starvation effect' is avoided and a constant uptake rate onto the sampler is maintained. Uptake rates for the sampler have been empirically derived by the tube designer/manufacturer and the method has been validated against the TO-15 active sampling method.

The soil vapour sampling results have been presented both as concentrations in the units µg/m^3, and as mass collected on the tube per day (units of µg/tube/day).

The calculation of concentration was performed using the manufacturer's published uptake rates which are specific for each compound and for the type of sampler used (i.e. the WMS^{TM}– LU). Uptake rates are listed in Table 3.1.

3.4.2 Deployment method

The majority of soil vapour measurements were made by sub-slab sampling, while a minority were taken from depths of approximately 1 m below unsurfaced (natural) ground.

Sub-slab samples were collected by drilling a 20 mm diameter hole in the pavement – concrete slabs or footpaths, or in asphalt roadways or car parks and the like. The depth of the drilled hole in the concrete or asphalt was generally to a depth of 250 mm to 300 mm from the surface of the slab.

To deploy the WMS-LU tubes in the holes, the tubes were first wrapped in metal flyscreen to protect the sampling tube from direct contact with soil. The tubes were then lowered into the drilled holes attached to a wire. The hole was sealed at the surface by a cement based grout supported by an aluminium foil plug which formed a seal to prevent the ingress of air and water from the surface.

Where soil vapour tubes were deployed in unsurfaced areas, holes to a depth of 1 m were installed using a 1 m drill bit on a hand held hammer drill. For the deeper holes into unsurfaced land, the same method of WMS-LU tube installation was employed whereby the sampling tube was suspended on wire in the lower half of the hole and the hole was sealed at the surface by a soft grout and bentonite supported by a metal foil plug.

3.4.3 Recovery of sampling tubes

Sampling tubes were recovered from the boreholes after the predetermined deployment time (generally about two weeks), by breaking the seal formed by the grout at the top of the hole and pulling up the sampler by the attached wire. Sampling tubes were placed into their glass vials and sent under chain of custody to the analytical laboratory, SGS-Leeder Consulting.

3.5 Laboratory analysis

Sample tubes were collected and dispatched to the analytical laboratory in Melbourne for analysis of total petroleum hydrocarbons (TPH) C_6-C_{10} and TPH >C_{10}-C_{16}, benzene, toluene, ethylbenzene and xylenes (BTEX) and trimethylbenzenes, plus a further range of selected compounds commonly found in petrol vapour. Parsons Brinckerhoff developed the specific analytical suite, which targets petrol analytes, used in this investigation in conjunction with SGS Leeder Consulting. The analytical suite includes many compounds that are major components of petrol and thus the suite allows greater and more complete interpretation of the results at each location.

The WMS™ – LU samplers were analysed by SGS Leeder Consulting in an Australian National Association of Testing Authorities (NATA) registered laboratory. The laboratory is accredited for the analysis methods used to extract and determine mass and concentrations on the tubes.

3.6 Quality assurance

Field sampling procedures conforming to regulatory guidelines and Parsons Brinckerhoff quality control/quality assurance (QA/QC) procedures were used to minimise the potential for cross-contamination and preserve sample integrity.

Non-disposable sampling equipment, such as the drill bits, was decontaminated using phosphate free detergent (Decon 90) between each sample location. Disposable nitrile gloves were worn when handling WMS™ – LU samplers and replaced before deploying and collecting each sample.

During deployment the WMS™ – LU sample tubes were wrapped in protective stainless steel wire mesh to avoid direct contact with soil surfaces. To ensure that the stainless steel wire mesh did not contaminate the samplers, laboratory analysis was carried out on the wire mesh for the analytes of concern.

3.6.1 Field duplicates

One field duplicate sample was collected per site, at a rate of at least 1 per 10 samples in accordance with the overall rate specified in the Australian Standard AS4482.1 (2005) and NEPM (2013). However, there are no guidelines for soil vapour sample duplication. For the duplicate sample, a borehole was drilled adjacent to the 'primary sample' so that the samplers were placed in two separate but adjacent boreholes, typically 10 to 15 cm apart.

3.6.2 Trip blanks

Trip blank samples comprise unopened WMS™ – LU samplers supplied by the laboratory. Trip blanks samples are transported with other WMS™ – LU samplers for the extent of the 'trip', from the laboratory to site and back to the laboratory. The purpose of the trip blank samples is to assess if any volatile or semi-volatile contaminants have entered the WMS™ – LU samplers during their journey from either an outside source or from the sample container itself. As the trip blank tubes remain within their sealed glass vials, which are within sealed packaging, for the duration of the 'trip' and until analysed by the laboratory, any contaminants found on the tubes may have more likely originated from the manufacturing process.

A minimum of one trip blank sample was analysed for each LGA.

3.6.3 Field blanks

Field blank samples comprise WMS™ – LU samplers supplied by the laboratory and opened while in the 'field'. The purpose of field blanks is to assess if any external contaminants have cross contaminated the sample containers or sample matrix during the installation and collection of the samplers.

A minimum of one field blank sample was analysed for each LGA.

3.7 Presentation of data

The laboratory analytical result for each sample tube is the mass for each analyte extracted from the sampling tube for the total period of deployment. The laboratory reports therefore provide a mass per tube measurement for each analyte. To provide comparability between different sampling locations and sites, these measurements were normalised to mass collected per day per tube. In addition to 'mass' units, the design of the samplers enables the calculation of concentration in units of $\mu g/m^3$. Concentrations are calculated using an uptake rate specific to each compound. Uptake rates for the analytes of interest in this study are listed in Table 3.1. The mean uptake rate for BTEX was used to estimate concentrations for the TPH C_6-C_{10} fraction, and the uptake rate for xylene was used to estimate concentrations for the TPH >C_{10}-C_{16} fraction.

Table 3.1 Uptake rates for analytes of interest (units: mL/minute)

Compound	Uptake rate	Compound	Uptake rate
Benzene	0.67	135-Trimethylbenzene	1.82[2]
Toluene	0.99	124-Trimethylbenzene	1.82
Ethylbenzene	1.25	Hexane	0.51
o-Xylene	1.21	Heptane	0.51
m&p-Xylenes	1.21	Decane	1.21[4]
TPH C_6-C_{10}	1.0[3]	Cyclohexane	0.51[1]
TPH >C_{10}-C_{16}	1.21[4]	2-MethylPentane	0.51[1]
Naphthalene	1	3-MethylPentane	0.51[1]

Notes
1. Hexane uptake rate used
2. 1,2,4-trimethylbenzene uptake rate used
3. Mean rate for BTEX used
4. Xylene uptake rate used

Calculation of soil vapour concentration from the mass extracted from the tube is based on the relationship:

$$C = M/k^{-1}t$$

where:
- C = concentration of target compound
- M = mass of target compound
- k^{-1} = compound specific uptake rate
- t = time

The factor $k^{-1}.t$ (i.e. uptake rate x time) is equivalent to volume sampled.

The main analyte groups of interest in this study are BTEX and TPH >C_{10}-C_{16} fraction. To provide context and perspective to the measured quantities the analyte groups can be categorised into mass and concentration bands. These are summarised in Table 3.2 for BTEX and the TPH >C_{10}-C_{16} fraction.

Table 3.2 Mass and concentration bands

	BTEX		TPH >C_{10}-C_{16}	
Grading	Concentration band (µg/m^3)	Mass band (µg/tube/day)	Concentration band (µg/m^3)	Mass band (µg/tube/day)
No detect	<1	< 0.001	< 220	< 0.35
Low	1 – 200	0.001 – 0.3	220 – 2,000	0.35 – 3.5
Intermediate	200 – 10,000	0.3 – 15	2,000 – 100,000	3.5 – 170
High	> 10,000	>15	> 100,000	> 170

The 'no detection' concentration band for aromatics and the TPH >C_{10}-C_{16} fraction represent sample locations where concentrations were less than laboratory detection limits.

The three gradings of contaminant impact levels provide a categorisation of the degree of impact by volatile hydrocarbons in the soil profile. The source of the vapours may be from impacted soil or from impacted groundwater or both. The vapour concentrations measured are, however, more likely to be caused by impacted soil. The categories do not directly relate to potential health risks from vapour intrusion into buildings, but the high category does align generally with concentrations that may present a potential health risk from vapour intrusion if the impacted soil was beneath a building. It was not the purpose of the

investigation to assess human health risks from vapour intrusion, but rather to characterise the relative degree of impact around the fuel infrastructure.

The grading described above was used in developing figures for each site showing total concentrations of BTEX compounds and the TPH >C_{10}-C_{16} fraction.

4. Results

4.1 Weather observations

Meteorological records from the Australian Bureau of Metrology for August 2013 showed that 26.4 mm of rain fell in Orange in the two weeks prior to the sampling period and 26.2 mm fell during the sampling period. Rainfall is the meteorological variable with the greatest potential to affect soil vapour concentrations. Increasing moisture in the soil profile will decrease the permeability of the soil and decrease the diffusive flux rates of vapours in the profile.

On retrieval of the soil vapour sampling tubes from the boreholes, it was noted that all the tube housing were dry, indicating that water did not enter the borehole. Therefore favourable meteorological conditions were encountered prior to and during the sampling period.

The Bureau of Meteorology August 2013 Daily Weather Observations for Orange are provided in Appendix D.

4.2 Site inspections

4.2.1 Status of fuel infrastructure

Parsons Brinckerhoff attended the site to inspect the UPSS infrastructure on the 15 August 2013.

The presence of two underground fuel tanks was identified through visible dip/fill points in the grassed area east of the sales building.

Both tanks had a capacity of 1,000 gallons, as labelled on the dip stick, and a diameter of 1.8 m. Tank 1, closest to the sales building contained approximately 30 cm of water. Tank 2, furthest from the sales building contained 50 cm of soil and no liquids.

No Dangerous Goods Licence was available for the site.

Photographs of the site are provided in Appendix B.

4.2.2 Tank inspection summary

Based on the tank inspection, a summary of the fuel storage present on-site is provided in Table 4.1

Table 4.1 Summary of fuel storage on-site

Tank ID	Accessible	Fuel type	Capacity (gallons)	Capacity (L)	Current content
Tank 1	Yes	Unknown	1,000	4,540	30 cm water
Tank 2	Yes	Unknown	1,000	4,540	50 cm soil, no liquid

Note: 1 gallon = 4.54 L

4.2.3 GPR results

A GPR scan of the site was carried out. The GPR scan identified two tank pit excavations, in the same area as the dip/fill points.

The GPR scan is presented in Appendix C.

4.3 Soil vapour sampling pattern

Nine passive soil gas samplers and one duplicate sampler were installed at the site surrounding the underground fuel tanks and bowser island. The locations of the samplers are shown in Appendix A, Figure 1.

4.4 Soil vapour sampling results

Measured concentrations and mass collected on tubes for the analytes of interest in this study are listed in the Table 4.2 and Table 4.3 below.

Sampling tubes were deployed from the 15 August 2013 to the 28 August 2013.

Table 4.2 Concentrations of petroleum vapour in soil bores and sub-slab test points (units: µg/m^3)

Compound	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV8 Duplicate	SV9
Benzene	<3.9	<3.9	<3.9	<3.9	<3.9	<3.9	<3.9	<3.9	3.9	<3.9
Toluene	<2.7	4.2	<2.7	2.7	3.7	9	4.2	4.8	7.4	4.2
Ethylbenzene	3.4	4.6	<2.1	<2.1	4.2	7.2	2.1	2.1	<2.1	3.4
o-Xylene	7	7	<2.2	<2.2	7	11	6.5	4.4	3	13
m&p-Xylenes	18	23	<2.2	2.2	20	32	13	10	7.4	21
Total BTEX	28.4	38.8	-	4.9	34.9	59.2	25.8	21.3	21.7	41.6
C_6-C_{10}	420	480	490	<260	<260	<260	<260	290	<260	<260
>C_{10}-C_{16}	<220	<220	<220	280	460	320	410	380	380	260
1,2,4-trimethylbenzene	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	7.5	3.5	<1.4
1,3,5-trimethylbenzene	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	3.2	1.4	<1.4
Naphthalene	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6
n-pentane	38	22	<21	21	21	21	<21	<21	21	21
n-hexane	5.2	7.2	<5.2	<5.2	<5.2	5.2	6.2	<5.2	6.2	5.2
n-heptane	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
n-octane	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	7.2	<5.2	<5.2
n-nonane	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	3.5	<2.2	<2.2
n-decane	<44	<43	<43	<43	<43	<44	<44	<44	<44	<44
n-undecane	2	2	<1.4	<1.4	<1.4	3.2	3.2	3.2	3.2	2.3
n-dodecane	<140	<140	<140	<140	<140	<140	<140	<140	<140	<140
2-methylbutane	28	25	<21	<21	<21	<21	<21	<21	<21	<21
2-methylpentane		29	22	20	21	20	51	26	32	25
2-methylhexane	130	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
3-methylhexane	150	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
cyclohexane	<5.2	9.3	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
methylcyclohexane	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
ethylcyclohexane	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
2,4-dimethylpentane	36	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
4-isoproyltoluene	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	2.2	<2.2
isopropylbenzene	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2
propylbenzene	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2
n-butylbenzene	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4
PID field reading (ppm)	0.1	2.2	0	1.0	0.8	0.3	0	5.3	3.7	0.5

Table 4.3 Mass collected on tubes: petroleum vapours in soil bores & sub-slab test points (units: µg/tube/day)

Compound	SV1	SV2	SV3	SV4	SV5	SV6	SV7	SV8	SV8 Duplicate	SV9
Benzene	nd	nd	nd	nd	nd	nd	nd	nd	0.004	nd
Toluene	nd	0.006	nd	0.004	0.005	0.013	0.006	0.007	0.011	0.006
Ethylbenzene	0.006	0.008	nd	nd	0.008	0.013	0.004	0.004	nd	0.006
o-Xylene	0.012	0.012	nd	nd	0.012	0.020	0.011	0.008	0.005	0.023
m&p-Xylenes	0.031	0.040	nd	0.004	0.036	0.056	0.023	0.017	0.013	0.037
Total BTEX	0.049	0.067	0.000	0.008	0.061	0.102	0.044	0.036	0.033	0.073
TPH C_6-C_{10}	0.607	0.682	0.682	nd	nd	nd	nd	0.379	nd	nd
TPH >C_{10}-C_{16}	nd	nd	nd	0.530	0.833	0.531	0.682	0.683	0.683	0.455
1,2,4-trimethylbenzene	nd	nd	nd	nd	nd	nd	nd	0.020	0.009	nd
1,3,5-trimethylbenzene	nd	nd	nd	nd	nd	nd	nd	0.008	0.004	nd
Naphthalene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
n-pentane	0.030	0.015	nd	0.015	0.015	0.015	nd	nd	0.015	0.015
n-hexane	0.004	0.005	nd	nd	nd	0.004	0.005	nd	0.005	0.004
n-heptane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
n-octane	nd	nd	nd	nd	nd	nd	nd	0.005	nd	nd
n-nonane	nd	nd	nd	nd	nd	nd	nd	0.006	nd	nd
n-decane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
n-undecane	0.005	0.005	nd	nd	nd	0.008	0.008	0.008	0.008	0.006
n-dodecane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2-methylbutane	0.023	0.015	nd	nd	nd	nd	nd	nd	nd	nd
2-methylpentane	0.000	0.021	0.016	0.014	0.015	0.014	0.037	0.019	0.024	0.018
2-methylhexane	0.099	nd	nd	nd	nd	nd	nd	nd	nd	nd
3-methylhexane	0.114	nd	nd	nd	nd	nd	nd	nd	nd	nd
cyclohexane	nd	0.007	nd	nd	nd	nd	nd	nd	nd	nd
methylcyclohexane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ethylcyclohexane	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2,4-dimethylpentane	0.027	nd	nd	nd	nd	nd	nd	nd	nd	nd
4-isoproyltoluene	nd	nd	nd	nd	nd	nd	nd	nd	0.004	nd
isopropylbenzene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
propylbenzene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
n-butylbenzene	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
PID field reading (ppm)	0.1	2.2	0	1.0	0.8	0.3	0	5.3	3.7	0.5

All sampling locations showed BTEX at trace or non-detect concentrations. Total petroleum hydrocarbons in either the C_6-C_{10} or >C_{10}-C_{16} fraction were detected at all sampling locations, although at low levels close to the detection limit.

A figure showing the concentration bands for measured BTEX at each sampling location is presented in Appendix A, Figure 2. Concentrations bands for TPH >C_{10}-C_{16} measured at each sampling location are presented in Appendix A, Figure 3.

Laboratory reports and chain of custody documentation are provided in Appendix E.

4.5 Quality assurance assessment

4.5.1 Field duplicates

The purpose of the field duplicate was to estimate the variability of a given characteristic or contaminant associated with a population.

For the field duplicate sample, a borehole was drilled adjacent to the 'primary sample' so that the samplers were placed in two separate but adjacent boreholes, typically 10 to 15 cm apart.

Measured concentrations for the two samples were compared by calculating the RPD values between the primary sample and duplicate sample given by:

$$RPD = \left[\frac{X1 - X2}{\left(\frac{X1 + X2}{2} \right)} \right] \times 100$$

where: *X1 is the first duplicate value*
X2 is the second duplicate value

There are no official references for acceptable ranges for RPDs for volatile organic compounds in any medium, and no official references for acceptable differences between duplicate samples for any analyte for vapours. For this study an RPD of 100% is presented as a 'rule of thumb' for acceptability. However, the magnitude of the concentration, and particularly its closeness to the detection limit, is a very important consideration in evaluating the acceptability of RPDs. A further factor to consider in the interpretation of RPDs is that the duplicates are from different soil bores, about 15 cm from each other. There may be significant non-homogeneity in the level of contaminant impact in soil at the two adjacent locations which would lead to large differences between the vapour concentrations of the duplicate pairs.

RPDs for primary and duplicate samples have been calculated and the results for BTEX and TPH fractions are presented below. It is considered that the comparison of duplicate concentrations for these analytes is sufficient to characterise the degree of agreement between the duplicate samples. And the main area of focus in this investigation is on these analytes. Concentrations for the primary and duplicate sample and calculated RPDs are presented in Table 4.4 below.

Table 4.4 RPD's for soil vapour measurements at the duplicate location (units: µg/m^3)

	Benzene	Toluene	Ethylbenzene	o-Xylene	m&p-Xylenes	TPH C_6-C_{10}	TPH >C_{10}-C_{16}
SV8	<3.9	4.8	2.1	4.4	10	21.3	290
SV8 Duplicate	3.9	7.4	<2.1	3	7.4	21.7	<260
RPD	-	43%	-	38%	30%	2%	-

The primary sample and its corresponding duplicate show very consistent results. When concentrations are close to the detection limit, as in this case, the calculated values often are not representative of the true variability because the values are expressed as percent difference. Although the concentrations were low for this duplicate pair, the relative differences were also low.

When concentrations are below laboratory detection limits RPDs cannot be calculated.

4.5.2 Trip blanks

One trip blank sample was analysed for the Cabonne LGA, and the results are provided in Appendix E.

All concentrations were shown as not detected with the exception of 2-methylpentane which was measured at 0.25 µg total. As this concentration was detected on the trip blank, an unopened sampler, it is most likely attributable to a manufacturing defect. Overall, this detection is minimal and it is concluded that the sampling tubes were not contaminated during transport.

4.5.3 Field blanks

One field blank sample was analysed for the Cabonne LGA, and the results are provided in Appendix E.

All concentrations were shown as not detected with the exception of 2-methylpentane which was measured at 0.19 µg total. As 2-methylpentatne was also detected on the trip blank, it is most likely attributable to a manufacturing issue. Therefore it is concluded that the 'handling' of the sampling tubes during deployment or recovery did not contaminate the tubes. It is reasonable that if the field blanks had been contaminated as a results of the sampling program, compounds other than 2-methylpentane would also have been detected on the field blank and they were not.

4.6 Laboratory quality control results

The laboratory analysed two method blanks and two spiked samples analysed in duplicate. The method blanks showed all results to be non-detect, and recoveries for the spiked samples were within the range of 79-122% which is considered acceptable.

Laboratory quality control results are provided in Appendix E.

5. Discussion and evaluation of the extent of impact

Two underground fuel tanks were identified on-site. Both tanks were accessible via visible dip/fill points and were located east of the sales building.

Field screening of the nine soil vapour bores placed in the vicinity of the underground tanks and bowser island showed little indication of petroleum vapours. Laboratory analysis of the sampling tubes confirmed low impacts of petroleum products in the area of investigation.

Vapour concentrations were at trace or low levels at all sampling locations. The location of the highest BTEX concentration, SV6 was located between the tanks and bowser island near the fuel lines. Although low, most of the BTEX comprised ethylbenzene and xylene, with the lighter BTEX compounds and lighter aliphatic non-detect or at trace levels.

Total petroleum hydrocarbons were measured in either the C_6-C_{10} or >C_{10}-C_{16} fractions at all sampling locations, although only marginally greater than the laboratory detection limit.

The impact to the upper soil profile was diffuse, without any areas of high impact. The measured concentrations throughout the area of investigation were similarly low or trace. The very low degree of impact remaining from the light volatile compounds is indicative of old degraded petrol leaks and spills.

Overall the soil vapour concentrations of petroleum hydrocarbon in sub-slab and soil bores, were low or not detected, indicating the upper soil profile around the old fuel facilities has had only minor impacts from former leaks and spills. Alternatively, any past impacts have substantially attenuated within the upper soil profile. It should be noted that the results cannot confirm the degree of impact, if any, to groundwater.

6. Limitations

Scope of services

This environmental site assessment report (the report) has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the client and Parsons Brinckerhoff (scope of services). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints.

Reliance on data

In preparing the report, Parsons Brinckerhoff has relied upon data, surveys, analyses, designs, plans and other information provided by the client and other individuals and organisations, most of which are referred to in the report (the data). Except as otherwise stated in the report, Parsons Brinckerhoff has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report (conclusions) are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. Parsons Brinckerhoff will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to Parsons Brinckerhoff.

Environmental conclusions

In accordance with the scope of services, Parsons Brinckerhoff has relied upon the data and has conducted environmental field monitoring and/or testing in the preparation of the report. The nature and extent of monitoring and/or testing conducted is described in the report.

On all sites, varying degrees of non-uniformity of the vertical and horizontal soil or groundwater conditions are encountered. Hence no monitoring, common testing or sampling technique can eliminate the possibility that monitoring or testing results/samples are not totally representative of soil and/or groundwater conditions encountered. The conclusions are based upon the data and the environmental field monitoring and/or testing and are therefore merely indicative of the environmental condition of the site at the time of preparing the report, including the presence or otherwise of contaminants or emissions.

Also, it should be recognised that site conditions, including the extent and concentration of contaminants, can change with time.

Within the limitations imposed by the scope of services, the monitoring, testing, sampling and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

Report for benefit of client

The report has been prepared for the benefit of the client and no other party. Parsons Brinckerhoff assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of Parsons Brinckerhoff or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own enquiries and obtain independent advice in relation to such matters.

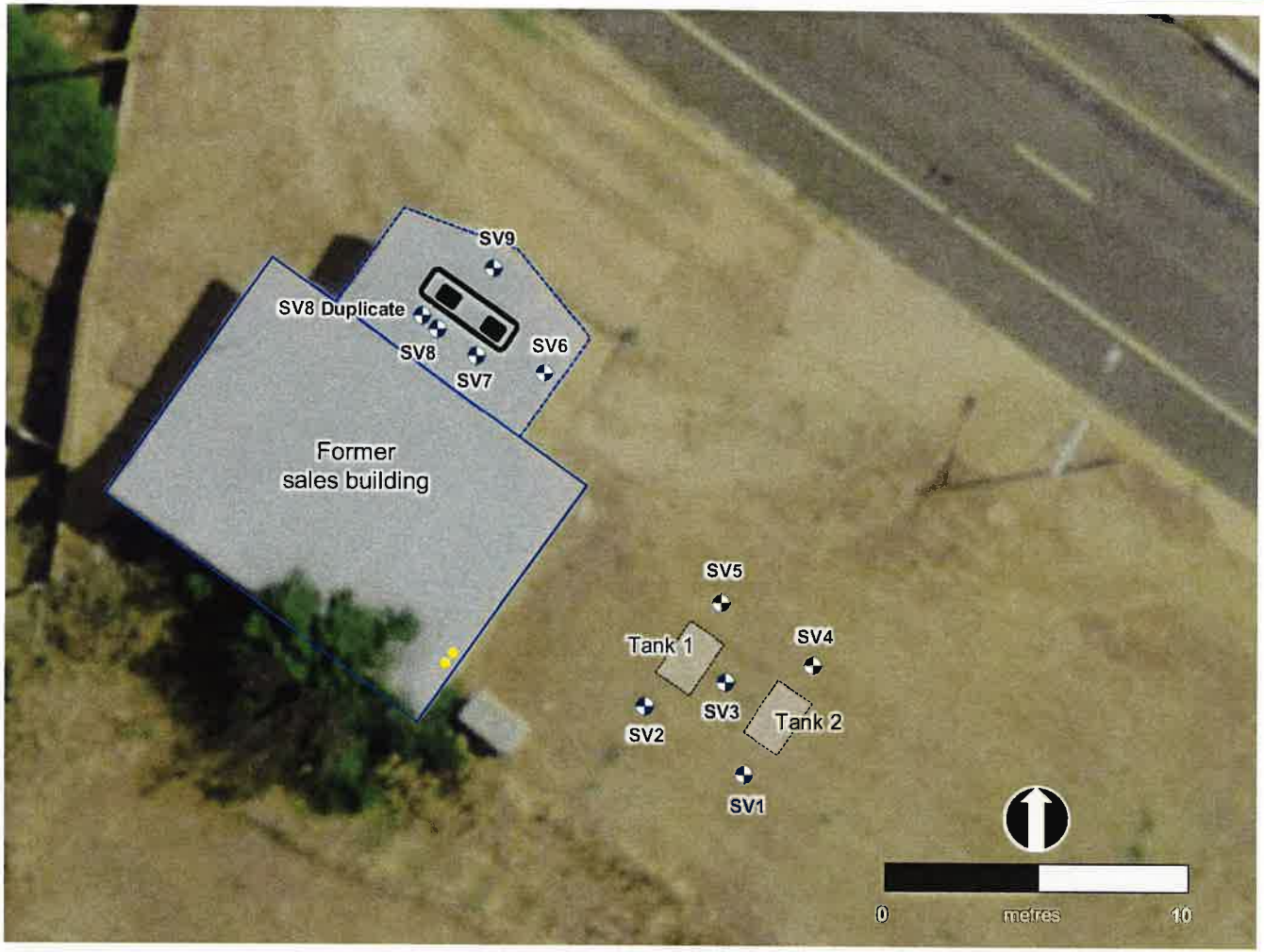
Other limitations

Parsons Brinckerhoff will not be liable to update or revise the report to take into account any events or emergent circumstances or facts occurring or becoming apparent after the date of the report.

The scope of services did not include any assessment of the title to or ownership of the properties, buildings and structures referred to in the report nor the application or interpretation of laws in the jurisdiction in which those properties, buildings and structures are located.

Appendix A

Figures

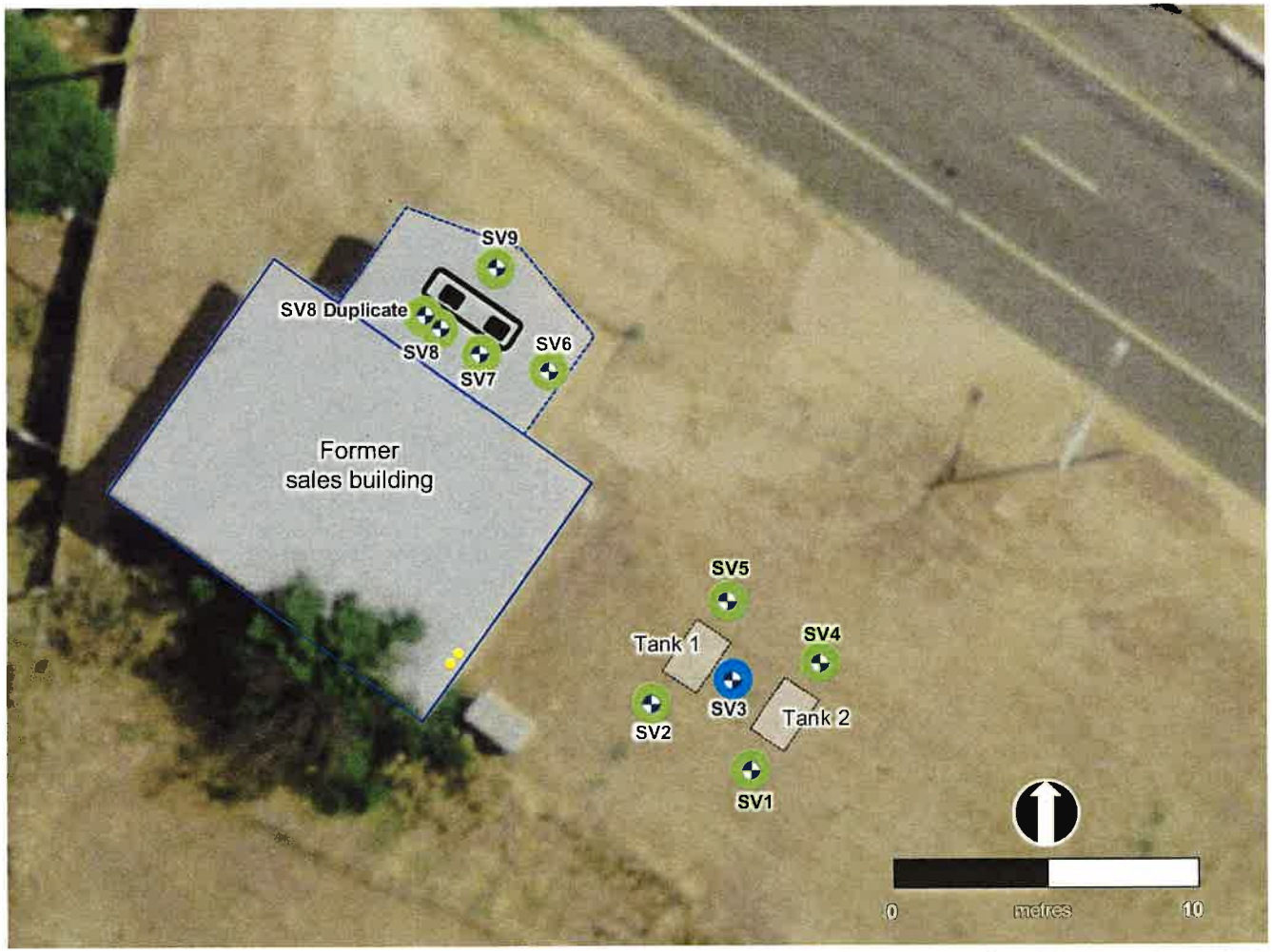


Base map source: Spatial information exchange (2013)

LEGEND

- Site boundary
- Approximate location of underground storage tanks (USTs)
- Soil vapour bore
- Bowser footprint
- Vent pipe

Figure 1 Site layout and sampling locations
Former Service Station
Gaskill Street, Canowindra, NSW



Base map source: Spatial Information exchange (2013)

LEGEND

- Site boundary
- Approximate location of USTs
- Soil vapour bore
- Bowser footprint
- Vent pipe

Concentrations of BTEX

- Not detected
- Low (1 – 200 µg/m³)
- Intermediate (200 – 10,000 µg/m³)
- High (> 10,000 µg/m³)

Figure 2 Spatial extent of BTEX impact in soil vapour
Former Service Station
Gaskill Street, Canowindra, NSW

Base map source: Spatial information exchange (2013)

LEGEND

- Site boundary
- Approximate location of USTs
- Soil vapour bore
- Bowser footprint
- Vent pipe

Concentrations of TPH $>C_{10}$-C_{16}

- Not detected
- Low (220 – 2,000 µg/m³)
- Intermediate (2,000 – 100,000 µg/m³)
- High (> 100,000 µg/m³)

Figure 3 Spatial extent of TPH $>C_{10}$-C_{16} impact in soil vapour
Former Service Station
Gaskill Street, Canowindra, NSW

Appendix B

Photographs

Plate 1 – The two dip/fill points and SV3 located between them.

Plate 2 – Both dip/fill points opened, with the dip stick of tank 1 visible.

Plate 3 – A close up of the dip stick, showing the capacity at 1,010 gallons.

Plate 4 – The bowser island.

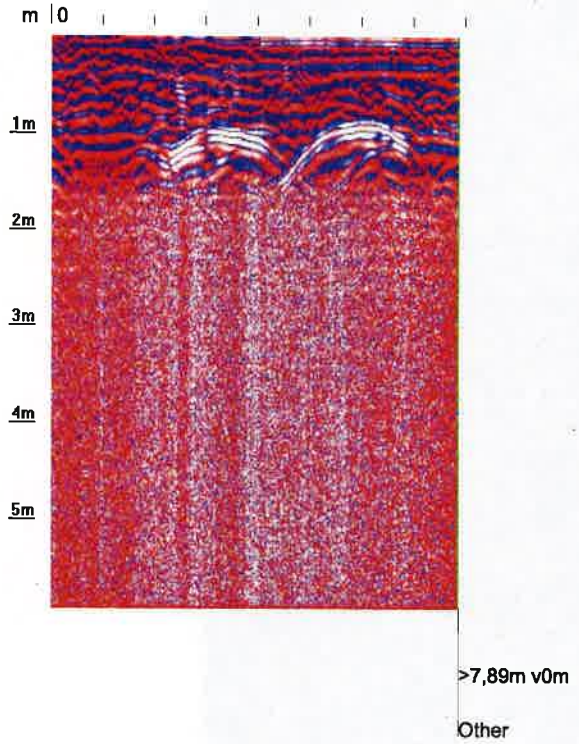
Plate 5 – Soil vapour sampling locations surrounding the underground fuel tanks. Note the two vent pipes on the building.

Plate 6 – Soil vapour sampling locations in the vicinity of the bowser island.

Appendix C

GPR Scan

Acquisition: 130814AA Gaskill Street Canowind Date: Thursday 5 September 2013 Page: 1	Scan:	Prescan note: Prescan note not present	IDS INGEGNERIA DEI SISTEMI S.p.A.



Appendix D

Daily Weather Observations

Orange, New South Wales
August 2013 Daily Weather Observations

Most observations from Orange Airport, but some from Orange Agricultural Institute.

Australian Government
Bureau of Meteorology

Date	Day	Temps		Rain	Evap	Sun	Max wind gust			9am						3pm					
		Min	Max				Dirn	Spd	Time	Temp	RH	Cld	Dirn	Spd	MSLP	Temp	RH	Cld	Dirn	Spd	MSLP
		°C	°C	mm	mm	hours		km/h	local	°C	%	eighths		km/h	hPa	°C	%	eighths		km/h	hPa
1	Th	-3.7	13.1	0	2.4	6.2	E	19	11:56	6.2	90	0	ENE	7	1024.2	11.5	60		SW	7	1021.2
2	Fr	0.0	11.8	0.2	2.0	7.2	WNW	48	15:09	7.7	73	8	WNW	15	1019.8	11.0	54		WNW	26	1016.2
3	Sa	4.0	7.8	0	1.8	6.1	WSW	41	00:47	4.5	84	7	WSW	20	1019.0	7.5	66		W	15	1016.7
4	Su	3.3	8.6	0.8	1.0	8.1	W	43	13:28	5.1	93	8	W	17	1017.2	7.4	67		W	22	1016.7
5	Mo	0.9	9.7	0	2.8	5.2	W	41	10:20	7.3	73	2	W	20	1020.2	8.3	68		NW	24	1018.6
6	Tu	1.9	12.2	0	1.4	4.2	NW	46	09:16	8.6	76	6	NW	28	1016.0	9.9	69		WNW	22	1014.0
7	We	3.2	10.6	3.6	2.0	3.0	SW	39	22:46	7.1	93	8	N	6	1014.3	8.4	85		NNW	11	1010.9
8	Th	0.6	5.3	15.6	2.0	2.6	SW	48	01:24	1.6	93	8	WSW	26	1010.4	4.3	93		SW	28	1013.7
9	Fr	0.6	10.1	0.6	0.2	3.8	SSW	30	00:21	3.7	93	3	SW	11	1020.7	8.0	52		WNW	9	1017.6
10	Sa	2.9	13.7	0	1.8	9.0	SW	35	12:46	9.9	49	0	WSW	17	1018.8	13.0	58		WSW	17	1018.7
11	Su	-3.9	14.1	0	2.0	8.5	WNW	31	12:25	9.4	78	1	N	7	1020.2	13.5	75		NNW	22	1017.0
12	Mo	5.1	12.3	0	2.2	7.0	WNW	83	14:08	11.3	63	8	NNW	26	1010.9	9.3	86		W	30	1009.1
13	Tu	1.9	11.4	5.6	1.2	2.1	WSW	52	08:21	7.6	53	1	W	28	1017.5	10.5	59		W	28	1016.8
14	We	2.8	14.0	0	3.0	8.2	W	50	21:05	10.2	48	1	NW	20	1016.6	13.5	39		WNW	28	1013.0
15	Th	0.9	8.2	6.4	4.6	9.6	SSW	59	05:22	2.6	93	7	SSW	28	1021.7	7.8	69		SSW	26	1022.1
16	Fr	-3.5	13.7	0.2	2.6	8.7	NW	63	23:54	6.3	84	0	NNE	11	1023.5	13.4	31		N	26	1017.5
17	Sa	5.2	13.3	8.0	3.3	9.5	NW	48	10:44	10.7	74	6	NNW	26	1012.8	11.1	60		WSW	20	1013.2
18	Su	0.5	13.1	0	1.2	8.0	NW	46	13:44	9.4	55	0	W	22	1019.1	12.5	45		NW	30	1016.0
19	Mo	3.4	8.6	0.8	3.0	9.0	WNW	52	12:24	4.6	93	8	WSW	19	1014.9	4.2	84		WSW	24	1012.3
20	Tu	-1.0	4.8	1.2	3.2	7.3	WSW	43	00:59	-0.4	93	7	SW	17	1016.9	2.6	75		WSW	24	1015.7
21	We	-0.6	6.5	0	2.0	4.5	SW	41	08:31	2.5	93	8	SW	26	1018.0	4.7	81		W	22	1016.1
22	Th	1.7	7.0	0.8	1.2	6.8	WNW	44	20:52	4.2	82	8	NW	28	1015.6	5.9	87		W	19	1013.4
23	Fr	4.2	8.3	3.0	0.8	4.2	W	54	21:35	4.8	93	8	W	20	1015.1	6.6	93		WNW	28	1014.8
24	Sa	4.8	9.9	5.4	1.4	2.5	WSW	48	00:14	6.2	93	3	SSW	22	1023.5	9.2	84		SW	17	1023.7
25	Su	-1.7	15.7	0.2	1.4	9.5	NW	33	11:53	9.8	81	0	N	9	1026.8	12.9	66		SW	17	1025.1
26	Mo	-2.2	11.0	0.2	3.2	9.7	S	33	08:32	6.4	87	1	SSW	22	1026.7	10.3	68		SW	17	1024.4
27	Tu	1.4	15.3	0	2.4	9.5	WSW	24	15:00	9.0	79	0	S	7	1023.6	14.1	58		SW	17	1021.1
28	We	0.0	17.5	0	2.4	8.4	NE	24	21:24	13.2	56	1	NW	6	1024.3	16.9	35		SW	9	1022.3
29	Th	6.8	18.0	0	2.2	6.5	NE	39	15:35	11.6	68	6	NE	22	1024.4	17.8	44		NE	28	1019.6
30	Fr	8.5	17.5	0.4	3.8	4.9	N	48	00:15	12.9	79	3	NNW	20	1019.7	16.7	41		WNW	30	1017.7
31	Sa	2.8	16.0	0	3.0	9.5	NW	35	13:44	13.0	55	7	WNW	11	1025.3	15.5	43		WNW	19	1024.3
Statistics for August 2013																					
Mean		1.6	11.6		2.2	6.8				7.3	77	4		18	1019.3	10.3	64			21	1017.4
Lowest		-3.9	4.8		0.2	2.1				-0.4	48	0	#	6	1010.4	2.6	31		SW	7	1009.1
Highest		8.5	18.0	15.6	4.6	9.7	WNW	83		13.2	93	8	#	28	1026.8	17.8	93		#	30	1025.1
Total				53.0	67.5	209.3															

Temperature, humidity, wind, pressure and rainfall observations are from Orange Airport AWS {station 063303}. Cloud, evaporation and sunshine observations are from Orange Agricultural Institute {station 063254}

IDCJDW2105.201308 Prepared at 16:01 UTC on 2 Oct 2013

Appendix E

Laboratory report and chain of custody documentation

A.B.N. 44 000 964 278
3 - 5, 18 Redland Drive
Mitcham, Vic, 3132
Telephone: (03) 9874 1988
Fax: (03) 9874 1933

Chartered Chemists

3-Oct-2013

REPORT NUMBER: M131931D

Site/Client Ref: 2189303A

Parsons Brinckerhoff

Ernst & Young Centre
Level 27/680 George Street
Sydney
NSW 2000
Attention: Rebecca Aaby

CERTIFICATE OF ANALYSIS

SAMPLES: Ten samples were received for analysis

DATE RECEIVED: **2-Sep-2013**

DATE COMMENCED: **2-Sep-2013**

METHODS: See Attached Results

RESULTS: Please refer to attached pages for results.

Note: Results are based on samples as received at SGS Leeder Consulting's laboratories
Results in airbourne concentrations are calculated using data provided by the client

Samples: 2013023268 was unable to be reported for 2-METHYLPENTANE in methods MA-5.WL.05 and MA-5.WL.06

REPORTED BY:

Evan Jones
Manager

NATA Accredited Laboratory Number: 2562

Accredited for compliance
with ISO/IEC 17025.

SGS LEEDER CONSULTING

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.06 Volatile Organics (w/v)

Sample units are expressed in µg/m³

	Leeder ID	2013023268	2013023269	2013023270	2013023271	2013023272
	Client ID	Canowinda Former Service Station_SV1 1304-AN-LU-070	Canowinda Former Service Station_SV2 1304-AN-LU-071	Canowinda Former Service Station_SV3 1304-AN-LU-072	Canowinda Former Service Station_SV4 1304-AN-LU-073	Canowinda Former Service Station_SV5 1304-AN-LU-074
Analyte Name	**PQL**					
Benzene		<3.9	<3.9	<3.9	<3.9	<3.9
2-butanone(MEK)		<7.5	<7.5	<7.5	<7.5	<7.5
n-Butylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
Carbon tetrachloride		<6.1	<6.1	<6.1	<6.1	<6.1
Chloroethane		<9.8	<9.8	<9.7	<9.7	<9.7
Chloromethane		<9.8	<9.8	<9.7	<9.7	<9.7
Cyclohexane		<5.2	9.3	<5.2	<5.2	<5.2
n-Decane		<44	<43	<43	<43	<43
Dibromochloromethane		<3.0	<3.0	<3.0	<3.0	<3.0
1,2-Dibromoethane		<3.0	<3.0	<3.0	<3.0	<3.0
Dichlorodifluoromethane		<52	<52	<52	<52	<52
1,1-Dichloroethane		<9.8	<9.8	<9.7	<9.7	<9.7
1,2-Dichloroethane		<3.9	<3.9	<3.9	<3.9	<3.9
1,1-Dichloroethene		<11	<11	<11	<11	<11
cis-1,2-Dichloroethene		<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene		<5.2	<5.2	<5.2	<5.2	<5.2
2,4-dimethylpentane		36	<5.2	<5.2	<5.2	<5.2
n-Dodecane		<140	<140	<140	<140	<140
Ethylbenzene		3.4	4.6	<2.1	<2.1	4.2
Ethylcyclohexane		<5.2	<5.2	<5.2	<5.2	<5.2
n-Heptane		<5.2	<5.2	<5.2	<5.2	<5.2
n-Hexane		5.2	7.2	<5.2	<5.2	<5.2
Isopropanol		<860	<860	<860	<860	<860
Isopropylbenzene		<2.2	<2.2	<2.2	<2.2	<2.2

SGS LEEDER CONSULTING

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.06 Volatile Organics (w/v)

Sample units are expressed in µg/m³

	Leeder ID	2013023268	2013023269	2013023270	2013023271	2013023272
	Client ID	Canowinda Former Service Station_SV1 1304-AN-LU-070	Canowinda Former Service Station_SV2 1304-AN-LU-071	Canowinda Former Service Station_SV3 1304-AN-LU-072	Canowinda Former Service Station_SV4 1304-AN-LU-073	Canowinda Former Service Station_SV5 1304-AN-LU-074
Analyte Name	**PQL**					
4-Isopropyltoluene		<2.2	<2.2	<2.2	<2.2	<2.2
[illegible]ethyl butane		28	25	<21	<21	<21
Methyl tert-butyl ether		<5.2	<5.2	<5.2	<5.2	<5.2
Methylcyclohexane		<5.2	<5.2	<5.2	<5.2	<5.2
2-Methylhexane		130	<5.2	<5.2	<5.2	<5.2
3-Methylhexane		150	<5.2	<5.2	<5.2	<5.2
2-Methylpentane			29	22	20	21
3-Methylpentane		<5.2	9.3	<5.2	<5.2	<5.2
Naphthalene		<2.6	<2.6	<2.6	<2.6	<2.6
n-Nonane		<2.2	<2.2	<2.2	<2.2	<2.2
n-Octane		<5.2	<5.2	<5.2	<5.2	<5.2
n-Pentane		38	22	<21	<21	<21
propylbenzene		<2.2	<2.2	<2.2	<2.2	<2.2
Tetrachloroethene		<2.4	<2.4	<2.4	<2.4	<2.4
[illegible]ene		<2.7	4.2	<2.7	2.7	3.7
1,1,1-trichloroethane		<7.5	<7.5	<7.5	<7.5	<7.5
1,1,2-trichloroethane		<3.0	<3.0	<3.0	<3.0	<3.0
Trichloroethene		<3.0	<3.0	<3.0	<3.0	<3.0
Trichloromethane		6.8	<4.9	<4.9	<4.9	<4.9
1,2,4-Trimethylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
1,3,5-Trimethylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
n-Undecane		2.0	2.0	<1.4	<1.4	<1.4
Vinyl Chloride		<19	<19	<19	<19	<19
o-Xylene		7.0	7.0	<2.2	<2.2	7.0
m&p-Xylenes		18	23	<2.2	2.2	20

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.06 Volatile Organics (w/v)

Sample units are expressed in µg/m³

	Leeder ID	2013023273	2013023274	2013023275	2013023276	2013023277
	Client ID	Canowinda Former Service Station_SV6 1304-AN-LU-075	Canowinda Former Service Station_SV7 1304-AN-LU-076	Canowinda Former Service Station_SV8 1304-AN-LU-077	Canowinda Former Service Station_SV9 1304-AN-LU-078	Canowinda Former Service Station_Dup 1304-AN-LU-079
Analyte Name	**PQL**					
Benzene		<3.9	<3.9	<3.9	<3.9	3.9
2-butanone(MEK)		<7.5	<7.5	<7.5	<7.5	<7.5
n-Butylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
Carbon tetrachloride		<6.1	<6.1	<6.1	<6.1	<6.1
Chloroethane		<9.8	<9.8	<9.8	<9.8	<9.8
Chloromethane		<9.8	<9.8	<9.8	<9.8	<9.8
Cyclohexane		<5.2	<5.2	<5.2	<5.2	<5.2
n-Decane		<44	<44	<44	<44	<44
Dibromochloromethane		<3.0	<3.0	<3.0	<3.0	<3.0
1,2-Dibromoethane		<3.0	<3.0	<3.0	<3.0	<3.0
Dichlorodifluoromethane		<52	<52	<52	<52	<52
1,1-Dichloroethane		<9.8	<9.8	<9.8	<9.8	<9.8
1,2-Dichloroethane		<3.9	<3.9	<3.9	<3.9	<3.9
1,1-Dichloroethene		<11	<11	<11	<11	<11
cis-1,2-Dichloroethene		<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene		<5.2	<5.2	<5.2	<5.2	<5.2
2,4-dimethylpentane		<5.2	<5.2	<5.2	<5.2	<5.2
n-Dodecane		<140	<140	<140	<140	<140
Ethylbenzene		7.2	2.1	2.1	3.4	<2.1
Ethylcyclohexane		<5.2	<5.2	<5.2	<5.2	<5.2
n-Heptane		<5.2	<5.2	<5.2	<5.2	<5.2
n-Hexane		5.2	6.2	<5.2	5.2	6.2
Isopropanol		<860	<860	<860	<860	<860
Isopropylbenzene		<2.2	<2.2	<2.2	<2.2	<2.2

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.06 Volatile Organics (w/v)

Sample units are expressed in µg/m³

	Leeder ID	2013023273	2013023274	2013023275	2013023276	2013023277
	Client ID	Canowinda Former Service Station_SV6 1304-AN-LU-075	Canowinda Former Service Station_SV7 1304-AN-LU-076	Canowinda Former Service Station_SV8 1304-AN-LU-077	Canowinda Former Service Station_SV9 1304-AN-LU-078	Canowinda Former Service Station_Dup 1304-AN-LU-079
Analyte Name	**PQL**					
4-Isopropyltoluene		<2.2	<2.2	<2.2	<2.2	2.2
ethyl butane		<21	<21	<21	<21	<21
Methyl tert-butyl ether		<5.2	<5.2	<5.2	<5.2	<5.2
Methylcyclohexane		<5.2	<5.2	<5.2	<5.2	<5.2
2-Methylhexane		<5.2	<5.2	<5.2	<5.2	<5.2
3-Methylhexane		<5.2	<5.2	<5.2	<5.2	<5.2
2-Methylpentane		20	51	26	25	32
3-Methylpentane		<5.2	<5.2	<5.2	<5.2	<5.2
Naphthalene		<2.6	<2.6	<2.6	<2.6	<2.6
n-Nonane		<2.2	<2.2	3.5	<2.2	<2.2
n-Octane		<5.2	<5.2	7.2	<5.2	<5.2
n-Pentane		<21	<21	<21	<21	<21
propylbenzene		<2.2	<2.2	<2.2	<2.2	<2.2
Tetrachloroethene		<2.4	<2.4	<2.4	<2.4	<2.4
ene		9.0	4.2	4.8	4.2	7.4
1,1,1-trichloroethane		<7.5	<7.5	<7.5	<7.5	<7.5
1,1,2-trichloroethane		<3.0	<3.0	<3.0	<3.0	<3.0
Trichloroethene		<3.0	<3.0	<3.0	<3.0	<3.0
Trichloromethane		<4.9	<4.9	<4.9	<4.9	<4.9
1,2,4-Trimethylbenzene		<1.4	<1.4	7.5	<1.4	3.5
1,3,5-Trimethylbenzene		<1.4	<1.4	3.2	<1.4	1.4
n-Undecane		3.2	3.2	3.2	2.3	3.2
Vinyl Chloride		<19	<19	<19	<19	<19
o-Xylene		11	6.5	4.4	13	3.0
m&p-Xylenes		32	13	10	21	7.4

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023268	2013023269	2013023270	2013023271	2013023272
	Client ID	Canowinda Former Service Station_SV1 1304-AN-LU-070	Canowinda Former Service Station_SV2 1304-AN-LU-071	Canowinda Former Service Station_SV3 1304-AN-LU-072	Canowinda Former Service Station_SV4 1304-AN-LU-073	Canowinda Former Service Station_SV5 1304-AN-LU-074
Analyte Name	**PQL**					
Benzene	0.05	nd	nd	nd	nd	nd
2-butanone(MEK)	0.05	nd	nd	nd	nd	nd
n-Butylbenzene	0.05	nd	nd	nd	nd	nd
Carbon tetrachloride	0.05	nd	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd	nd
Cyclohexane	0.05	nd	0.09	nd	nd	nd
n-Decane	1	nd	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd	nd
1,2-Dibromoethane	0.05	nd	nd	nd	nd	nd
Dichlorodifluoromethane	0.05	nd	nd	nd	nd	nd
1,1-Dichloroethane	0.05	nd	nd	nd	nd	nd
1,2-Dichloroethane	0.05	nd	nd	nd	nd	nd
1,1-Dichloroethene	0.05	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.05	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.05	nd	nd	nd	nd	nd
2,4-dimethylpentane	0.05	0.35	nd	nd	nd	nd
n-Dodecane	5	nd	nd	nd	nd	nd
Ethylbenzene	0.05	0.08	0.11	nd	nd	0.10
Ethylcyclohexane	0.05	nd	nd	nd	nd	nd
n-Heptane	0.05	nd	nd	nd	nd	nd
n-Hexane	0.05	0.05	0.07	nd	nd	nd
Isopropanol	5	nd	nd	nd	nd	nd
Isopropylbenzene	0.05	nd	nd	nd	nd	nd

SGS LEEDER CONSULTING

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023268	2013023269	2013023270	2013023271	2013023272
	Client ID	Canowinda Former Service Station_SV1 1304-AN-LU-070	Canowinda Former Service Station_SV2 1304-AN-LU-071	Canowinda Former Service Station_SV3 1304-AN-LU-072	Canowinda Former Service Station_SV4 1304-AN-LU-073	Canowinda Former Service Station_SV5 1304-AN-LU-074
Analyte Name	**PQL**					
4-Isopropyltoluene	0.05	nd	nd	nd	nd	nd
ethyl butane	0.2	0.3	0.2	nd	nd	nd
Methyl tert-butyl ether	0.05	nd	nd	nd	nd	nd
Methylcyclohexane	0.05	nd	nd	nd	nd	nd
2-Methylhexane	0.05	1.3	nd	nd	nd	nd
3-Methylhexane	0.05	1.5	nd	nd	nd	nd
2-Methylpentane	0.05		0.28	0.21	0.19	0.20
3-Methylpentane	0.05	nd	0.09	nd	nd	nd
Naphthalene	0.05	nd	nd	nd	nd	nd
n-Nonane	0.05	nd	nd	nd	nd	nd
n-Octane	0.05	nd	nd	nd	nd	nd
n-Pentane	0.2	0.4	0.2	nd	0.2	0.2
propylbenzene	0.05	nd	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	nd	nd
ene	0.05	nd	0.08	nd	0.05	0.07
1,1,1-trichloroethane	0.05	nd	nd	nd	nd	nd
1,1,2-trichloroethane	0.05	nd	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd	nd
Trichloromethane	0.05	0.07	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.05	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.05	nd	nd	nd	nd	nd
n-Undecane	0.05	0.07	0.07	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd	nd
o-Xylene	0.05	0.16	0.16	nd	nd	0.16
m&p-Xylenes	0.05	0.41	0.53	nd	0.05	0.47

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023273	2013023274	2013023275	2013023276	2013023277
	Client ID	Canowinda Former Service Station_SV6 1304-AN-LU-075	Canowinda Former Service Station_SV7 1304-AN-LU-076	Canowinda Former Service Station_SV8 1304-AN-LU-077	Canowinda Former Service Station_SV9 1304-AN-LU-078	Canowinda Former Service Station_Dup 1304-AN-LU-079
Analyte Name	**PQL**					
Benzene	0.05	nd	nd	nd	nd	0.05
2-butanone(MEK)	0.05	nd	nd	nd	nd	nd
n-Butylbenzene	0.05	nd	nd	nd	nd	nd
Carbon tetrachloride	0.05	nd	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd	nd
Cyclohexane	0.05	nd	nd	nd	nd	nd
n-Decane	1	nd	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd	nd
1,2-Dibromoethane	0.05	nd	nd	nd	nd	nd
Dichlorodifluoromethane	0.05	nd	nd	nd	nd	nd
1,1-Dichloroethane	0.05	nd	nd	nd	nd	nd
1,2-Dichloroethane	0.05	nd	nd	nd	nd	nd
1,1-Dichloroethene	0.05	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.05	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.05	nd	nd	nd	nd	nd
2,4-dimethylpentane	0.05	nd	nd	nd	nd	nd
n-Dodecane	5	nd	nd	nd	nd	nd
Ethylbenzene	0.05	0.17	0.05	0.05	0.08	nd
Ethylcyclohexane	0.05	nd	nd	nd	nd	nd
n-Heptane	0.05	nd	nd	nd	nd	nd
n-Hexane	0.05	0.05	0.06	nd	0.05	0.06
Isopropanol	5	nd	nd	nd	nd	nd
Isopropylbenzene	0.05	nd	nd	nd	nd	nd

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023273	2013023274	2013023275	2013023276	2013023277
	Client ID	Canowinda Former Service Station_SV6 1304-AN-LU-075	Canowinda Former Service Station_SV7 1304-AN-LU-076	Canowinda Former Service Station_SV8 1304-AN-LU-077	Canowinda Former Service Station_SV9 1304-AN-LU-078	Canowinda Former Service Station_Dup 1304-AN-LU-079
Analyte Name	**PQL**					
4-Isopropyltoluene	0.05	nd	nd	nd	nd	0.05
2-Methyl butane	0.2	nd	nd	nd	nd	nd
[illegible]thyl tert-butyl ether	0.05	nd	nd	nd	nd	nd
Methylcyclohexane	0.05	nd	nd	nd	nd	nd
2-Methylhexane	0.05	nd	nd	nd	nd	nd
3-Methylhexane	0.05	nd	nd	nd	nd	nd
2-Methylpentane	0.05	0.19	0.49	0.25	0.24	0.31
3-Methylpentane	0.05	nd	nd	nd	nd	nd
Naphthalene	0.05	nd	nd	nd	nd	nd
n-Nonane	0.05	nd	nd	0.08	nd	nd
n-Octane	0.05	nd	nd	0.07	nd	nd
n-Pentane	0.2	0.2	nd	nd	0.2	0.2
propylbenzene	0.05	nd	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	nd	nd
Toluene	0.05	0.17	0.08	0.09	0.08	0.14
[illegible]1-trichloroethane	0.05	nd	nd	nd	nd	nd
1,1,2-trichloroethane	0.05	nd	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd	nd
Trichloromethane	0.05	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.05	nd	nd	0.26	nd	0.12
1,3,5-Trimethylbenzene	0.05	nd	nd	0.11	nd	0.05
n-Undecane	0.05	0.11	0.11	0.11	0.08	0.11
Vinyl Chloride	0.05	nd	nd	nd	nd	nd
o-Xylene	0.05	0.26	0.15	0.10	0.31	0.07
m&p-Xylenes	0.05	0.74	0.30	0.23	0.49	0.17

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023302	2013023303	2013023304	2013023305
	Client ID	Method	Method	Method	Method
Analyte Name	**PQL**	Blank	Blank	Blank	Blank
Benzene	0.05	nd	nd	nd	nd
2-butanone(MEK)	0.05	nd	nd	nd	nd
n-Butylbenzene	0.05	nd	nd	nd	nd
Carbon tetrachloride	0.05	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd
Cyclohexane	0.05	nd	nd	nd	nd
n-Decane	1	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd
1,2-Dibromoethane	0.05	nd	nd	nd	nd
Dichlorodifluoromethane	0.05	nd	nd	nd	nd
1,1-Dichloroethane	0.05	nd	nd	nd	nd
1,2-Dichloroethane	0.05	nd	nd	nd	nd
1,1-Dichloroethene	0.05	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.05	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.05	nd	nd	nd	nd
2,4-dimethylpentane	0.05	nd	nd	nd	nd
n-Dodecane	5	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd
Ethylcyclohexane	0.05	nd	nd	nd	nd
n-Heptane	0.05	nd	nd	nd	nd
n-Hexane	0.05	nd	nd	nd	nd
Isopropanol	5	nd	nd	nd	nd
Isopropylbenzene	0.05	nd	nd	nd	nd

SGS LEEDER CONSULTING

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023302	2013023303	2013023304	2013023305
	Client ID	Method	Method	Method	Method
Analyte Name	PQL	Blank	Blank	Blank	Blank
4-Isopropyltoluene	0.05	nd	nd	nd	nd
[illegible]ethyl butane	0.2	nd	nd	nd	nd
Methyl tert-butyl ether	0.05	nd	nd	nd	nd
Methylcyclohexane	0.05	nd	nd	nd	nd
2-Methylhexane	0.05	nd	nd	nd	nd
3-Methylhexane	0.05	nd	nd	nd	nd
2-Methylpentane	0.05	nd	nd	nd	nd
3-Methylpentane	0.05	nd	nd	nd	nd
Naphthalene	0.05	nd	nd	nd	nd
n-Nonane	0.05	nd	nd	nd	nd
n-Octane	0.05	nd	nd	nd	nd
n-Pentane	0.2	nd	nd	nd	nd
propylbenzene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	nd
[illegible]ene	0.05	nd	nd	nd	nd
1,1,1-trichloroethane	0.05	nd	nd	nd	nd
1,1,2-trichloroethane	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
Trichloromethane	0.05	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.05	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.05	nd	nd	nd	nd
n-Undecane	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
o-Xylene	0.05	nd	nd	nd	nd
m&p-Xylenes	0.05	nd	nd	nd	nd

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-30.AIR.04 Total Petroleum Hydrocarbons

Sample units are expressed in µg/m³

	Leeder ID	2013023268	2013023269	2013023270	2013023271	2013023272
	Client ID	Canowinda Former Service Station_SV1 1304-AN-LU-070	Canowinda Former Service Station_SV2 1304-AN-LU-071	Canowinda Former Service Station_SV3 1304-AN-LU-072	Canowinda Former Service Station_SV4 1304-AN-LU-073	Canowinda Former Service Station_SV5 1304-AN-LU-074
Analyte Name	**PQL**					
C6-C10		420	480	490	<260	<260
>C10-C16		<220	<220	<220	280	460

Matrix: Passive Sampler

Method: MA-30.AIR.04 Total Petroleum Hydrocarbons

Sample units are expressed in µg/m³

	Leeder ID	2013023273	2013023274	2013023275	2013023276	2013023277
	Client ID	Canowinda Former Service Station_SV6 1304-AN-LU-075	Canowinda Former Service Station_SV7 1304-AN-LU-076	Canowinda Former Service Station_SV8 1304-AN-LU-077	Canowinda Former Service Station_SV9 1304-AN-LU-078	Canowinda Former Service Station_Dup 1304-AN-LU-079
Analyte Name	**PQL**					
C6-C10		<260	<260	290	<260	<260
>C10-C16		320	410	380	260	380

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-30.AIR.03 Total Petroleum Hydrocarbons

Sample units are expressed in µg total

	Leeder ID	2013023268	2013023269	2013023270	2013023271	2013023272
	Client ID	Canowinda Former Service Station_SV1 1304-AN-LU-070	Canowinda Former Service Station_SV2 1304-AN-LU-071	Canowinda Former Service Station_SV3 1304-AN-LU-072	Canowinda Former Service Station_SV4 1304-AN-LU-073	Canowinda Former Service Station_SV5 1304-AN-LU-074
Analyte Name	**PQL**					
C6-C10	5	8	9	9	nd	nd
>C10-C16	5	nd	nd	nd	7	11

Matrix: Passive Sampler

Method: MA-30.AIR.03 Total Petroleum Hydrocarbons

Sample units are expressed in µg total

	Leeder ID	2013023273	2013023274	2013023275	2013023276	2013023277
	Client ID	Canowinda Former Service Station_SV6 1304-AN-LU-075	Canowinda Former Service Station_SV7 1304-AN-LU-076	Canowinda Former Service Station_SV8 1304-AN-LU-077	Canowinda Former Service Station_SV9 1304-AN-LU-078	Canowinda Former Service Station_Dup 1304-AN-LU-079
Analyte Name	**PQL**					
C6-C10	5	nd	nd	5	nd	nd
>C10-C16	5	7	9	9	6	9

(I) RESULTS

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-30.AIR.03 Total Petroleum Hydrocarbons

Sample units are expressed in µg total

	Leeder ID	2013023302	2013023303	2013023304	2013023305
	Client ID	Method	Method	Method	Method
Analyte Name	PQL	Blank	Blank	Blank	Blank
C6-C10	5	nd	nd	nd	nd
>C10-C16	5	nd	nd	nd	nd

(II) QUALITY CONTROL

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Quality Control Results are expressed in Percent Recovery of expected result

	Leeder ID	2013023306	2013023307	2013023308	2013023309	2013023310
	Client ID	Method	Method	Method	Method	Method
Analyte Name	PQL	Spike	Spike Dup	Spike	Spike Dup	Spike
Benzene		89	96	94	95	95
2,4-dimethylpentane		117	121	112	111	110
Ethylbenzene		89	94	94	93	96
Isopropanol		112	109	105	110	111

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Quality Control Results are expressed in Percent Recovery of expected result

	Leeder ID	2013023306	2013023307	2013023308	2013023309	2013023310
	Client ID	Method	Method	Method	Method	Method
Analyte Name	PQL	Spike	Spike Dup	Spike	Spike Dup	Spike
Methyl butane		114	114	105	108	105
2-Methylhexane		118	120	112	112	111
3-Methylhexane		117	121	112	112	111
n-Pentane		121	122	113	114	110
Toluene		89	95	95	94	95
o-Xylene		88	96	92	93	93
m&p-Xylenes		90	96	93	94	96

(II) QUALITY CONTROL

Report N°: M131931D

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Quality Control Results are expressed in Percent Recovery of expected result

	Leeder ID	2013023311	2013023312	2013023313
	Client ID	Method	Method	Method
Analyte Name	PQL	Spike Dup	Spike	Spike Dup
Benzene		102	110	112
2,4-dimethylpentane		108	87	86
Ethylbenzene		99	109	106
Isopropanol		111	118	121

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Quality Control Results are expressed in Percent Recovery of expected result

	Leeder ID	2013023311	2013023312	2013023313
	Client ID	Method	Method	Method
Analyte Name	PQL	Spike Dup	Spike	Spike Dup
2-Methyl butane		102	81	79
2-Methylhexane		108	87	85
3-Methylhexane		107	87	86
n-Pentane		109	87	85
Toluene		99	107	104
o-Xylene		97	106	104
m&p-Xylenes		100	108	106

QUALIFIERS / NOTES FOR REPORTED RESULTS

PQL	Practical Quantitation Limit
is	Insufficient Sample to perform this analysis.
T	Tentative identification based on computer library search of mass spectra.
ND	Not Detected – The analyte was not detected above the reported PQL.
NC	Not calculated, Results below PQL
nr	Not Requested for analysis.
R	Rejected Result – results for this analysis failed QC checks.
SQ	Semi-Quantitative result – quantitation based on a generic response factor for this class of analyte.
IM	Inappropriate method of analysis for this compound
U	Unable to provide Quality Control data – high levels of compounds in sample interfered with analysis of QC results.
UF	Unable to provide Quality Control data- Surrogates failed QCchecks due to sample matrix effects
L	Analyte detected at a level above the linear response of calibration curve.
E	Estimated result. NATA accreditation does not cover estimated results.
C1	These compounds co-elute.
C2	These compounds co-elute.
CT	Elevated concentration. Results reported from carbon tube analysis
**	Sample shows non-petroleum hydrocarbon profile

SGS LEEDER CONSULTING

APPENDIX ONE.

CHAIN OF CUSTODY DOCUMENT

Passive Sample Collection

Unit 5, 18 Redland Drive
Mitcham VIC 3132
Ph: (03) 9874 1988 Fax: (03) 9874 1933

SGS

LEEDER CONSULTING

Project Manager: Rebecca Aaby
Collected by: Rebecca Aaby (signature) Reba Aaby
Company: Parsons Brinckerhoff **Email**: RAaby@pb.com.au
Address: Level 27, 680 George Street, GPO Box 5394
City: Sydney **State**: NSW **Post Code**: 2001
Phone: (02) 9272 5213

Project Info
Purchase Order Number:_____
Suburb & State: Canowindra, NSW
Project Number: 2189303A
Project Name: EPA Derelict UPSS Pilot Program

Turn Around Time
Normal: √
Rapid:
Specify: (days)

Site Name: Canowindra Former Service Station

Lab ID	Field Sample I.D. (Location)	Sampler I.D (WMS Code)	Date of Deployment	Time of Deployment	Date of Retrieval	Time of Retrieval	Analysis Required	Indoor Air	Outdoor Air	Workplace Monitoring	Other (soil vapour)
	Canowindra Former Service Station_SV1	1304-AN-LU-070	15-Aug-13	10:05	28-Aug-13	14:24	PB-EPA PSGS				√
	Canowindra Former Service Station_SV2	1304-AN-LU-071	15-Aug-13	9:40	28-Aug-13	14:21	PB-EPA PSGS				√
	Canowindra Former Service Station_SV3	1304-AN-LU-072	15-Aug-13	9:35	28-Aug-13	14:20	PB-EPA PSGS				√
	Canowindra Former Service Station_SV4	1304-AN-LU-073	15-Aug-13	9:30	28-Aug-13	14:22	PB-EPA PSGS				√
	Canowindra Former Service Station_SV5	1304-AN-LU-074	15-Aug-13	9:25	28-Aug-13	14:18	PB-EPA PSGS				√
	Canowindra Former Service Station_SV6	1304-AN-LU-075	15-Aug-13	9:45	28-Aug-13	14:24	PB-EPA PSGS				√
	Canowindra Former Service Station_SV7	1304-AN-LU-076	15-Aug-13	9:55	28-Aug-13	14:27	PB-EPA PSGS				√
	Canowindra Former Service Station_SV8	1304-AN-LU-077	15-Aug-13	10:00	28-Aug-13	14:27	PB-EPA PSGS				√
	Canowindra Former Service Station_SV9	1304-AN-LU-078	15-Aug-13	9:50	28-Aug-13	14:28	PB-EPA PSGS				√
	Canowindra Former Service Station_Duplicate	1304-AN-LU-079	15-Aug-13	10:10	28-Aug-13	14:28	PB-EPA PSGS				√

Relinquished By: (Signature) Date/Time	Received by: (Signature) Date/Time	Air Temp and Weather Description:
RAaby Reba 30/8/13	James Phillips 2/9/13 11:00	
Relinquished By: (Signature) Date/Time	Received by: (Signature) Date/Time	Notes:
Relinquished By: (Signature) Date/Time	Received by: (Signature) Date/Time	

A.B.N. 44 000 964 278
3 - 5, 18 Redland Drive
Mitcham, Vic, 3132
Telephone: (03) 9874 1988
Fax: (03) 9874 1933

Chartered Chemists

3-Oct-2013

REPORT NUMBER: M131931G

Site/Client Ref: 2189303A

Parsons Brinckerhoff

Ernst & Young Centre
Level 27/680 George Street
Sydney
NSW 2000
Attention: Rebecca Aaby

CERTIFICATE OF ANALYSIS

SAMPLES: Two samples were received for analysis

DATE RECEIVED: **2-Sep-2013**

DATE COMMENCED: **2-Sep-2013**

METHODS: See Attached Results

RESULTS: Please refer to attached pages for results.

Note: Results are based on samples as received at SGS Leeder Consulting's laboratories

REPORTED BY:

Evan Jones
Manager

NATA Accredited Laboratory Number: 2562

Accredited for compliance
with ISO/IEC 17025.

(I) RESULTS

Report N°: M131931G

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023300	2013023301	2013023302	2013023303	2013023304
	Client ID	Cabonne Trip Blank 1305-AN-LU-002	Cabonne Field Blank 1305-AN-LU-003	Method	Method	Method
Analyte Name	**PQL**			Blank	Blank	Blank
Benzene	0.05	nd	nd	nd	nd	nd
2-Butanone(MEK)	0.05	nd	nd	nd	nd	nd
n-Butylbenzene	0.05	nd	nd	nd	nd	nd
Carbon tetrachloride	0.05	nd	nd	nd	nd	nd
Chloroethane	0.05	nd	nd	nd	nd	nd
Chloromethane	0.05	nd	nd	nd	nd	nd
Cyclohexane	0.05	nd	nd	nd	nd	nd
n-Decane	1	nd	nd	nd	nd	nd
Dibromochloromethane	0.05	nd	nd	nd	nd	nd
1,2-Dibromoethane	0.05	nd	nd	nd	nd	nd
Dichlorodifluoromethane	0.05	nd	nd	nd	nd	nd
1,1-Dichloroethane	0.05	nd	nd	nd	nd	nd
1,2-Dichloroethane	0.05	nd	nd	nd	nd	nd
1,1-Dichloroethene	0.05	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.05	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.05	nd	nd	nd	nd	nd
2,4-dimethylpentane	0.05	nd	nd	nd	nd	nd
n-Dodecane	5	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd
Ethylcyclohexane	0.05	nd	nd	nd	nd	nd
n-Heptane	0.05	nd	nd	nd	nd	nd
n-Hexane	0.05	nd	nd	nd	nd	nd
Isopropanol	5	nd	nd	nd	nd	nd
Isopropylbenzene	0.05	nd	nd	nd	nd	nd

(I) RESULTS

Report N°: M131931G

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023300	2013023301	2013023302	2013023303	2013023304
	Client ID	Cabonne Trip Blank 1305-AN-LU-002	Cabonne Field Blank 1305-AN-LU-003	Method	Method	Method
Analyte Name	**PQL**			Blank	Blank	Blank
4-Isopropyltoluene	0.05	nd	nd	nd	nd	nd
2-Methyl butane	0.2	nd	nd	nd	nd	nd
Methyl tert-butyl ether	0.05	nd	nd	nd	nd	nd
Methylcyclohexane	0.05	nd	nd	nd	nd	nd
2-Methylhexane	0.05	nd	nd	nd	nd	nd
3-Methylhexane	0.05	nd	nd	nd	nd	nd
2-Methylpentane	0.05	0.25	0.19	nd	nd	nd
3-Methylpentane	0.05	nd	nd	nd	nd	nd
Naphthalene	0.05	nd	nd	nd	nd	nd
n-Nonane	0.05	nd	nd	nd	nd	nd
n-Octane	0.05	nd	nd	nd	nd	nd
n-Pentane	0.2	nd	nd	nd	nd	nd
propylbenzene	0.05	nd	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	nd	nd
Toluene	0.05	nd	nd	nd	nd	nd
1,1,1-trichloroethane	0.05	nd	nd	nd	nd	nd
1,1,2-trichloroethane	0.05	nd	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd	nd
Trichloromethane	0.05	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.05	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.05	nd	nd	nd	nd	nd
n-Undecane	0.05	nd	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd	nd
o-Xylene	0.05	nd	nd	nd	nd	nd
m&p-Xylenes	0.05	nd	nd	nd	nd	nd

(I) RESULTS

Report N°: M131931G

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023305
	Client ID	Method
Analyte Name	**PQL**	Blank
Benzene	0.05	nd
2-Butanone(MEK)	0.05	nd
n-Butylbenzene	0.05	nd
Carbon tetrachloride	0.05	nd
Chloroethane	0.05	nd
Chloromethane	0.05	nd
Cyclohexane	0.05	nd
n-Decane	1	nd
Dibromochloromethane	0.05	nd
1,2-Dibromoethane	0.05	nd
Dichlorodifluoromethane	0.05	nd
1,1-Dichloroethane	0.05	nd
1,2-Dichloroethane	0.05	nd
1,1-Dichloroethene	0.05	nd
cis-1,2-Dichloroethene	0.05	nd
trans-1,2-Dichloroethene	0.05	nd
2,4-dimethylpentane	0.05	nd
n-Dodecane	5	nd
Ethylbenzene	0.05	nd
Ethylcyclohexane	0.05	nd
n-Heptane	0.05	nd
n-Hexane	0.05	nd
Isopropanol	5	nd
Isopropylbenzene	0.05	nd

(I) RESULTS

Report N°: M131931G

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Sample units are expressed in µg total

	Leeder ID	2013023305
	Client ID	Method
Analyte Name	**PQL**	Blank
4-Isopropyltoluene	0.05	nd
2-Methyl butane	0.2	nd
Methyl tert-butyl ether	0.05	nd
Methylcyclohexane	0.05	nd
2-Methylhexane	0.05	nd
3-Methylhexane	0.05	nd
2-Methylpentane	0.05	nd
3-Methylpentane	0.05	nd
Naphthalene	0.05	nd
n-Nonane	0.05	nd
n-Octane	0.05	nd
n-Pentane	0.2	nd
propylbenzene	0.05	nd
Tetrachloroethene	0.05	nd
Toluene	0.05	nd
1,1,1-trichloroethane	0.05	nd
1,1,2-trichloroethane	0.05	nd
Trichloroethene	0.05	nd
Trichloromethane	0.05	nd
1,2,4-Trimethylbenzene	0.05	nd
1,3,5-Trimethylbenzene	0.05	nd
n-Undecane	0.05	nd
Vinyl Chloride	0.05	nd
o-Xylene	0.05	nd
m&p-Xylenes	0.05	nd

(I) RESULTS

Report N°: M131931G

Matrix: Passive Sampler

Method: MA-30.AIR.03 Total Petroleum Hydrocarbons

Sample units are expressed in µg total

	Leeder ID	2013023300	2013023301	2013023302	2013023303	2013023304
	Client ID	Cabonne Trip Blank 1305-AN-LU-002	Cabonne Field Blank 1305-AN-LU-003	Method	Method	Method
Analyte Name	PQL			Blank	Blank	Blank
C6-C10	5	nd	nd	nd	nd	nd
>C10-C16	5	nd	nd	nd	nd	nd

Matrix: Passive Sampler

Method: MA-30.AIR.03 Total Petroleum Hydrocarbons

Sample units are expressed in µg total

	Leeder ID	2013023305
	Client ID	Method
Analyte Name	PQL	Blank
C6-C10	5	nd
>C10-C16	5	nd

(II) QUALITY CONTROL

Report N°: M131931G

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Quality Control Results are expressed in Percent Recovery of expected result

	Leeder ID	2013023306	2013023307	2013023308	2013023309	2013023310
	Client ID	Method	Method	Method	Method	Method
Analyte Name	PQL	Spike	Spike Dup	Spike	Spike Dup	Spike
Benzene		89	96	94	95	95
2,4-dimethylpentane		117	121	112	111	110
Ethylbenzene		89	94	94	93	96
Isopropanol		112	109	105	110	111

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Quality Control Results are expressed in Percent Recovery of expected result

	Leeder ID	2013023306	2013023307	2013023308	2013023309	2013023310
	Client ID	Method	Method	Method	Method	Method
Analyte Name	PQL	Spike	Spike Dup	Spike	Spike Dup	Spike
2-Methyl butane		114	114	105	108	105
2-Methylhexane		118	120	112	112	111
3-Methylhexane		117	121	112	112	111
n-Pentane		121	122	113	114	110
Toluene		89	95	95	94	95
o-Xylene		88	96	92	93	93
m&p-Xylenes		90	96	93	94	96

(II) QUALITY CONTROL

Report N°: M131931G

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Quality Control Results are expressed in Percent Recovery of expected result

	Leeder ID	2013023311	2013023312	2013023313
	Client ID	Method	Method	Method
Analyte Name	PQL	Spike Dup	Spike	Spike Dup
Benzene		102	110	112
dimethylpentane		108	87	86
Ethylbenzene		99	109	106
Isopropanol		111	118	121

Matrix: Passive Sampler

Method: MA-5.WL.05 Volatile Organics

Quality Control Results are expressed in Percent Recovery of expected result

	Leeder ID	2013023311	2013023312	2013023313
	Client ID	Method	Method	Method
Analyte Name	PQL	Spike Dup	Spike	Spike Dup
ethyl butane		102	81	79
2-Methylhexane		108	87	85
3-Methylhexane		107	87	86
n-Pentane		109	87	85
Toluene		99	107	104
o-Xylene		97	106	104
m&p-Xylenes		100	108	106

QUALIFIERS / NOTES FOR REPORTED RESULTS

PQL	Practical Quantitation Limit
is	Insufficient Sample to perform this analysis.
T	Tentative identification based on computer library search of mass spectra.
ND	Not Detected – The analyte was not detected above the reported PQL.
NC	Not calculated, Results below PQL
nr	Not Requested for analysis.
R	Rejected Result – results for this analysis failed QC checks.
SQ	Semi-Quantitative result – quantitation based on a generic response factor for this class of analyte.
IM	Inappropriate method of analysis for this compound
U	Unable to provide Quality Control data – high levels of compounds in sample interfered with analysis of QC results.
UF	Unable to provide Quality Control data- Surrogates failed QCchecks due to sample matrix effects
L	Analyte detected at a level above the linear response of calibration curve.
E	Estimated result. NATA accreditation does not cover estimated results.
C1	These compounds co-elute.
C2	These compounds co-elute.
CT	Elevated concentration. Results reported from carbon tube analysis
**	Sample shows non-petroleum hydrocarbon profile

SGS LEEDER CONSULTING

APPENDIX ONE.

CHAIN OF CUSTODY DOCUMENT

Passive Sample Collection

Unit 5, 18 Redland Drive
Mitcham VIC 3132
Ph: (03) 9874 1988 Fax: (03) 9874 1933

SGS

LEEDER CONSULTING

Project Manager: Rebecca Aaby
Collected by: Rebecca Aaby (signature) Reb Aaby
Company: Parsons Brinckerhoff **Email**: RAaby@pb.com.au
Address: Level 27, 680 George Street, GPO Box 5394
City: Sydney **State**: NSW **Post Code**: 2001
Phone: (02) 9272 5213

Project Info
Purchase Order Number:_____
Suburb & State: Cabonne LGA
Project Number: 2189303A
Project Name: EPA Derelict UPSS Pilot Program

Turn Around Time
Normal: √
Rapid:
Specify: (days)

Site Name: Cabonne Quality Control

Lab ID	Field Sample I.D. (Location)	Sampler I.D (WMS Code)	Date of Deployment	Time of Deployment	Date of Retrieval	Time of Retrieval	Analysis Required	Indoor Air	Outdoor Air	Workplace Monitoring	Other (soil vapour)
	Cabonne Trip Blank	1305-AN-LU-002	15-Aug-13		28-Aug-13		PB-EPA PSGS				√
	Cabonne Field Blank	1305-AN-LU-003	15-Aug-13		28-Aug-13		PB-EPA PSGS				√

Relinquished By: (Signature) Date/Time	Received by: (Signature) Date/Time	Air Temp and Weather Description:
RAaby Reb Aa 30/8/13	James Phillips 2/9/13 11:00	
Relinquished By: (Signature) Date/Time	Received by: (Signature) Date/Time	Notes:
Relinquished By: (Signature) Date/Time	Received by: (Signature) Date/Time	

TRAFFIC IMPACT ASSESSMENT

PROPOSED SERVICE STATION
(Incorporating a Convenience Store)

at
19-23 Gaskill Street
CANOWINDRA

DA 2019/0169

For

Canowindra Petroleum Pty Ltd

December 2019

Prepared by

Winning Traffic Solutions Pty Ltd
PO Box 4106 Denistone East NSW 2112
Tel: 61 2 9807 9962
Mob. 0411 484 014
Email: terry@winningtraffic.com.au
ABN: 74 091 818 021

TRAFFIC IMPACT ASSESSMENT

PROPOSED SERVICE STATION
(Incorporating a Convenience Store)
at
19-23 Gaskill Street
CANOWINDRA

1. *Introduction*

Winning Traffic Solutions Pty Ltd, an established consultancy in providing traffic engineering solutions and advice, has been engaged to assess the traffic impacts of the development of the subject site as a Service Station (incorporating a convenience store) located at 19-23 Gaskill Street, Canowindra and within the Cabonne Council administration boundaries (refer Figure 1).

Figure 1

It is understood the site is the subject of a Council's assessment of DA 2019/0169 and that regular communication has been exchanged between Council and the proponent relating to numerous issues of the proposal.

It is also understood that one of these issues requiring clarification is that raised by the community relating to vehicle access and pedestrian safety.

To this end Winning Traffic Solutions have been engaged to undertake an assessment of vehicle access and road user safety for the subject development.

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 Member of IPWEA Road Safety Panel, addressing the above issues as well as the operational aspects of the site accommodating heavy vehicle (17.2m articulated vehicle) access of the site.

2. Scope of Report

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

A desktop inspection and observations of the project was carried out where assessment was undertaken based on the tabled design. Assistance was obtained employing "Google Maps" in support of appreciating the road network and environment of the surrounding precinct.

In addition, the following Guides and standards were applied:

- 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;
- Austroads Guide To Road Design – Part 4A; Unsignalised and Signalised Intersections;
- RMS Guidelines For Road Safety Audit Practices; and
- NSW Road Rules

The above have been applied to the site access and parking proposed and this report 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.

3. ***The Site***

For the purpose of description, Gaskill Street is orientated in an east/west direction past the subject site (refer Figure 2).

The site is located on the southern side and is identified as No.19-23 Gaskill Street Canowindra. It is understood Gaskill Street is a Council administered road and that the subject site operated as a service station under previous use approval.

The site is located within a predominantly residential area with commercial development further to the west and accommodating the Canowindra CBD (refer Figure 2).

Figure 2

In the vicinity of the site Gaskill Street is bitumen sealed with kerb and gutter, (accommodates restricted access of northern footway), concrete footpath (northern side only), speed regulated to 50 km/hr, operates as a two-lane two-way road and traffic calmed with edgeline markings accommodating unrestricted kerbside parking.

Figure 3

It is noted that signposting of the 10Tonne Load Limit is employed only for westbound traffic approaching from the east in Gaskill Street from Tilga Street B81 (an RMS classified road MR No. 56 - Lachlan Valley Way). No other load limit restrictions could be identified within the road network restricting vehicle access approaching from the north or west. This issue is discussed below.

4. Traffic Flow & Evaluation of Traffic Generation by the Proposed Development

Traffic volume count information provided was undertaken in Sept/Oct 2010, north of Ryall Street and for purpose of assessment can only be considered indicative road usage as change of traffic demand may have increased, though patterns may not have changed.

From that information it is noted that, generally, peak hour volumes occurred during the middle of the day and only exceeded 100 vph (two-way flow) between 0800 to 1800 hours. This is understandable given the traffic counts were taken at the peripheral of the Canowindra CBD.

It is considered the greatest impact of generated traffic of the proposed development will be during the morning and afternoon peak periods where the higher (commuter) traffic demand will mix with traffic of the proposed development.

The RMS "Guide To Traffic Generation Developments" includes information for traffic generation of service stations with convenience store as:

- Evening peak hour vehicle trips = 0.66 A(F)
- Average vehicle trips (9 pm-12 midnight) = 0.6 A(F).
    - Where A(F) = gross floor area of convenience store (m^2).

On the basis of the above and given the GFA of convenience store is $155m^2$ traffic generation (two way trips) of the proposed development equates to:

- Evening two way vehicle trips peak hour = 0.66 x 155 = 102 vtph
- Average two way vehicle trips 9pm- 12 midnight = 0.6 x 155 = 93 vtph

It has been established for normal service stations alongside arterial roads that about 75% of patronage comes from the adjacent road with induced traffic from other locations and roads representing about 25% of patronage.

It is offered that should 50% of patronage come from passing trade, given the location of the site on a local road, then induced traffic of the site equates to approximately 50 vehicle trips per hour (vtph), during PM peak flow.

From a review of the site it is assumed the current Level Of Service (LoS) along Gaskill Street is "A" or close enough to and an additional 50 vtph would not impact that current LoS.

5. Evaluation of Vehicle Access and Movements Within the Site

Firstly, it has been established that Gaskill Street is restricted to a 10 Tonne Load Limit – from the east. No other heavy vehicle restrictions can be identified in the adjoining road network, including the approach from the west.

It is understood Council raised this issue on the basis of community objections received. In the RMS Heavy Vehicle Drivers Handbook it is stated:

> *"You must not use any road with a load limit sign if the total weight of your vehicle is the same as, or heavier than, the weight shown on the sign.*
> *You may use a light traffic road when that road is your destination for a pick-up or delivery and there is no alternative route."*

On the basis of the above it is offered that heavy vehicles over 10 Tonne, (i.e an articulated 17.2m long petrol tanker) would need to access the site from the west.

It is assumed tanker deliveries to the subject site would be generated from fuel distribution centres either from Cowra (in the south) or Orange (in the north) travelling via B81 (Lachlan Valley Way) and Tilga Street, Canowindra.

Given the nature of the road network (condition, width and amenity) to approach the site from Tilga Street, vehicles will need to turn into Blatchford Street then to Ryall Street to access Gaskill Street. Exiting the site these vehicles turn right from the site to travel east and access Tilga Street via Gaskill Street. It is assumed this is existing access for "over mass" vehicles accessing commercial premises west of the subject site.

Deliveries to the site are proposed 2/3 petrol tanker deliveries per week. The impact of such activity is considered negligible to the existing road network amenity. If it is considered necessary delivery times can be arranged outside of peak or major vehicle flow times (i.e. 1800 hours to 0800 hours).

It is understood the use of small petrol fueling trucks would be uneconomical for the business and this would also result in increased deliveries which is an unnecessary increase in traffic movements.

Road user safety has been duly considered in that adequate sight lines are available at the access points of the adjoining road network, commensurate with the signposted speed of the road and commensurate with required design standards.

In the vicinity of the site Gaskill Street is bitumen sealed with kerb and gutter, (accommodates restricted access of northern footway), concrete footpath (northern side only), speed regulated to 50 km/hr, operates as a two-lane two-way road and traffic calmed with edgeline markings accommodating unrestricted kerbside parking.

In Gaskill Street at the driveway access points of the site there are good vehicle/vehicle and vehicle/pedestrian mutual sight lines compliant with AS 2890.1 Off-street Car Parking and relevant standards to ensure road user safety (refer Appendix 1).

Internal to the site vehicle access and parking has been applied in accordance with AS 2809.1 and is discussed below.

Access of articulated petrol tanker (17.2 long) is demonstrated by swept path analysis (refer Appendix 2).

It is considered that should a heavy vehicle, having just left the site and accelerating to speed, would not compromise road user safety due to the configuration of the road, overall low vehicle speeds and ample site lines to the exiting vehicle.

6. Parking

The proposed sales building/convenience store component for the Service Station proposes a GFA of 111m^2 and two (2) staff members at any one time.

Council parking rates for service station/convenience store could not be identified thus the RMS "Guide to Traffic Generating Developments" has been applied to determine car parking requirements

Schedule of Parking Standards (RMS) Table 5.3

Land Use	Car Parking Requirement
Service Station/ Convenience Stores	5 spaces per 100m^2 GFA of convenience store.

The proposed sales building/convenience store component for the Service Station proposes a GFA of 111m^2 and two (2) staff members at any one time.

On the basis of the above the number of car parking spaces required for the proposed development is assessed as follows:

Staff members = 2 spaces

Sales Centre/Convenience store = 111m^2 = 7 spaces

In total **seven (7) car parking spaces** are required to comply with the above.

The submitted development accommodating a Service Station (incorporating a convenience store) proposes the following:

- Car parking (including disabled) = 7 spaces
- Car parking (spaces available at pumps) = 4 spaces
- Delivery Bay (accommodating 8.8m MRV Service Vehicle) = 1 space

In total, the submitted proposed development as a described above accommodates **twelve (12) car parking spaces** and accommodating 17.2m articulated vehicle access at the refueling pumps.

The designated areas for parking activities servicing the convenience store, other than refueling pumps, are compliant with AS 2890.1 and 2890.6 Off-street parking for people with disabilities.

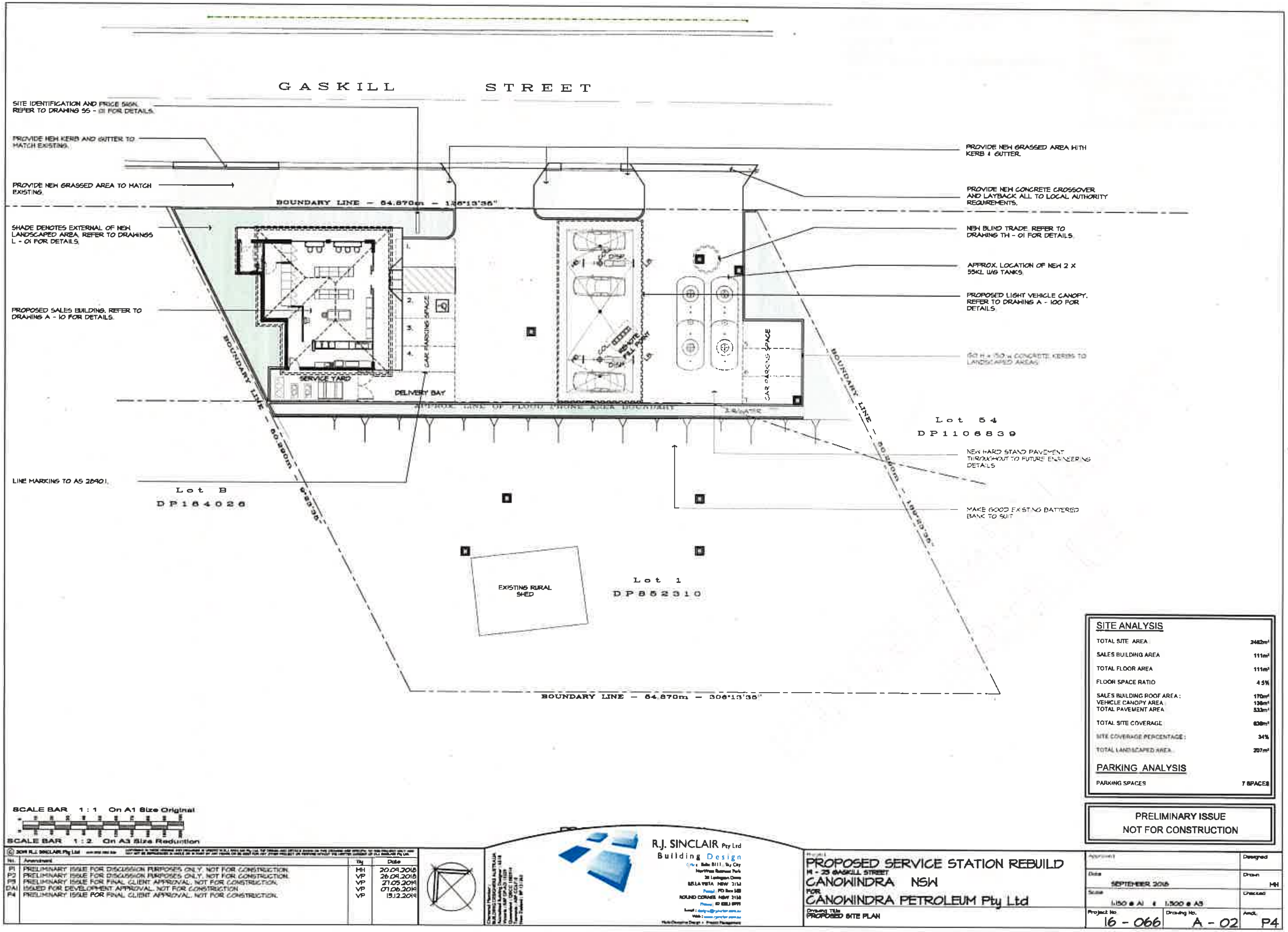
The proposed parking provisions for the submitted development and the whole of site operation is therefore considered appropriate.

7. Conclusion

On the basis of this submission, the assessment undertaken of the traffic and parking impacts and the assumptions and calculations made in determining those impacts are considered valid. In addition, assessment of vehicle access and road user safety for the subject development did not expose any high risk operational issues that need to be addressed.

Therefore, it is considered the proposed development of the subject site as a Service Station (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 of the site shown in the submitted plans.

APPENDIX 1


GASKILL STREET
SITE IDENTIFICATION AND PRICE SIGN. REFER TO DRAWING SS - 01 FOR DETAILS.
PROVIDE NEW KERB AND GUTTER TO MATCH EXISTING.
PROVIDE NEW GRASSED AREA TO MATCH EXISTING.
SHADE DENOTES EXTERNAL OF NEW LANDSCAPED AREA. REFER TO DRAWINGS L - 01 FOR DETAILS.
PROPOSED SALES BUILDING. REFER TO DRAWING A - 10 FOR DETAILS.
LINE MARKING TO AS 2890.1.
PROVIDE NEW GRASSED AREA WITH KERB & GUTTER.
PROVIDE NEW CONCRETE CROSSOVER AND LAYBACK ALL TO LOCAL AUTHORITY REQUIREMENTS.
NEW BLIND TRADE. REFER TO DRAWING TH - 01 FOR DETAILS.
APPROX. LOCATION OF NEW 2 X 55KL U/G TANKS.
PROPOSED LIGHT VEHICLE CANOPY. REFER TO DRAWING A - 100 FOR DETAILS.
NEW HARD STAND PAVEMENT THROUGHOUT TO FUTURE ENGINEERING DETAILS
MAKE GOOD EXISTING BATTERED BANK TO SUIT
BOUNDARY LINE - 64.870m - 126°13'35"
BOUNDARY LINE - 60.290m - 9°23'35"
BOUNDARY LINE - 60.290m - 189°23'35"
BOUNDARY LINE - 64.870m - 306°13'35"
SERVICE YARD
DELIVERY BAY
CAR PARKING SPACE
REMOTE FILL POINT
Lot B
DP184026
Lot 54
DP1108839
Lot 1
DP852310
EXISTING RURAL SHED
SITE ANALYSIS
TOTAL SITE AREA 2462m²
SALES BUILDING AREA 111m²
TOTAL FLOOR AREA 111m²
FLOOR SPACE RATIO 4.5%
SALES BUILDING ROOF AREA: 170m²
VEHICLE CANOPY AREA 136m²
TOTAL PAVEMENT AREA 533m²
TOTAL SITE COVERAGE 839m²
SITE COVERAGE PERCENTAGE: 34%
TOTAL LANDSCAPED AREA 207m²
PARKING ANALYSIS
PARKING SPACES 7 SPACES
PRELIMINARY ISSUE
NOT FOR CONSTRUCTION
SCALE BAR 1:1 On A1 Size Original
SCALE BAR 1:2 On A3 Size Reduction
P1 PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION. MH 20.04.2018
P2 PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION. VP 26.04.2018
P3 PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION. VP 21.05.2019
DA1 ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION. VP 07.06.2019
P4 PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION. VP 13.12.2019
R.J. SINCLAIR Pty Ltd
Building Design
PROPOSED SERVICE STATION REBUILD
11 - 25 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd
Drawing Title PROPOSED SITE PLAN
Date SEPTEMBER 2018
Scale 1:150 @ A1 & 1:300 @ A3
Drawn MH
Project No. 16 - 066
Drawing No. A - 02
Amd. P4

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

OSED SERVICE STATION REBUILD
ALL STREET
NINDRA NSW
NINDRA PETROLEUM Pty Ltd
SITE PLAN

Approved		Designed
Date: SEPTEMBER 2016		Drawn: TM
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Project No. 16 - 066	Drawing No. A - 03	Issue P4

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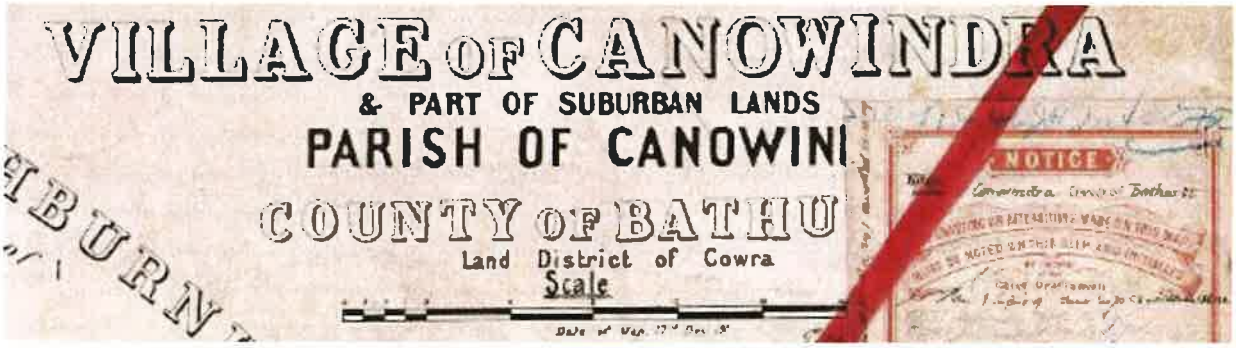
Planning / Heritage / Development

HERITAGE IMPACT STATEMENT



19 - 23 Gaskill St Canowindra

June 2019

CONTENTS

LIST OF FIGURES

METHODOLOGY

The report has been prepared within the framework required by the NSW Heritage Manual, produced by the then Department of Urban Affairs and Planning and the Heritage Office, New South Wales. The process has been guided by:

- Australia ICOMOS, The Burra Charter (The Australia ICOMOS Charter for Places of Cultural Significance) 2013;
- NSW Heritage Office, Assessing Heritage Significance, 2001; and
- NSW Heritage Manual, 1996. (NB There have been major amendments to the Heritage Act and the manual is continually being replaced by new guidelines).

Where possible primary or academic sources have been used to compose and corroborate the history with all information referenced. Site visits were conducted in January and March 2019 to record and photograph various elements of the site.

REPORT AUTHORS

This report was jointly written by Ian Rufus, Bachelor Town Planning, Master Heritage Conservation, Consultant Planner and Stella Rufus, Bachelor Fine Arts, Research Manager, Lithgow and Warrimoo offices. The plans were provided by R.J. Sinclair Pty Ltd.

EXECUTIVE SUMMARY

PROPOSAL

This report accompanies a Development Application to Cabonne Council for the construction of a new service station. The proposal site is a part of the Gaskill Streetscape within the Canowindra Urban Conservation Area.

STATEMENT OF SIGNIFICANCE

The single storey building at 19 - 23 Gaskill St, Canowindra was formerly a service station which is now defunct and dilapidated.

The existing building was most likely constructed in the 1950's. The modest building is made of fibro with a glazed shopfront and a metal awning and poles. The building is damaged and vandalised including broken windows, some of which are boarded up. The former service station is also severely weathered and has signs of wear and tear associated with lack of long term maintenance. The structural and non-structural external timberwork and eaves are weathered and damaged. The building has suffered extensive termite damage.

Unsurprisingly, given its former use, there is no landscape to speak of and the surrounding is in poor condition with many weeds and some rubbish.

The subject building has little significance at best especially when compared with some of the heritage listed buildings nearby. It is not heritage listed, although it is a part of the Gaskill Streetscape within the Canowindra Urban Conservation Area and has many listed buildings nearby, however none of these are close enough to be impacted by the subject site.

STATEMENT OF HERITAGE IMPACT

The new building will have minimal impact on the significance of nearby heritage items. The listed heritage items in the vicinity of the site do not have curtilages extending onto the proposed development site. The proposal will not materially affect views or shading of the adjacent items. Therefore, the heritage items in the vicinity will not be detrimentally affected and do not warrant separate heritage investigation.

An archaeological report would not potentially reveal any useful information. The lack of significance of the site in terms of the previous activities on the lot mitigates against any significant information or relics being found.

The business nature and streetscape impact of the proposal will improve the general area and assist in the adjoining and nearby items being conserved into the future.

STATEMENT OF SIGNIFICANCE

1 INTRODUCTION

1.1 SITE LOCATION

The site is located on lot 1 DP852310 at 19 - 23 Gaskill St Canowindra. The site area is approximately 507.48m^2. Latitude: -33.63567 Longitude: 148.662008.

The site is a typical size and character for combined lots in this area of Canowindra as evidenced in the aerial photographs below.

Figure 1: Location of site and context within Canowindra

Figure 2: Detail view of site

2 ZONING

The proposed development is a permissible development with the zone. No critical habitat or item of environmental heritage is located on the site, however the site is a part of the Gaskill Streetscape within the Canowindra Urban Conservation Area. There are many heritage items nearby but none upon which the site has a direct impact.

The site is zoned as B2 Local Centre in LEP 2012. The land is shown to be Groundwater Vulnerable, and is below Council's adopted flood planning level. The site is not mapped as bush fire prone land.

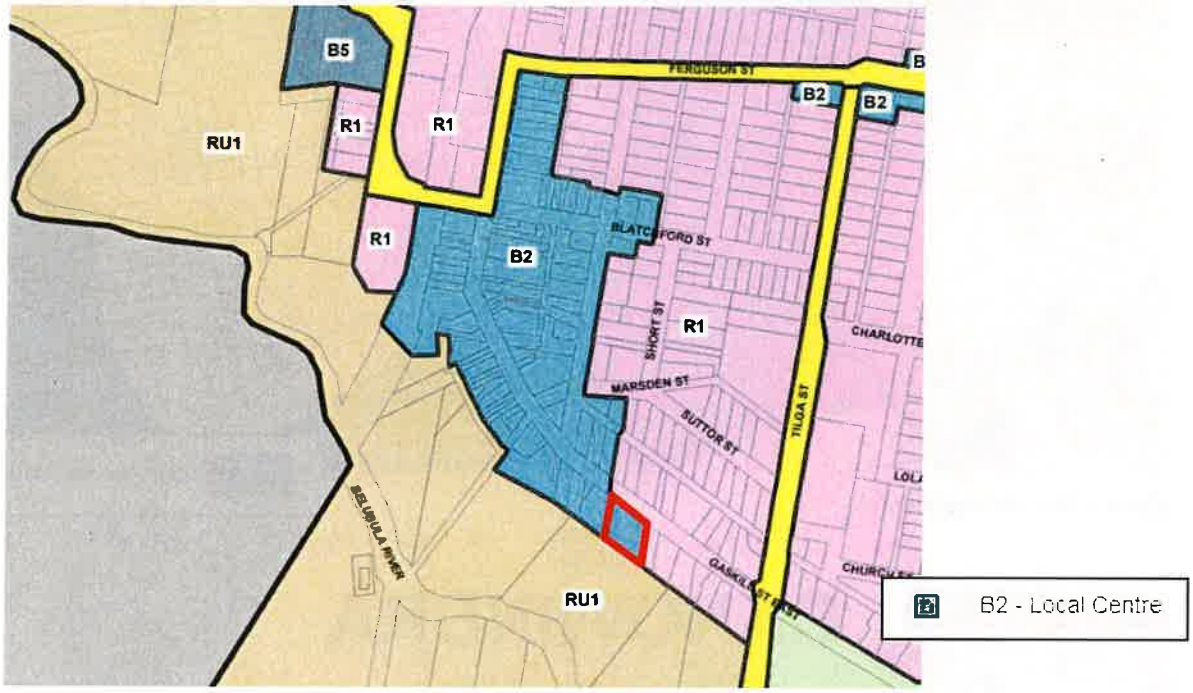


Figure 3: Zoning map

Figure 4: Heritage map

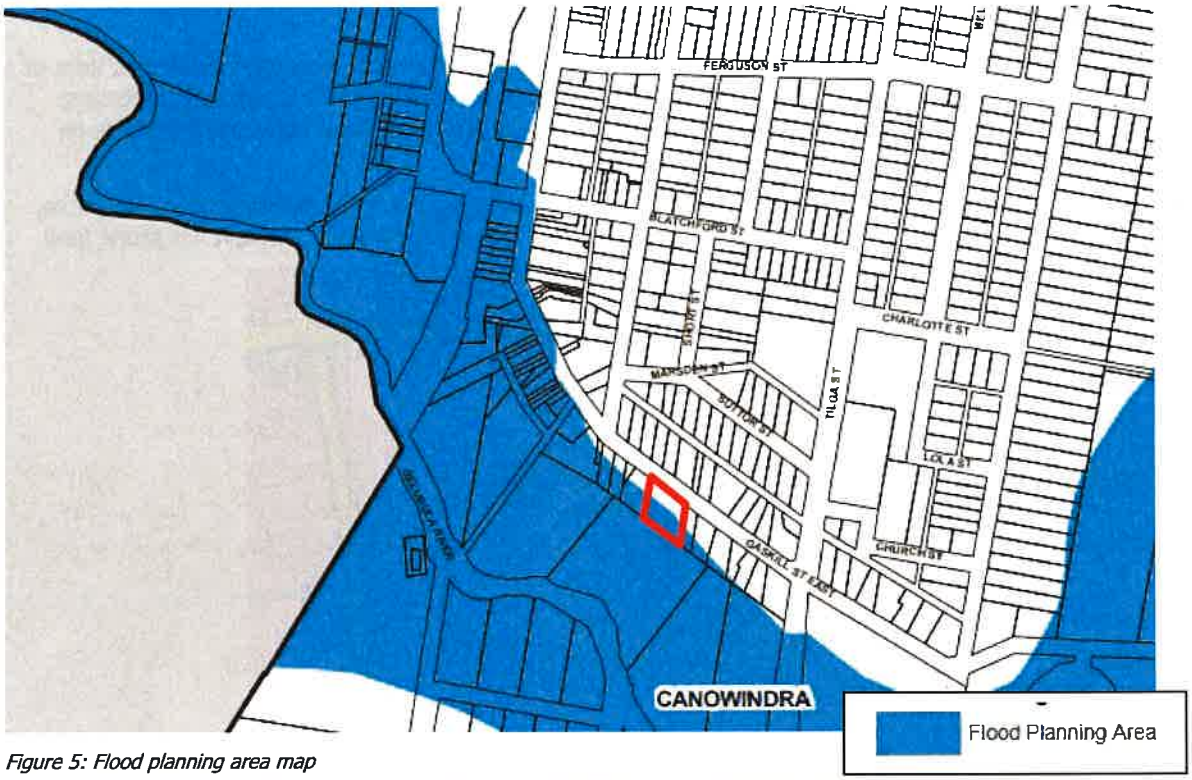


Figure 5: Flood planning area map

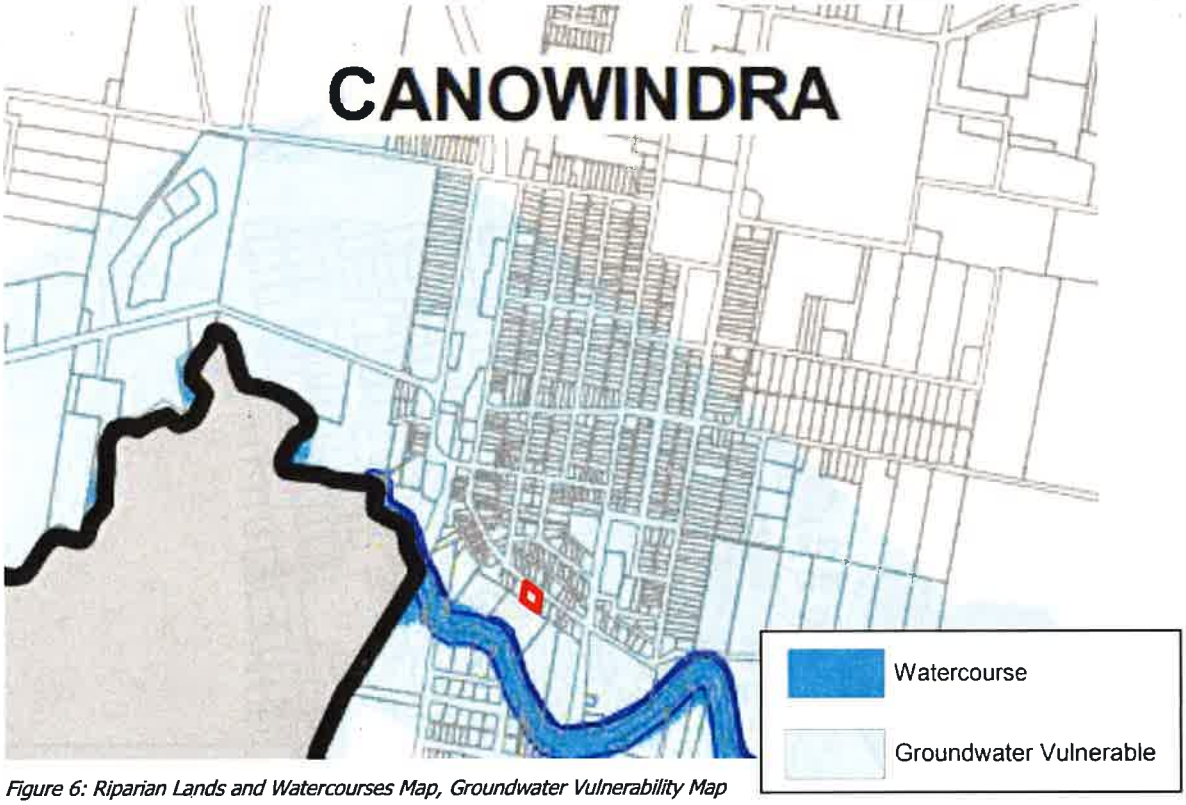


Figure 6: Riparian Lands and Watercourses Map, Groundwater Vulnerability Map

2.1 HERITAGE LISTINGS

There are a number of heritage registers for the different levels of national, state and local heritage items. The following databases were searched for listings:

2.1.1 National significance

National Heritage List

The National Heritage List has been established to list places of outstanding heritage significance to Australia. It includes natural, historic and Indigenous places that are of outstanding national heritage value to the Australian nation.

The National Heritage List is compiled and maintained by the Department of the Environment, Water, Heritage and the Arts and can be searched using the Australian Heritage Database[1]

Australian Heritage Database

The Australian Heritage Database contains information about more than 20,000 natural, historic and Indigenous places. The database includes:

- places in the World Heritage List
- places in the National Heritage List
- places in the Commonwealth Heritage list
- places in the Register of the National Estate
- places in the List of Overseas Places of Historic Significance to Australia
- places under consideration, or that may have been considered for, any one of these lists.

The site is a part of the Gaskill Streetscape within Canowindra Urban Conservation Area. Listed heritage items are located away from the proposal site.[2]

2.1.2 State significance

New South Wales State Heritage Register - Heritage Act 1977

The State Heritage Register is a list of places and objects of particular importance to the people of NSW. A place or object is state significant if it is important for the whole of NSW. The register lists a diverse range of over 1,500 items, in both private and public ownership. To be listed, an item must be significant for the whole of NSW.

Some places and items may not reach the threshold for listing on the State Heritage Register but may be of significance locally.

2.1.3 Local Significance

The site itself is not listed as significant in the 2015 LEP, yet there are many heritage items nearby.[3]

2.1.4 Cabonne Council heritage[4]

Item name: **Gaskill Streetscape**
Item number: -
Location: **Gaskill Street, Canowindra, Cabonne NSW 2804**
Assessed significance: **Local**
Statement of Significance:

The Canowindra Urban Conservation Area, consisting of a length of Gaskill Street, is aesthetically highly important for the cohesiveness and consistency of the streetscape, created largely through the parapets, verandahs and awnings which predominate on so many of the buildings. Another major contributing factor is the several bends in this distinctively shaped street, these forming various enclosed vistas.

Reflecting Canowindra's prosperity during the early decades of the present century, the conservation area has historical significance.

[1] http://www.environment.gov.au/heritage/places/national/index.html
[2] http://www.environment.gov.au
[3] http://www.environment.gov.au
[4] Refer to Appendices for copy of Cabonne Council Heritage Inventory Sheet

The area is also significant as an example of a New South Wales rural town main street of the early twentieth century period. Included in the conservation area is a notable range of building forms and styles. Consisting of a major part of the commercial centre of this Central West town, the conservation area is of social significance to the local community.

The retention of verandah posts on many of the buildings fronting the main street is an important architectural detail which has a unifying effect on the street. The concentration of these attractive and potentially attractive buildings in conjunction with a narrow and curving street creates short vistas and enclosed units when viewed from either the middle or the extremities. The human scale of the townscape here is an unusual experience which merits protection.

Historical Notes (relevant extracts)

The conservation area is of further importance for representing a rural New South Wales town main street of the early twentieth century. Land grants were taken up in the area from 1829, and by the late 1840s a hotel, post office and a store had been established.

The Forbes gold rush, however, saw Canowindra by passed for a time. In 1863 the town was held up for three days by the Ben Hall Gang of bushrangers. Development again proceeded in the 1870s. The town's fourth hotel, the Junction (built by H Carman for Matthew Dwyer in 1890) survives today (in altered form) as Canowindra's oldest hotel building. The town developed partly as a private town on subdivided private land away from the official government village reserve. Canowindra was declared a village in 1885 and Crown Land subdivision followed.

Gaskill Street was officially surveyed in 1899, resulting in a realignment which necessitated alterations to a number of buildings fronting the street (and thus playing a role in the development of the present streetscape). The early 1900s were a boom time for the town, and this was accelerated by the arrival of the railway in 1910.

During the 1920s a number of new commercial buildings were erected and new facades were built onto some older buildings, adding to the predominance of parapets and awnings. Few new buildings were constructed after 1940, although there have been some.

The main street of Canowindra is notable for being curved, creating enclosed streetscapes and enhanced by a variety of well-preserved heritage buildings.

2.2 HERITAGE PLANNING CONTROL

The subject site is not heritage listed, however the site is a part of the Gaskill Streetscape within Canowindra Urban Conservation Area and there are many heritage items in this part of Canowindra as shown on the location map.

2.3 CABONNE LOCAL ENVIRONMENTAL PLAN 2012- HERITAGE CONSERVATION[5]

Items listed under the provisions of LEP 2012 are covered by the following provisions:

5.10 Heritage conservation

Note.

Heritage items (if any) are listed and described in Schedule 5. Heritage conservation areas (if any) are shown on the Heritage Map as well as being described in Schedule 5.

(1) Objectives

The objectives of this clause are as follows:

(a) to conserve the environmental heritage of Cabonne,

(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,

(c) to conserve archaeological sites,

(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

(2) Requirement for consent

Development consent is required for any of the following:

(a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):

(i) a heritage item,

(ii) an Aboriginal object,

(iii) a building, work, relic or tree within a heritage conservation area,

(b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,

(c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,

(d) disturbing or excavating

an Aboriginal place of heritage significance,

(e) erecting a building on land:

(i) on which a heritage item is located or that is within a heritage conservation area, or

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance

(f) subdividing land:

(i) on which a heritage item is located or that is within a heritage conservation area, or

[5] https://www.legislation.nsw.gov.au/#/view/EPI/2013/2/part5/cl5.10

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

(3) When consent not required

However, development consent under this clause is not required if:

(a) the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development:

(i) is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and

(ii) would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or

(b) the development is in a cemetery or burial ground and the proposed development:

(i) is the creation of a new grave or monument, or excavation or disturbance of land for the purpose of conserving or repairing monuments or grave markers, and

(ii) would not cause disturbance to human remains, relics, Aboriginal objects in the form of grave goods, or to an Aboriginal place of heritage significance, or

(c) the development is limited to the removal of a tree or other vegetation that the Council is satisfied is a risk to human life or property, or

(d) the development is exempt development.

(4) Effect of proposed development on heritage significance

The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).

(5) Heritage assessment

The consent authority may, before granting consent to any development:

(a) on land on which a heritage item is located, or

(b) on land that is within a heritage conservation area, or

(c) on land that is within the vicinity of land referred to in paragraph (a) or (b),

require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.

(6) Heritage conservation management plans

The consent authority may require, after considering the heritage significance of a heritage item and the extent of change proposed to it, the submission of a heritage conservation management plan before granting consent under this clause.

(7) Archaeological sites

The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the Heritage Act 1977applies):

(a) notify the Heritage Council of its intention to grant consent, and

(b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

(8) Aboriginal places of heritage significance

The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:

(a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and

(b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.

(9) Demolition of nominated State heritage items

The consent authority must, before granting consent under this clause for the demolition of a nominated State heritage item:

(a) notify the Heritage Council about the application, and

(b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

(10) Conservation incentives

The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by this Plan, if the consent authority is satisfied that:

(a) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and

(b) the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and

(c) the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and

(d) the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance, and

(e) the proposed development would not have any significant adverse effect on the amenity of the surrounding area.

Comment:

This report will address and consider all the issues above for a development in a Conservation Area and in the vicinity of a heritage item, given the NSW Heritage requirements of a Heritage Impact Statement.

2.4 PARISH MAPS

The site is located on Lot 1 DP852310 and according to the parish maps was part of the Parish of Collett, County of Ashburnham. The land was originally part of a 160 acre lot allocated to J.S. Rodd according to the 1892 town map. It is also shown in the town map of Canowindra, Village of Canowindra County of Bathurst.

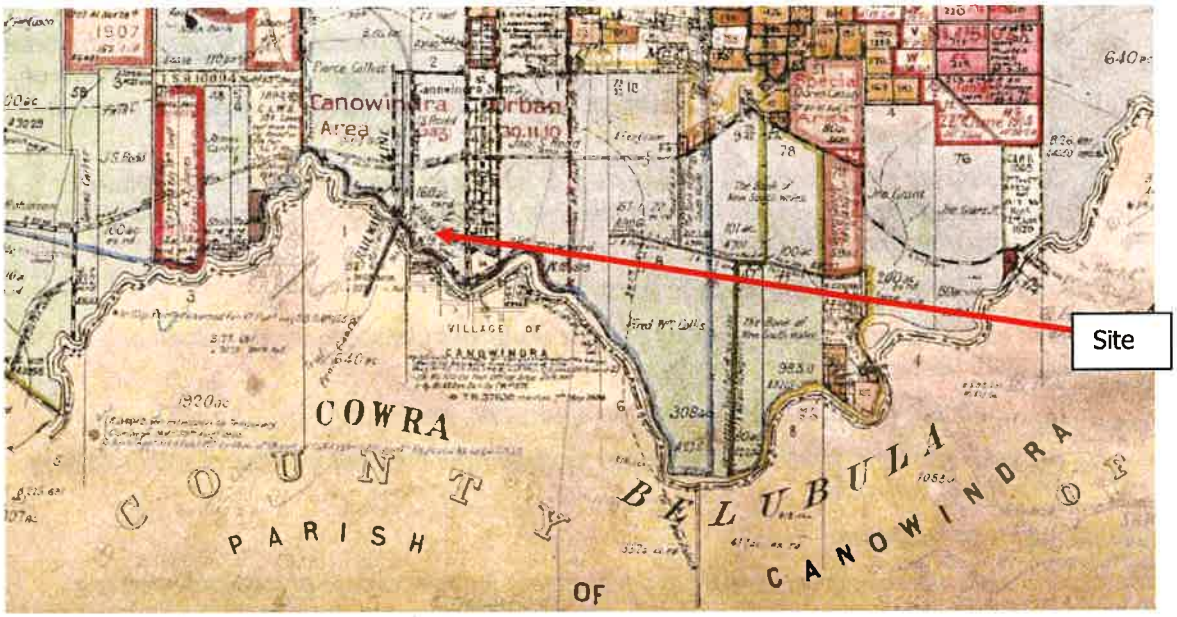


Figure 7: View of site in 1892 Collett parish map[6]

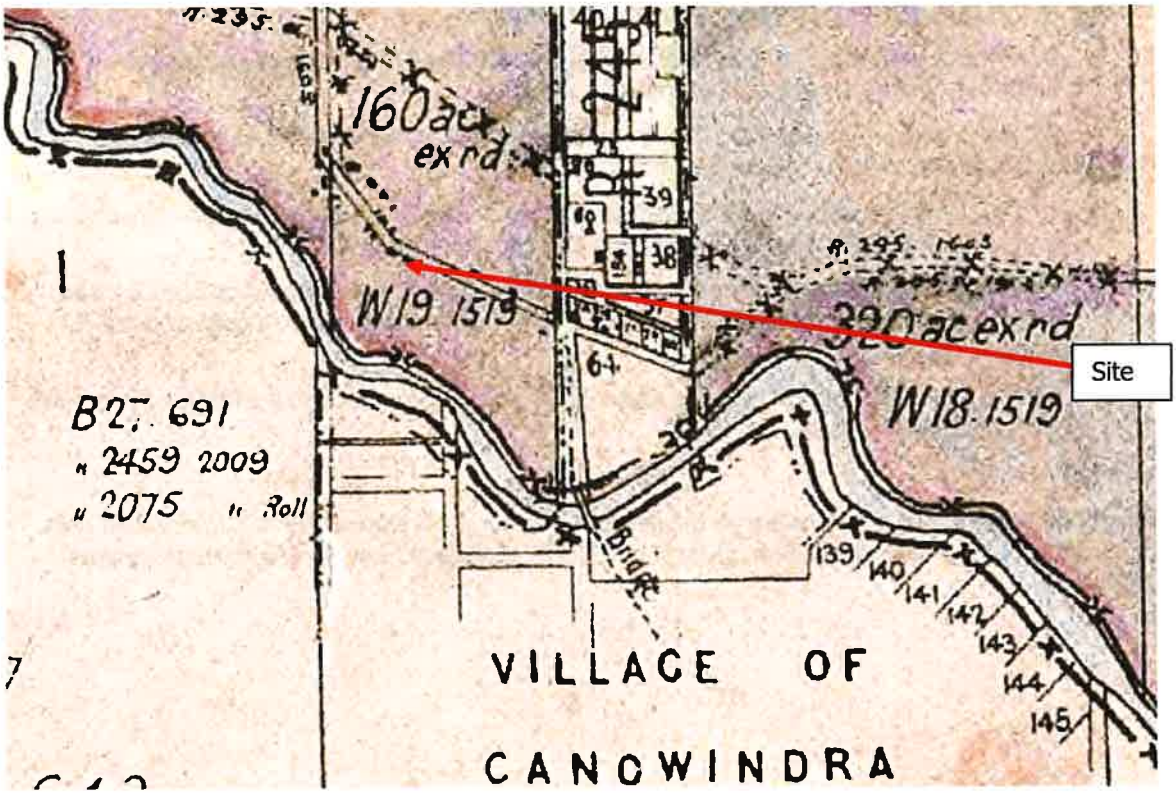


Figure 8: Detailed view of site in 1892 parish map[7]

[6] Land & Property Information website: http://images.maps.nsw.gov.au/pixel.htm# File number: 14830701.jp2
[7] File number: 14830701.jp2

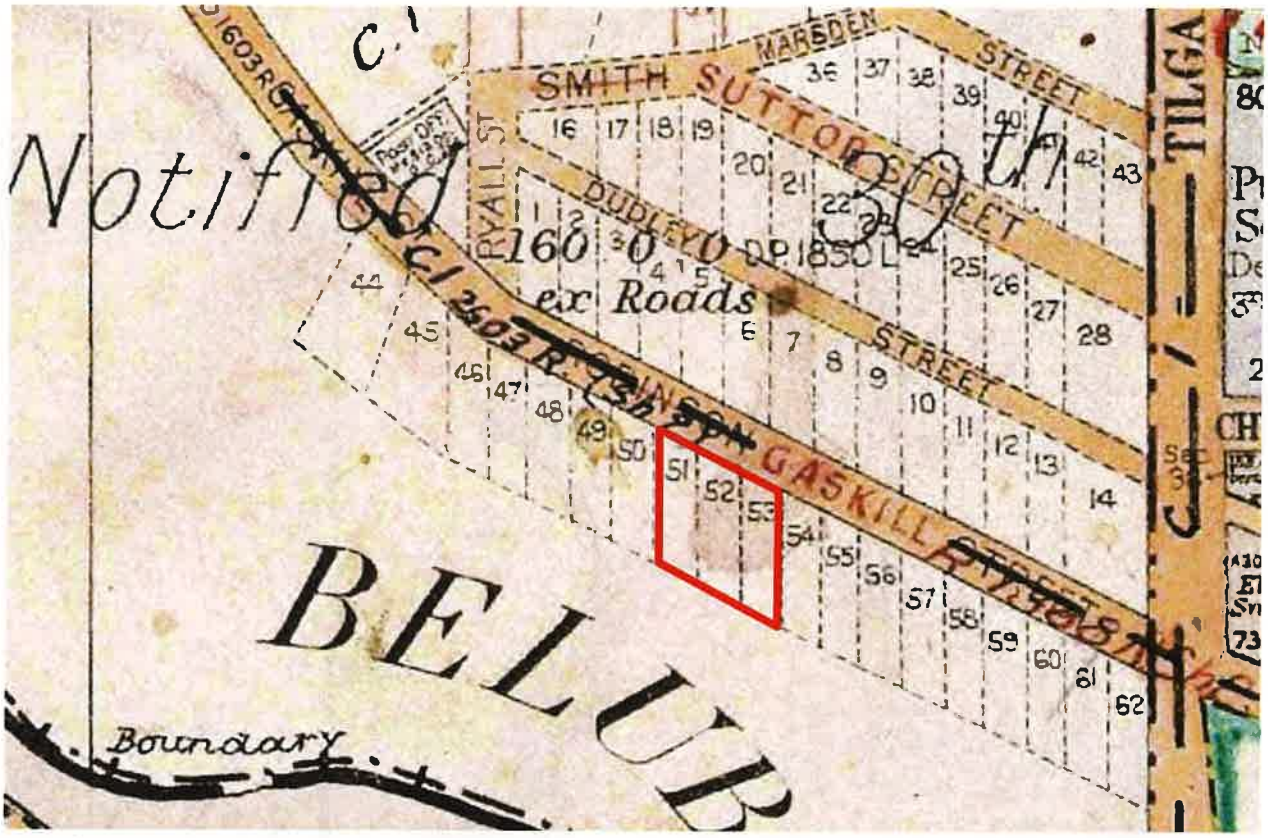


Figure 9: Detailed view of site in 1909 parish map[8]

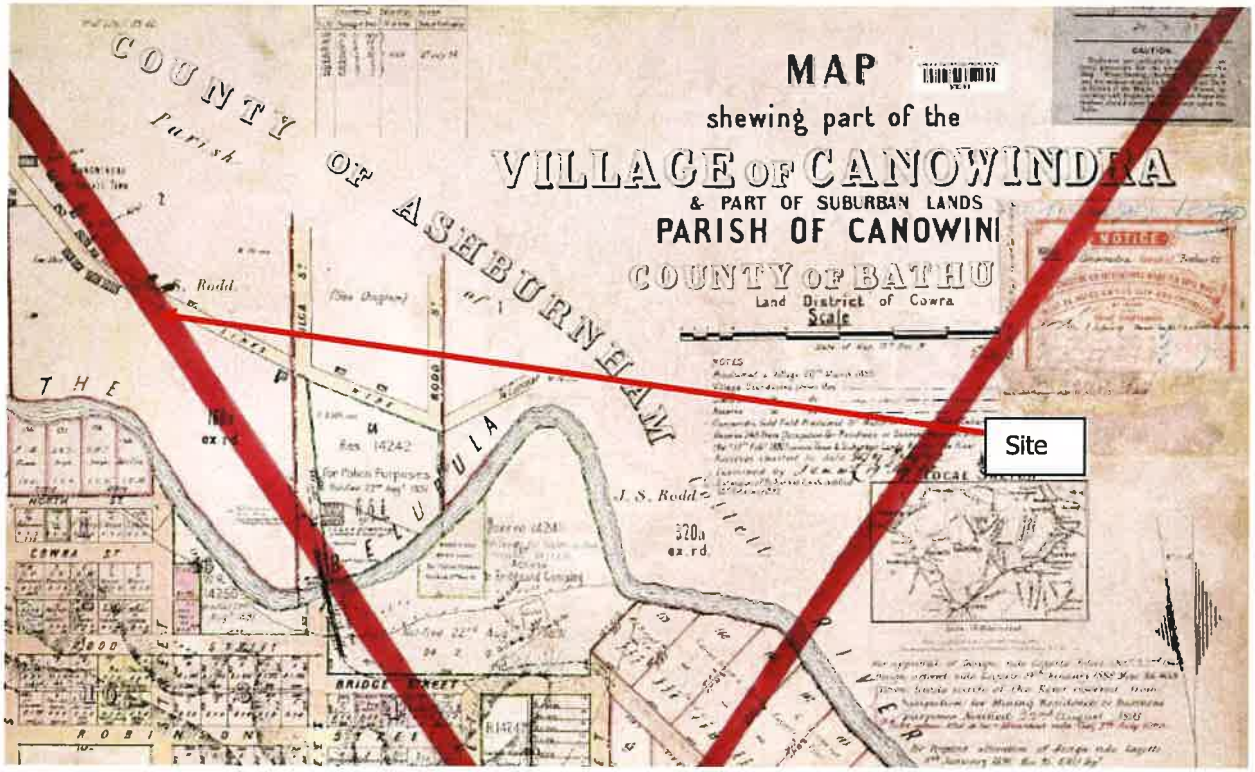


Figure 10: View of site in 1921 Canowindra town map[9]

[8] File number: 14825901.jp2
[9] File number: 11548001.jp2

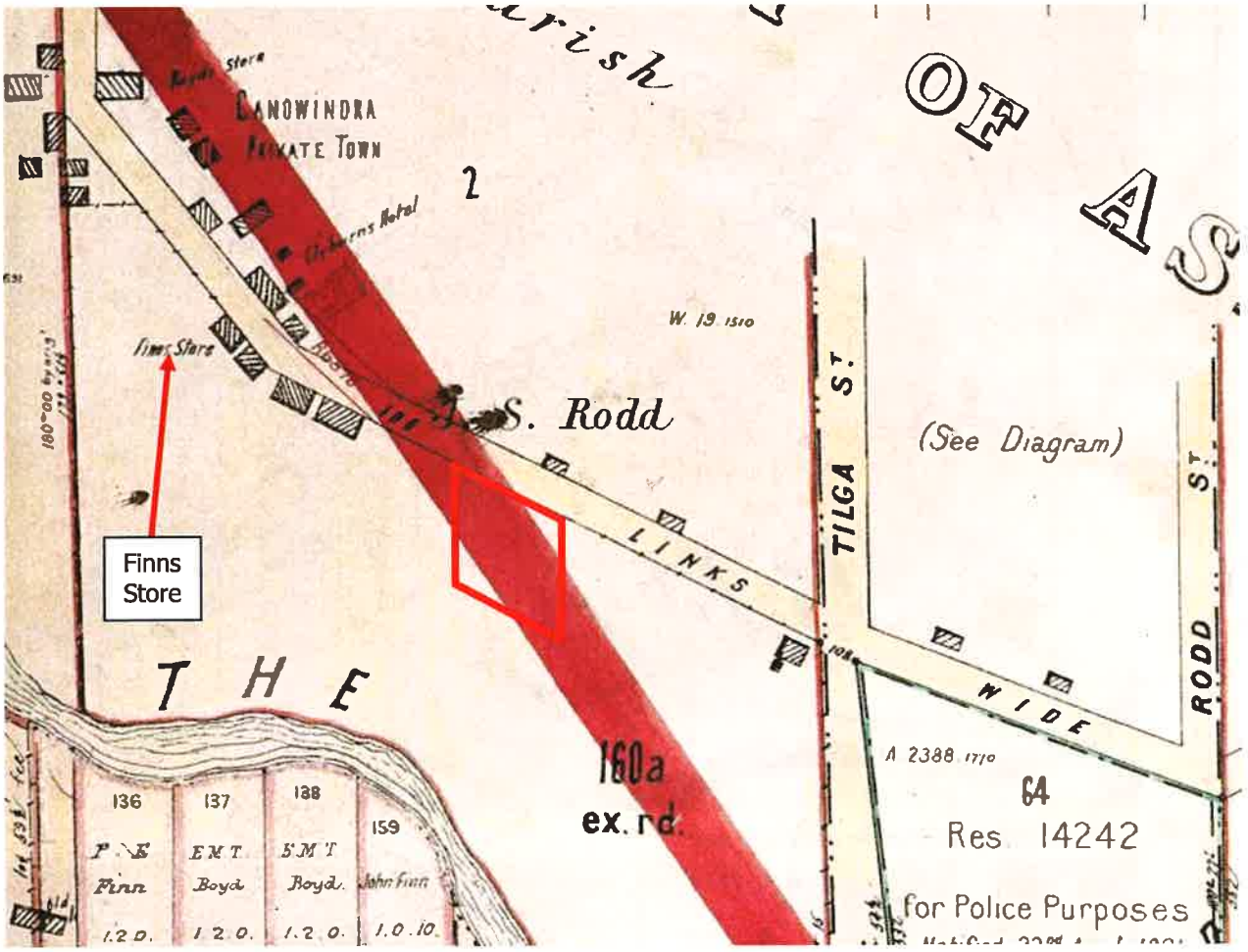


Figure 11: Detailed view of site in 1921 Canowindra town map[10]

[10] File number: 11548001.jp2

2.5 PHOTOGRAPHIC EVIDENCE

There are no known photographs of the subject site.

Below are extracts from the State Heritage Inventory listing for the Gaskill Streetscape, explaining the history of Canowindra in regard to Gaskill St:

> *...Land grants were taken up in the area from 1829, and by the late 1840s a hotel, post office and a store had been established.*
>
> *Development again proceeded in the 1870s. The town's fourth hotel, the Junction (built by H Carman for Matthew Dwyer in 1890) survives today (in altered form) as Canowindra's oldest hotel building.*
>
> *Gaskill Street was officially surveyed in 1899, resulting in a realignment which necessitated alterations to a number of buildings fronting the street (and thus playing a role in the development of the present streetscape). The early 1900s were a boom time for the town, and this was accelerated by the arrival of the railway in 1910.*
>
> *During the 1920s a number of new commercial buildings were erected and new facades were built onto some older buildings, adding to the predominance of parapets and awnings. Few new buildings were constructed after 1940, although there have been some.*
>
> *The main street of Canowindra is notable for being curved, creating enclosed streetscapes and enhanced by a variety of well-preserved heritage buildings.*

However not in this area, while Junction Hotel is opposite further up the road.

Below are some historical photographs of other shop buildings in Gaskill St which show the character of the typical developments of this area of Canowindra.

Figure 12: Canowindra, N.S.W. - 1911[11]

[11] Aussie Mobs Flickr account: https://www.flickr.com/photos/70994841@N07/41134734955

Figure 13: Gaskill St, 05 Jul 1928[12]

Figure 14: McCormick-Deering W-30 tractors outside the Farmers & Graziers (F&G) Motor Garage at Canowindra, 1937[13]

[12] State Archives and Records Authority of NSW website: https://www.records.nsw.gov.au/image/549_a029_a029000064#
[13] Museum Victoria website: https://collections.museumvictoria.com.au/items/802824

Figure 15: Exterior of Canowindra Hotel under construction, c.1928[14]

Figure 16: Canowindra Post Office, 1930[15]

[14] Museum of Applied Arts and Sciences website: https://ma.as/374750
[15] National Archives of Australia website:
https://recordsearch.naa.gov.au/SearchNRetrieve/Interface/DetailsReports/PhotoDetail.aspx?Barcode=3037305

Figure 17: Canowindra Post Office, 1949[16]

While the description in the heritage inventory focusses on the post supported verandah section of Gaskell Street there are a number of later, more simple Art Deco detailed buildings generally on the edges of the Conservation Area.

[16] National Archives of Australia website:
https://recordsearch.naa.gov.au/SearchNRetrieve/Interface/DetailsReports/PhotoDetail.aspx?Barcode=3038010

2.6 ABORIGINAL SITES

According to the Aboriginal Heritage Information Management System search there are no Aboriginal sites or places on or near 19 - 23 Gaskill St Canowindra, as shown below:

A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

2.7 SUMMARY OF DOCUMENTARY EVIDENCE

There are no known photographs of the subject site. The photographs of the surrounding shops in the late 19th and early 20th century show the different styles of commercial shopfronts over time on Gaskill St.

Not surprisingly in such a disturbed environment there are no recorded aboriginal sites in the area.

3 PHYSICAL EVIDENCE

3.1 IDENTIFICATION & ANALYSIS OF EXISTING FABRIC

The single storey building at 19 - 23 Gaskill St, Canowindra was formerly a service station which is now dilapidated. The existing building was most likely constructed in the 1950's. The modest building is made of fibro with a glazed shopfront and a metal awning and poles. The building is damaged and vandalised including broken windows, some of which are boarded up. The former service station is also severely weathered and has signs of wear and tear associated with lack of long term maintenance. The structural and non-structural external timberwork and eaves are weathered and damaged.

Much of the timber in the building is severely termite affected, tapping on the doorframes for example easily causes punctures and tapping on the walls revealed the extent of the termite damage. During the site inspection the well experienced inspector noted concern about the current state of collapse. The photographs show the degree of the termite damage and general dilapidation of the building.

Unsurprisingly, given its former use, there is no landscape to speak of and the surrounding is in poor condition with some rubbish and many weeds, some of which are growing out of a shattered sewerage pipe.

Figure 18: Views of subject site from Gaskill St

Figure 19: Detailed view of shopfront of former service station, note boarded up windows & others which have been vandalised

Figure 20: Detailed view of weathered and water damaged timbers

Figure 21: Detailed views of weathered and water damaged cladding

Figure 22: View of broken window on northern elevation

Figure 23: View of east elevation of dilapidated former service station

Figure 24: View of west elevation of former service station and surrounding landscape

Figure 25: Detailed view of damaged cladding and timber, broken windows, gap between the ground level and concrete slab

Figure 26: Detailed view of damaged cladding and timber, broken windows and door is boarded up

Figure 27: Small adjacent enclosure

Figure 28: Detailed view of broken, boarded up windows

Figure 29: View of severely termite affected timber doorways

As an indication of structural damage under the sheeting, many doors do not open or close as the decayed structure has settled upon them.

Figure 30: Detailed views of severely termite affected timbers

Figure 31: Detailed view fallen timbers and termite detritus

Figure 32: View of former room with vandal damage, rubbish and general waste

Figure 33: View of former kitchen area with walls with holes from vandal damage, theft of fittings

Figure 34: Fallen cladding exposing termite nests and damage to structural materials

The large shed shed on the subject lot at first glance appears to be early with a round pole foundation structure. Inside though it is recent with sawn timber frame and space frame roof construction. The iron cladding is also recent.

Figure 35: Views of shed exterior

Figure 36: Views of shed foundations

Figure 37: View of shed subfloor

Figure 38: View of shed interior

Figure 39: Space frame roof construction

So while the foundations would appear earlier at first viewing, from the age of the timbers and concrete, it simply seems to be a relatively cheap, and more recent, means of keeping the building above flood level. The shed is unlikely to have any significance to the Conservation Area. In any event, it is to be retained.

Figure 40: Existing small trees at rear of existing building

The vegetation shown below basically environmental weeds probably fostered by the shattered sewer piping at rear of the building.

Figure 41: Environmental weeds growing out of shattered sewer piping at the rear of the building

Figure 42: Nearby property with a possible unconventional approach to flood protection

3.2 STREETSCAPE

The Canowindra Urban Conservation Area has the most delightful curved streetscape creating enclosed streetscapes and enhanced by a variety of well-preserved heritage buildings. Virtually all the original buildings are intact and few design aberrations. Although the subject site itself isn't listed, there are many close heritage items nearby.

There are many buildings with flat parapet details, generally on the outer edge of the business area. These buildings are most likely to be Inter War extensions of the town as the designs are more Art Deco in style. Inter War Art Deco was focussed on simplification with horizontal and vertical lines used in conjunction with geometric curves.

Figure 43: View of properties adjoining subject site

Figure 44: View of adjoining property at 25 Gaskill St and curved streetscape further north on Gaskill St

Figure 45: Panoramic view of interwar properties opposite the subject site

Figure 46: View of Interwar property opposite the subject site

Figure 47: View of Interwar properties opposite the subject site, looking south on Gaskill St

Figure 48: View of Late Victorian era commercial building at 27 Gaskill St, formerly Canowindra Motors

Figure 49: View of Art Deco property at 94 Gaskill St

Figure 50: View of modern house near the subject site at 15 Gaskill St

Figure 51: Views of service stations within Canowindra, however they are not within a conservation area

There are other service stations in the town, all appearing to be from the 1960s with later upgrades. From a traffic perspective as well as architectural they fall short of current requirements for parking loading and fuel delivery.

Below are views of likely Inter War buildings with flat parapets on and near Gaskill Street.

Figure 52: Views of likely Inter War buildings with flat parapets on and near Gaskill Street

Figure 53: Views of Inter War style buildings with flat parapets on Gaskill St

Figure 54: View of recent infill building with flat parapet on Gaskill St

Figure 55: Views of more recent buildings on Gaskill St

These buildings are more recent. The building to the left also fits neatly into an architectural history bridge between the historic part of the town and the 1960s library.

Note the predominance of red in the brickwork and also tiles which have been used as a cladding in a kind of Spanish Mission variant. This gives a vibrancy to the facades. Although maybe determined by local brickworks colours available, it is a recurring theme.

3.2.1 Heritage items nearby

Figure 56: View of Victorian Filigree style Junction Hotel on Gaskill St

While the oldest remaining hotel in the town, it seems to have severe structural problems to the verandah. Apart from that the extension on the right exhibit a more simplified extension.

Figure 57: View of commercial building at 27 Gaskill St, formerly Canowindra Motors

This building also is in need of maintenance, and may have lost an earlier post supported verandah.

3.3 SUMMARY OF PHYSICAL EVIDENCE

The existing building was most likely constructed in the 1950's. The modest building is made of fibro with a glazed shopfront and a metal awning and poles. The building is damaged and vandalised including broken windows, some of which are boarded up. The former service station is also severely weathered and has signs of wear and tear associated with lack of long term maintenance. The structural and non-structural external timberwork and eaves are weathered and damaged by age and termites. Unsurprisingly, given its former use and apparent length of time abandoned, there is no landscape to speak of and the surroundings are in poor condition.

4 ASSESSMENT OF CULTURAL SIGNIFICANCE

4.1 ASSESSMENT OF SIGNIFICANCE

Assessment of the site's significance is based on the following criteria and gradings.

NSW Heritage Assessment Criteria

Criterion (a)	An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area).
Criterion (b)	An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area).
Criterion (c)	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).
Criterion (d)	An item has a strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons.
Criterion (e)	An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area).
Criterion (f)	An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).
Criterion (g)	An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural or natural environments (or a class of the local area's cultural or natural places; or cultural or natural environments.)

Gradings of Significance

Grading	Justification	Status
Exceptional	Rare or outstanding item of local or State significance. High degree of intactness. Item can be interpreted relatively easily.	Fulfils criteria for local or State listing.
High	High degree of original fabric. Demonstrates a key element of the item's significance. Alterations do not detract from significance.	Fulfils criteria for local or State listing.
Moderate	Altered or modified elements. Elements with little heritage value, but which will contribute to the overall significance of the item.	Fulfils criteria for local or State listing.
Little	Alterations detract from significance. Difficult to interpret.	Does not fulfil criteria for local or State listing.
Intrusive	Damaging to the item's heritage significance.	Does not fulfil criteria for local or State listing.

The following tables assess the heritage significance of the property and its constituent elements based on the NSW criteria:

NSW Heritage Assessment Criterion	Significance	Grading	Reasons
Historical significance Criterion (a)	Intrusive	Little	This property is a typical post war style 1950's service station building of this era.
Historical association significance Criterion (b)	Intrusive	Little	Typical recent service station development.
Aesthetic significance Criterion (c)	Intrusive	Little	This building is a typical example of the post war 1950's style, its exterior and interior are in poor condition. It has a typical glazed shopfront with a canopy awning.
Social significance Criterion (d)	Intrusive	Little	It has only recent associations with the commercial nature of Canowindra over time.
Technical/ Research significance Criterion (e)	Intrusive	Little	This property has little potential to inform on the scientific and technological development of architecture and commercial development in Canowindra.
Rarity Criterion (f)	Intrusive	Little	The style of building and setting is common in Cabonne and in NSW generally.
Representat-iveness Criterion (g)	Intrusive	Little	This property is an example of a common type of building across New South Wales.

Figure 58: Assessment of property's heritage significance

Element	Level of significance
Overall building design	Little
Streetscape value	Little
Rear shed	Little

Figure 59: Heritage significance of elements of the property within the context of the overall site

4.2 STATEMENT OF SIGNIFICANCE

The single storey building at 19 - 23 Gaskill St, Canowindra was formerly a service station which is now defunct and dilapidated.

The existing building was most likely constructed in the 1950's. The modest building is made of fibro with a glazed shopfront and a metal awning and poles. The building is damaged and vandalised including broken windows, some of which are boarded up. The former service station is also severely weathered and has signs of wear and tear associated with lack of long term maintenance. The structural and non-structural external timberwork and eaves are weathered and damaged. The building has suffered extensive termite damage.

Unsurprisingly, given its former use, there is no landscape to speak of and the surrounding is in poor condition with many weeds and some rubbish.

The subject building has little significance at best especially when compared with some of the heritage listed buildings nearby. It is not heritage listed, although it is a part of the Gaskill Streetscape within the Canowindra Urban Conservation Area and has many listed buildings nearby, however none of these are close enough to be impacted by the subject site.

5 HERITAGE IMPACT ASSESSMENT

5.1 PROPOSAL

This proposal concerns the demolition of the existing dilapidated service station building, and the construction of a new service station. The shed at the rear will be retained. The service station will include a sales building, canopy, site identification sign, leader board and other associated signage.

5.1.1 Site plans

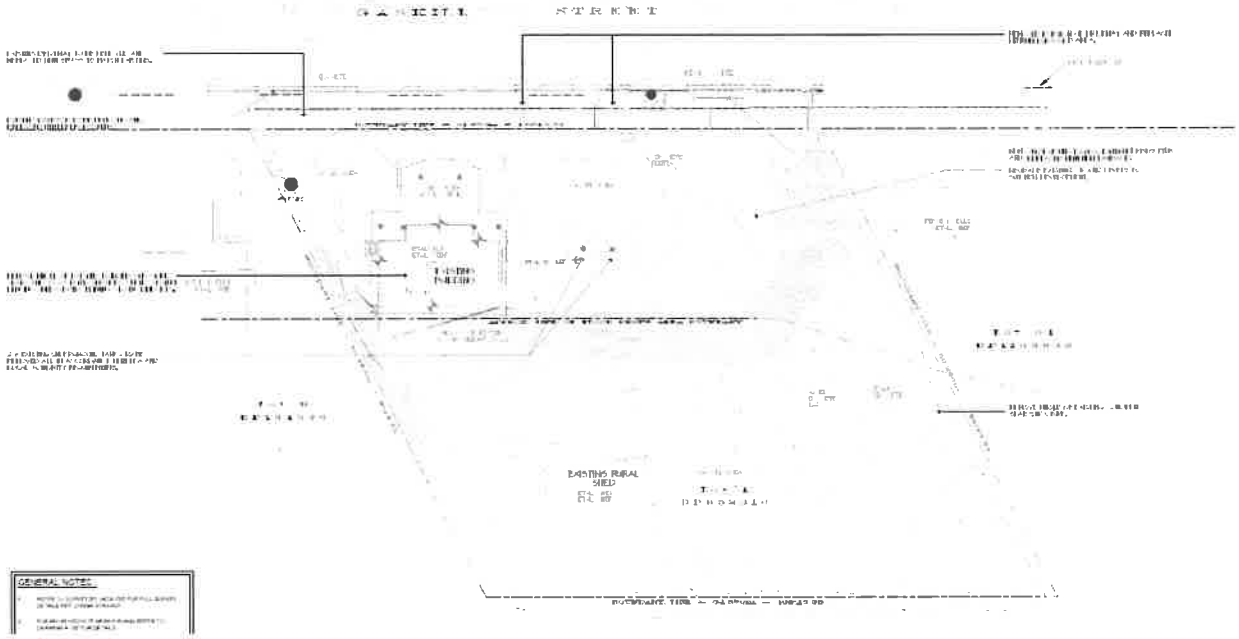


Figure 60: Existing site plan and demolition plan

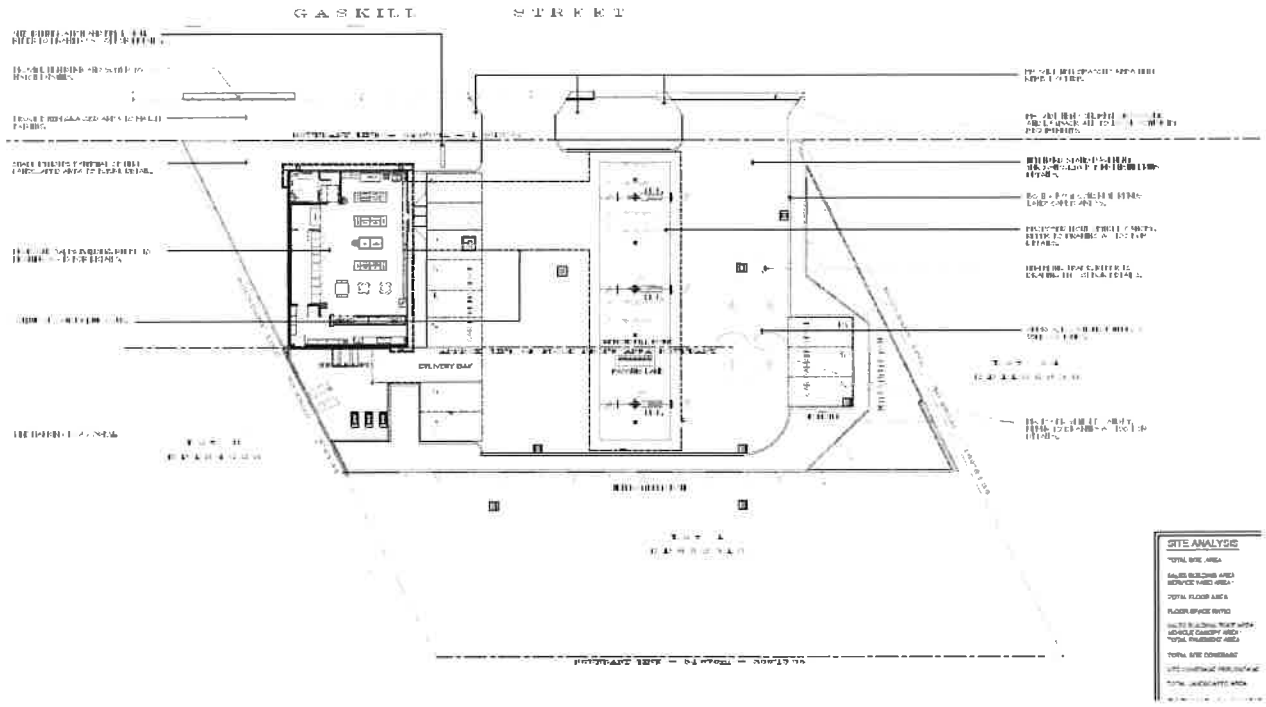


Figure 61: Site analysis plan

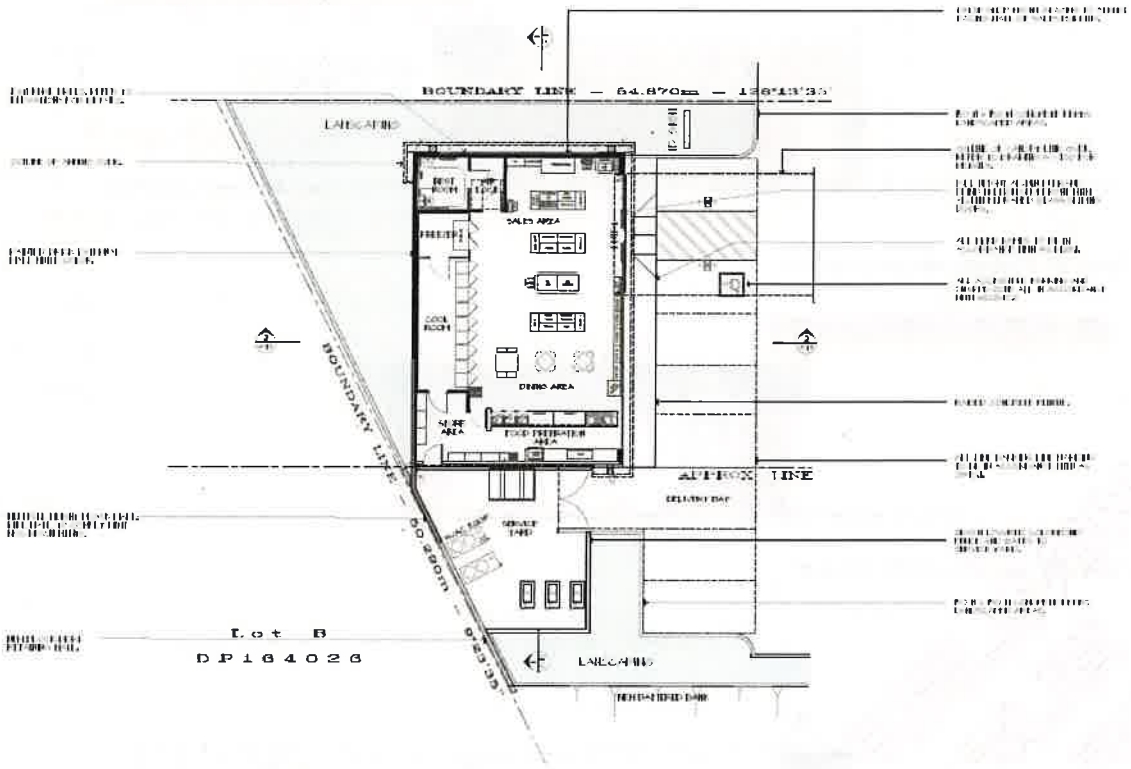


Figure 62: Sales building plans

5.1.2 Elevations

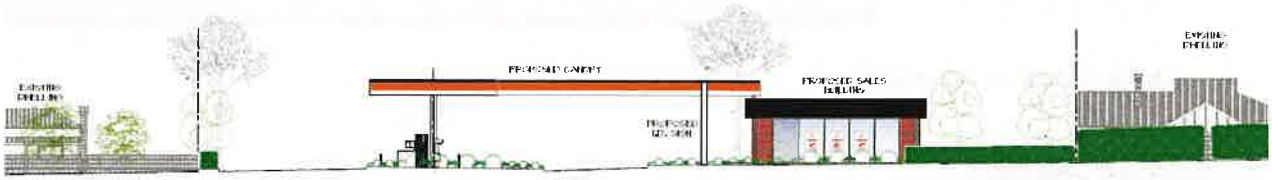


Figure 63: Gaskill St elevation

Figure 64: Southern eastern elevation

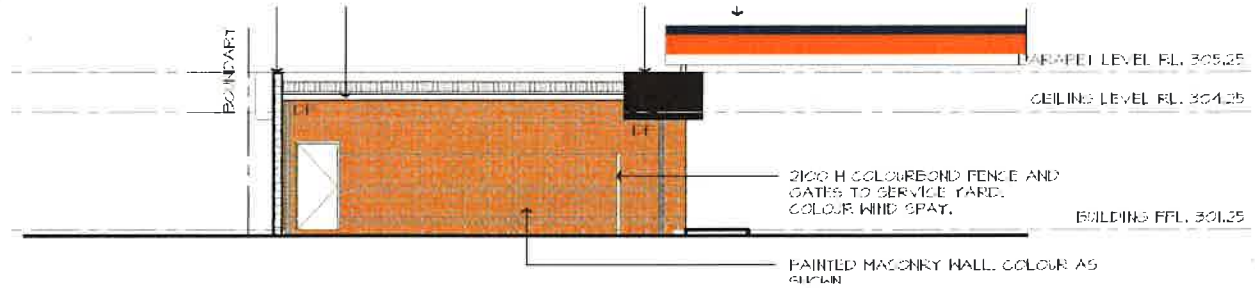


Figure 65: Southern western elevation

Figure 66: Northern eastern elevation

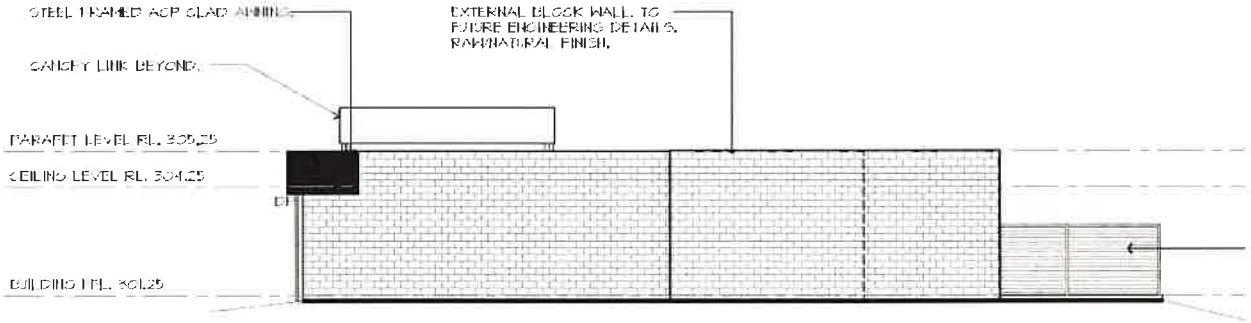


Figure 67: Northern western elevation

5.1.3 Signage

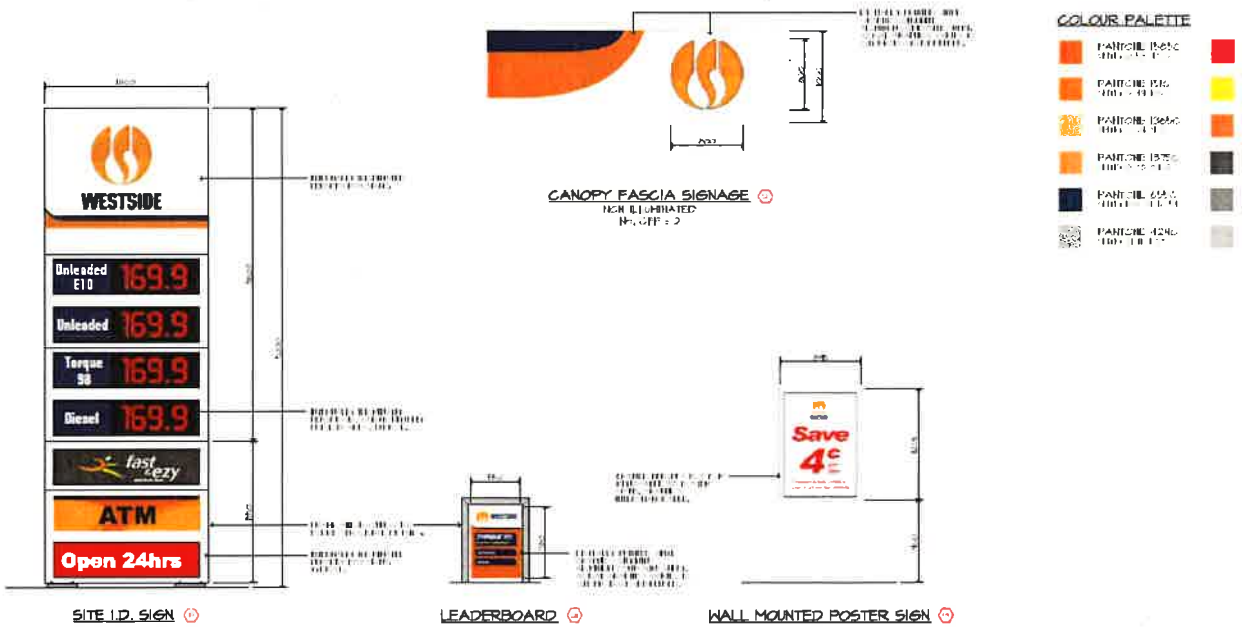


Figure 68: Signage

5.1.4 Landscape

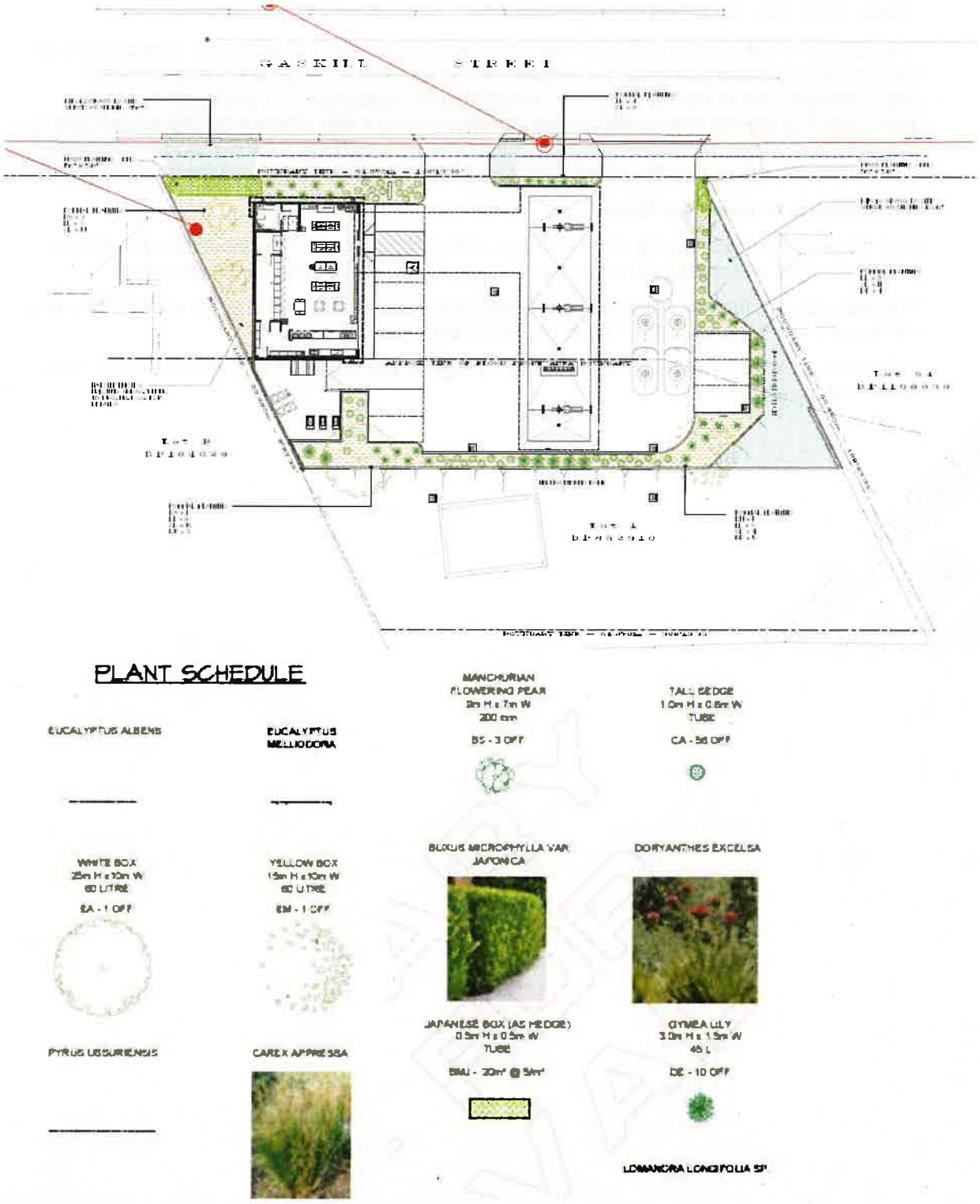


Figure 69: Landscape plan and plant schedule

This follows Council's response to the initial submitted plan.

Plant species for the rear of the site are selected to reinforce the endangered Box Gum Woodlands. Yellow Box and White Box Woodland are plant communities characterized by dominance of openly spaced trees including White Box (*Eucalyptus albens*), Yellow Box (*E. melliodora*) and / or Blakely's

red gum (*E. blakelyi*). They typically occur on fertile clay or loamy soils on alluvial plains, lower slopes, creek flats, slopes and drainage lines.[17]

The purpose of the planting choice is reintroduction of canopy trees to grassland. Layout should be informed by intact box gum grassy woodlands nearby and with a similar set of environmental characteristics such as aspect, slope, and elevation in the landscape. The configuration of tree placement is in the two rear corners of the property, leaving a gap between the two so that view of the grassland beyond is maintained. In good grassland with good soil moisture and low compaction, control for competition may be limited to spot spraying at planting sites, mulching and tree guards. [18]

Landscaping to street frontage

Low hedging is proposed to the street frontage of the shop building. This responds to the screen hedging in front of the adjacent house, not the same but a similar textured hedging plant.

The proposal is framed by deciduous ornamental pear trees, located and under pruned so they will not impede driver and pedestrian views for traffic safety reasons.

The whole proposal is planned to allow a view through to the floodplain and creekline, which in a feature of the site.

[17] Local Native Seed Supply Strategy for the Central Tablelands Landcare District targeting Box Gum Woodlands. www.greeningaustralia.org.au February 2012

[18] Australian Government Environmental Stewardship Box Gum Grassy Woodland Project Information Booklet p47

6 IMPACTS ON HERITAGE SIGNIFICANCE OF ITEMS

6.1 RESPONSE TO COUNCIL LETTER

The council letter mostly relates to technical information that will be covered in the Statement of Environmental Effects. The heritage information excerpts required by Council is shown below in *italics*, with our comments in regular type.

There is no discussion of whether retention and refurbishment of the existing building was considered as a possibility. Given the building has several visually attractive design features and occupies a similar footprint to the proposed C store it is recommended that the retention option plus additional fuelling area and canopy be discussed.

Comment: The building has several design features of the 1950's era and occupies a similar footprint to the proposed sales building. Retention and refurbishment of the existing building would include extending the existing building with an additional fuelling area, canopy and ID pylon. In theory to carry out these works appears to be a viable option. In practical terms however, the building is in very poor condition due to its age, a long period without maintenance and vandalism. The damage to the structural and non-structural elements of the building is such that most if not all materials would have to be replaced, this would not constitute refurbishment. Additionally, to extend the existing damaged building could very well cause the existing building to collapse.

The travel and swept paths for current vehicles have not been shown on the existing building. However, comparison with those shown on the proposed building, it is reasonably clear that current movement and turning paths for service stations could not be accommodated in the current building configuration.

It is noted that the traditional existing petrol station is a white designed structure and typical of the late 1950s period. The current proposal is a considerably larger structure with the major elements shaped from a practical point of view as opposed to a design point of view. Therefore the use of a colours and design cues which seek to make the building visually recessive is better strategy than using the existing white colour scheme.

Comment: The footprint of the proposed service station is larger in order to accommodate larger vehicles and safety requirements. The proposal includes the use of design cues which will aid in making the building visually recessive, while matching colours in other areas of the Gaskill Streetscape. For example, the earthy orange elements of the proposed canopy and signage design and the red brick sales building match with the red brick buildings further along Gaskill St to the north, and the tone of buildings with terracotta roof tiling and orange painted buildings and details. From the SEE:

"The franchise colouring of Westside fuel of orange, blue and white is acceptable as the colouring on the signage and canopies are minimal. Excessive bright colouring is discouraged and plain tones/ hues of white more suitable in conservation areas because it references the colouring of the neighbouring weatherboard and rendered residential dwellings... The proposed sign colours are standard tenant corporate colours used throughout Australia on similarly branded sites. No fluorescent or iridescent paint colours are proposed."

Recommended modifications:

- *In the further development of the current proposal, the NE elevation of the C store should be fully glazed to reflect the traditional 'active' commercial presentations to the street;*

Comment: False shop front glazing to the NE elevation of the C store will be provided, to reflect the traditional 'active' commercial presentations to the street.

- *The front setback of the C store to be modified to a line no further forward than the adjoining building with a site plan illustrating the setbacks of the subject and two adjoining sites/buildings for analysis and comparison*

Comment: The front setback of the C store is no further forward than the adjoining building. A site plan has been provided illustrating the setbacks of the subject and two adjoining sites/buildings for analysis and comparison.

- *The coloured graphic panels on the SE elevation of the C store should be replaced with ACP cladding in silver grey to reduce the visual prominence and utilise a traditional steel/galvanised iron type colour*

Comment: The coloured graphic panels on the South East elevation of the C store are proposed to remain. Please see plans for further details. The earthy orange elements of the proposed canopy and signage design and red brick sales building blend with various red brick buildings further along Gaskill St to the north, and the tone of the buildings with terracotta roof tiling and orange painted buildings and details.

- *Colorbond gates and fencing in Windspray are generally acceptable*

Comment: The colorbond fence and gates are to be Windspray colour.

- *Raw concrete blockwork is acceptable subject to all horizontal joints being ironed/ruled, all vertical joints being flushed and mortar colour matched to the block colour*

Comment: Please see plans for details of raw/natural finish concrete blockwork.

- *The ID pylon to be reduced in height through limiting the elements to the corporate brand, four price points and the fast-ezy graphic. Internal illumination to be limited to the corporate ID top brand and generally as per the BP example provided.*

Comment: The ID pylon sign is reduced by the removal of the legs, and details on the specific plans attached to the application.

- *A planting plan to provide deciduous/exotic planting to the foreground areas and native trees to the rear of the batter strip. Along the rear a central gap in the planting should allow for through site distant views as per the existing.*

Comment: Low hedging using Japanese Box (*Buxus Microphylla Var Japonica)* is proposed to the street frontage of the shop building. This responds to the screen hedging in front of the adjacent house, which is not the same but a similar textured hedging plant. The proposal is framed by deciduous Manchurian Flowering Pears (*Pyrus Ussuriensis*) located and under pruned so they will not impede driver and pedestrian views for traffic safety reasons. Native trees and shrubs including White Box (*Eucalyptus Albens*) and Gymea Lily (*Doryanthes Excelsa)* are to be planted to the rear of the batter strip.

- *A lighting plan, in particular the narrow cone lighting units in the canopy soffit, will need to illustrate light spill so as not to disturb the residential properties in the vicinity*

Comment: A lighting plan is to be provided by an external consultant.

- *The background/base colour to the parapets and elevations to be silver grey or shale grey to reduce the visual impact of the large structure in the setting and utilise a local traditional colour interpreting the galvanised iron.*

Comment: The background colour on the shop parapets is proposed as black. The earthy orange elements of the proposed canopy and signage design and the red brick sales building match with the red brick buildings further along Gaskill St to the north, and the tone of buildings with terracotta roof tiling and orange painted buildings and details. Please see plans for further details.

6.2 ASSESSED IMPACTS

The impact of the proposed development is assessed using the recognised significance on the nearby conservation area and on nearby heritage items.

1. The following aspects of the proposal respect or enhance the heritage significance of the item or conservation area for the following reasons.

(List in point form. List also, any other completed or proposed future works, such as the implementation of maintenance plans, interpretation strategies or archival recording.)

- The subject building is not heritage listed. The site is a part of the Gaskill St Streetscape within the Canowindra Urban Conservation Area. There are many heritage items nearby but none that the site has a direct impact on.
- Future works such as maintenance plans, interpretation strategies or an archival recording are not needed in conjunction with this proposal given the property is not heritage listed and has been demonstrated in any event to have little or intrusive level significance.
- The building does not display significant architectural detail and fabric.
- The building is damaged and vandalised including broken windows, some of which are boarded up. The former service station is also severely weathered and has signs of wear and tear associated with lack of long term maintenance. The structural and non-structural external timberwork and eaves are weathered and damaged.
- Much of the timber in the building is severely termite affected, tapping on the doorframes for example easily causes punctures and tapping on the walls revealed the extent of the termite damage. During the site inspection the well experienced inspector noted concern about the current state of collapse. The photographs show the degree of the termite damage and general dilapidation of the building.
- Unsurprisingly, given its former use, there is no landscape to speak of and the surrounding is in poor condition with some rubbish and many weeds, some of which are growing out of a shattered sewerage pipe.
- The proposal provides on ongoing use of the site. The proposed continuous use of the site will give the site new life and viability. Additionally, the size of the existing shop provides a small commercial space, it does not have anywhere near the commercial capacity that similar service stations and nearby commercial shops have.
- The proposed continued use, being a service station will provide use of the site and its greater importance to the economic benefit of the shopping area, rather than have the new service station on the outskirts of the town.

2. The following aspects of the proposal could detrimentally impact on the heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts.

(List the ways in which the item or area is significant and way/s they could be affected; why the work is necessary for the ongoing viability; and, the steps taken to minimise negative impacts. Consider addressing significance under each of the seven criteria used to define heritage significance)

The building is in poor condition and contributes minimally to the streetscape and nearby heritage items. The building is not heritage listed. The proposal has typical 1950's design aspects which do not fit with many of the developments on the street from different eras considered significant in the Conservation Area listing.

One of the aspects of the building is the use of colour. The visual strength of the orange and black is effectively on the "parapet" of the building group, which includes the awning over the filling points as well. This use of colour in these areas is by no means a new design feature, and although early photos of commercial buildings are generally black and white, the use of colour to emphasise a building can be seen in the contrast of the design details, often related to the structural basis of the façade. The use of red based hues is also consistent with many remaining building features in the Conservation Area.

Additionally, when viewed as a single elevation of the store, it does seem to be quite a contrast to its immediate surroundings. When viewed on the site as a whole, as shown in the overall elevation to Gaskill Street immersed in the landscaping, it is a small part of the overall design.

3. The following sympathetic solutions have been considered and discounted for the following reasons.

(List alternatives (especially those identified in the conservation management plan or other study) and clearly argue why these cannot be implemented).

There are a number of options for the site in order to improve the streetscape and the sustainability of the business area.

Do nothing:

Without development approval and active use this building will simply remain and deteriorate. Additionally, the chance of a more compatible design having a positive impact will be lost.

Retention and refurbishment:
Retention and refurbishment of the existing building would include extending the existing building with an additional fuelling area, canopy and ID pylon. In theory to carry out these works appears to be a viable option. As identified by us, on closer inspection the building is in very poor condition due to structural damage, a long period without use or maintenance, and vandalism. The damage to the structural and non-structural elements of the building is such that most if not all materials would have to be replaced. This would not constitute refurbishment. Additionally, to extend the existing damaged building could very well cause the existing structure to collapse.

Redevelop with compatible design and continuation of use:

The proposed building has several design features of the 1930-50s era and occupies a similarly located footprint to the existing building.

The proposal provides a practical ongoing use of the site. The size of the existing shop provides a very small commercial space. It does not have anywhere near the commercial capacity that similar service stations and nearby commercial shops have.

The proposed continuous use of the site will give the site new life and viability. In addition, there are many buildings with flat parapet details similar to the proposed design, generally on the outer edge of the business area, similar to this location. These buildings are most likely to be interwar extensions of the town. Inter War Art Deco was focussed on simplification with horizontal and vertical lines, and the proposal is not dissimilar to that.

6.3 STATEMENT OF HERITAGE IMPACT

The new building will have minimal impact on the significance of nearby heritage items. The listed heritage items in the vicinity of the site do not have curtilages extending onto the proposed development site. The proposal will not materially affect views or shading of the adjacent items. Therefore, the heritage items in the vicinity will not be detrimentally affected and do not warrant separate heritage investigation.

An archaeological report would not potentially reveal any useful information. The lack of significance of the site in terms of the previous activities on the lot mitigates against any significant information or relics being found.

The business nature and streetscape impact of the proposal will improve the presentation and viability of the general area and assist in the adjoining and nearby items being conserved into the future.

7 REFERENCES

Apperly, R., Irving, R. and Reynolds, P. *A pictorial guide to identifying Australian architecture - Styles and terms from 1788 to the present*, Angus & Robertson (1989).

Evans, I. and Department of Planning, *Getting the details right – Restoring Australian houses 1890's – 1920's,* Flannel Flower Press (1989).

Evans, I., Lucas, C. and Stapleton, I., *Colour schemes for old Australian houses,* Flannel Flower Press (1984).

Evans, I., Lucas, C. and Stapleton, I., *More colour schemes for old Australian houses,* Flannel Flower Press (1992).

Heritage Office and Department of Urban Affairs & Planning *Statements of Heritage Impact* 1996, revised 2002 originally published as part of the NSW Heritage Manual

APPENDICES

7.1 CABONNE HERITAGE INVENTORY

7.1.1 Gaskill Streetscape[19]

Cabonne Heritage Inventory

State Heritage Inventory

SHI Number 1271032

Study Number CA23, 1270

Item Name: Gaskill Streetscape

Location: Gaskill Street, Canowindra [Cabonne]

Address:	Gaskil Street	Planning:	Southern & Western
Suburb / Nearest Town:	Canowindra 2804	Historic Region:	Central Tableland
Local Govt Area:	Cabonne	Parish:	
State:	NSW	County:	
Other/Former Names:			
Area/Group/Complex:	Gaskil Street Conservation Area	Group ID:	
Aboriginal Area:			

Curtilage/Boundary: About the, comprising all properties with a frontage to Gaskil Street between and including, on the north-eastern side of that street, the Junction Hotel (36 Gaskil Street, corner Ryall Street) to the Canowindra Hotel (104 Gaskil Street), and on the south-western side of that street, Canowindra Motors (27-29 Gaskil Street) to the property on the north-western corner of Gaskil and Belchford Streets, Canowindra.

Item Type:	Conservation Area	Group:	Urban Area	Category:	Streetscape
Owner:	Multiple Owners				
Admin Codes:	000925	Code 2:		Code 3:	
Current Use:	Main street				
Former Uses:	Main street				
Assessed Significance:	Local		Endorsed Significance:		

Statement of Significance: The Canowindra Urban Conservation Area, consisting of a length of Gaskil Street, is aesthetically highly important for the cohesiveness and consistency of the streetscape, created largely through the parapets, verandahs and awnings which predominate on so many of the buildings. Another major contributing factor is the several bends in this distinctively shaped street, these forming various enclosed vistas.
Reflecting Canowindra's prosperity during the early decades of the present century, the conservation area has historical significance.
The area is also significant as an example of a New South Wales rural town main street of the early twentieth century period.
Included in the conservation area is a notable range of building forms and styles.
Consisting of a major part of the commercial centre of this Central West town, the conservation area is of social significance to the local community.
The retention of verandah posts on many of the buildings fronting the main street is an important architectural detail which has a unifying effect on the street. The concentration of these attractive and potentially attractive buildings in conjunction with a narrow and curving street creates short vistas and enclosed units when viewed from either the middle or the extremities. The human scale of the townscape here is an unusual experience which merits protection.

State Heritage Inventory

Date: 02/11/2018 Full Report with Images Page 1

This report was produced using the Heritage Database Software provided by the Heritage Council, NSW Department of Planning

[19] http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=1172011

Cabonne Heritage Inventory

State Heritage Inventory

SHI Number 1271032

Study Number CA23, 1270

Item Name: Gaskill Streetscape

Location: Gaskill Street, Canowindra [Cabonne]

Historical Notes or Provenance: The conservation area is of further importance for representing a rural New South Wales town main street of the early twentieth century. Land grants were taken up in the area from 1829, and by the late 1840s a hotel, post office and a store had been established.
The Forbes gold rush, however, saw Canowindra by passed for a time. In 1863 the town was held up for three days by the Ben Hall Gang of bushrangers. Development again proceeded in the 1870s.
The town's fourth hotel, the Junction (built by H Carman for Matthew Dwyer in 1890) survives today (in altered form) as Canowindra's oldest hotel building. The town developed partly as a private town on subdivided private land away from the official government village reserve. Canowindra was declared a village in 1865 and Crown Land subdivision followed.
Gaskill Street was officially surveyed in 1899, resulting in a realignment which necessitated alterations to a number of buildings fronting the street (and thus playing a role in the development of the present streetscape). The early 1900s were a boom time for the town, and this was accelerated by the arrival of the railway in 1910.
During the 1920s a number of new commercial buildings were erected and new facades were built onto some older buildings, adding to the predominance of parapets and awnings. Few new buildings were constructed after 1940, although there have been some.
The main street of Canowindra is notable for being curved, creating enclosed streetscapes and enhanced by a variety of well preserved heritage buildings

Themes:

National Theme	State Theme	Local Theme
3. Economy	Commerce	commercial streetscape
4. Settlement	Towns, suburbs and villages	main street

Designer:

Maker / Builder:

Year Started: 1840 Year Completed: Circa: Yes

Physical Description: The Canowindra Urban Conservation Area consists of a segment of Canowindra's main thoroughfare, Gaskill Street. It is highly significant as a streetscape, owing to the unusual shape of the curving street (which creates a range of enclosed views) and particularly the consistency created by the street's collection of buildings on which parapets, verandahs and awnings predominate.
A range of buildings are included. The Junction Hotel (mentioned above) had a second storey added in 1915 and was remodelled. Built of brick and having a parapet, the building has a double storey verandah with iron lace to the upper balustrade and brackets to the lower floor; the building stands on a key corner site.
The c. 1910 commercial building on the other side of the Gaskill Street/Ryal Street corner is single storey brick with a high parapet with pediment and urns, and a verandah. Finns Buildings (adjacent) were built by Thomas Finn in 1910 and are a double storey brick building with parapet and central pediment and flagpole with wrought iron decoration. The verandah has iron lace to the upper balustrade and iron friezes and brackets; columns (with

Cabonne Heritage Inventory

State Heritage Inventory

SHI Number 1271032

Study Number CA22, 1270

Item Name: Gaskill Streetscape

Location: Gaskill Street, Canowindra [Cabonne]

estregals) are iron. There are French doors upstairs and some original shopfronts have retained their leadlight.

A little further along Gaskill Street the former Victoria Hotel was in 1969 converted into a convalescent home. Again a double storey building, this edifice has a particularly notable verandah which has iron lace to the upper balustrade and timber valances (of different designs) to both the upper and lower floors.

The former saddlery dates from 1906 and has a parapet and an awning (it was the first double storey building erected in Canowindra). The 1927 council building has a distinctive parapet featuring three arched sections and a cornice, while the adjacent 1920s commercial building has gables at each end, a parapet running between, pilasters, arches over the windows, an awning and original tiles and leadlight glazing to the shopfronts.

The late 1920s LSP building features a curvilinear gabled parapet which is a prominent element in the streetscape. Dating from around 1927 is the Georgian style brick former ANZ Bank. On the corner of Gaskill and Bletchford Streets is Cobley's Building (built 1913), double storey and with a pedimented parapet and a verandah that runs around the corner and features timber balustrading and valance. Across the corner is the Canowindra Hotel, built in the 1920s, double storey, tiled roof and arched upper storey facades.

Shops on the other side of Gaskill Street have a range of parapet styles. Also on this side of the street is the 1915 former CBC Bank, double storey brick with render bands; the low parapet has a low pediment. Adjacent is the (1915) Westpac Bank which has Georgian characteristics, a projecting entrance porch supported by classical columns, a picket fence and plantings.

Dating from about 1910 is the Royal Hotel, another double storey brick building, having a verandah featuring a lower floor valance of curved timberwork and a bull nosed roof. This building is located on a bend and terminates the vista on this part of Gaskill Street; thus it is of great importance visually in the streetscape.

Canowindra is prominent in the landscape, being situated on a low ridge and surrounded by agricultural flats. The Classification, however, is confined to the main street, which is unusually narrow with two bends which create three distinct sections. The street is distinguished by a number of fine nineteenth century and twentieth century buildings, some of which form groups.

There are some modern buildings which are out of character with the fine streetscape. The most notable buildings include: the Royal Hotel, the Nursing Home, the Junction Hotel, Finn's Building, the Victoria Hotel, the Westpac Bank (formerly Bank of New South Wales) and the National Australia Bank (formerly C B C Bank).

Physical Condition: The conservation area is of high integrity, despite some unsympathetic alterations and newer buildings. In early 1987 it was reported that there was some lack of maintenance in the street. (September 1992)

Modification Dates:

Recommended Management:

Management: Statutory Instrument Included in a Conservation Area within an LEP

Further Comments: Canowindra Urban Conservation Area: The Properties On Both Sides Of Gaskill Street From Bletchford Street In The North-west (including The Corner Properties At That Intersection)

Cabonne Heritage Inventory

State Heritage Inventory

SHI Number
1271032
Study Number
CA23, 1270

Item Name: **Gaskill Streetscape**

Location: **Gaskill Street, Canowindra [Cabonne]**

To Rodd Street In The South-east (including The Public Reserve Between The South Side Of Gaskill Street And The North Bank Of The Belubula

Criteria a)

Criteria b)

Criteria c)

Criteria d)

Criteria e)

Criteria f)

Criteria g)

Integrity / Intactness:

References:

Author	Title	Year
Blair, J ; Boss, A	National Trust of Australia (NSW)	
Cabonne Shire Council and Heritage Council of N.S.W	Canowindra	1987

Studies:

Author	Title	Number	Year
Cabonne Shire Council	Cabonne Heritage Study	CA23, 1270	2003
National Trust of Australia (NSW)	National Trust Country Register	1571	
B Hickson	Cabonne Heritage Review		2010

Parcels:

Latitude: -33.5687 Longitude: 148.6608

Location validity: Spatial Accuracy:

Map Name: Map Scale:

AMG Zone: Easting: Northing:

Listings:

Name:	Title:	Number:	Date:
National Trust of Australia Register		1571	23/08/1974
Register of the National Estate	Nom. 20/12/1976	000025	21/03/1978

Custom Field One: Perumal, Wrethall and Murphy Pty Ltd, "Heritage Study of Gaskill Street, @@ Canowindra", Cabonne Shire Council and Heritage Council of N.S.W., @@ 1987. @@ Information from the National Trust of Australia (New South Wales). @@

Custom Field Two:

Custom Field Three: DescriptionChanged:22/12/1998 Condition Changed:08/04/1995 Significance Changed:07/05/1998 Nominated:20/12/1976 Interim Listed:29/03/1977

Cabonne Heritage Inventory

State Heritage Inventory

Site Number
1271032
Study Number
CA23, 1270

Item Name: Gaskill Streetscape

Location: Gaskill Street, Canowindra [Cabonne]

Registered 21/03/1978

Custom Field Four:

Custom Field Five: Rysli St, Blatchford St, Dudley St

Custom Field Six:

Data Entry: Date First Entered: 29/05/2001 Date Updated: 07/16/2013 Status: Partial

Image:

Caption: Geskil Streetscape

Copyright: B J Hobson

Image by: B J Hobson

Image Date: 20/01/2011

Image Number:

Image Path:

Image File: 1271032b4.jpg

Thumb Nail Path:

Thumb Nail File:

Cabonne Heritage Inventory

State Heritage Inventory

SHI Number 1271032

Study Number CA28, 1270

Item Name: Gaskill Streetscape

Location: Gaskill Street, Canowindra [Cabonne]

Image:

Caption: Gaskill Streetscape

Copyright:

Image by: David Scobie

Image Date:

Image Number:

Image Path:

Image File: 1271032b3.jpg

Thumb Nail Path:

Thumb Nail File:

Cabonne Heritage Inventory

State Heritage Inventory

SHI Number
1271032
Study Number
CA23, 1270

Item Name: Gaskill Streetscape

Location: Gaskill Street, Canowindra [Cabonne]

Image:

Caption: Canowindra Urban Conservation Area

Copyright:

Image by: David Scobie

Image Date: 27/11/2009

Image Number:

Image Path:

Image File: 1271032b1.jpg

Thumb Nail Path:

Thumb Nail File:

Cabonne Heritage Inventory

State Heritage Inventory

SHI Number
1271032

Study Number
CA23, 1278

Item Name: Gaskill Streetscape

Location: Gaskill Street, Canowindra [Cabonne]

Image:

Caption: Canowindra Urban Conservation Area

Copyright:

Image by: David Scobie

Image Date: 27/11/2009

Image Number:

Image Path:

Image File: 1271032b2.jpg

Thumb Nail Path:

Thumb Nail File:

Cabonne Heritage Inventory

State Heritage Inventory

SHI Number
1271032
Study Number
CA23, 1270

Item Name: Gaskill Streetscape

Location: Gaskill Street, Canowindra [Cabonne]

Image:

Caption: Gaskill Street Conservation Area

Copyright:

Image by:

Image Date: 23/12/2009

Image Number:

Image Path:

Image File: 1271032b3.jpg

Thumb Nail Path:

Thumb Nail File:

AHIMS WEB SERVICES (AWS) SEARCH RESULT

Office of Environment & Heritage

AHIMS Web Services (AWS)
Search Result

Purchase Order/Reference : 1
Client Service ID : 418591

Ian Rufus of Hillcrest
Hillcrest 2a Eskbank St
Lithgow New South Wales 2790
Attention: Stella Rufus

Email: stella_rufus@yahoo.com

Date: 06 May 2019

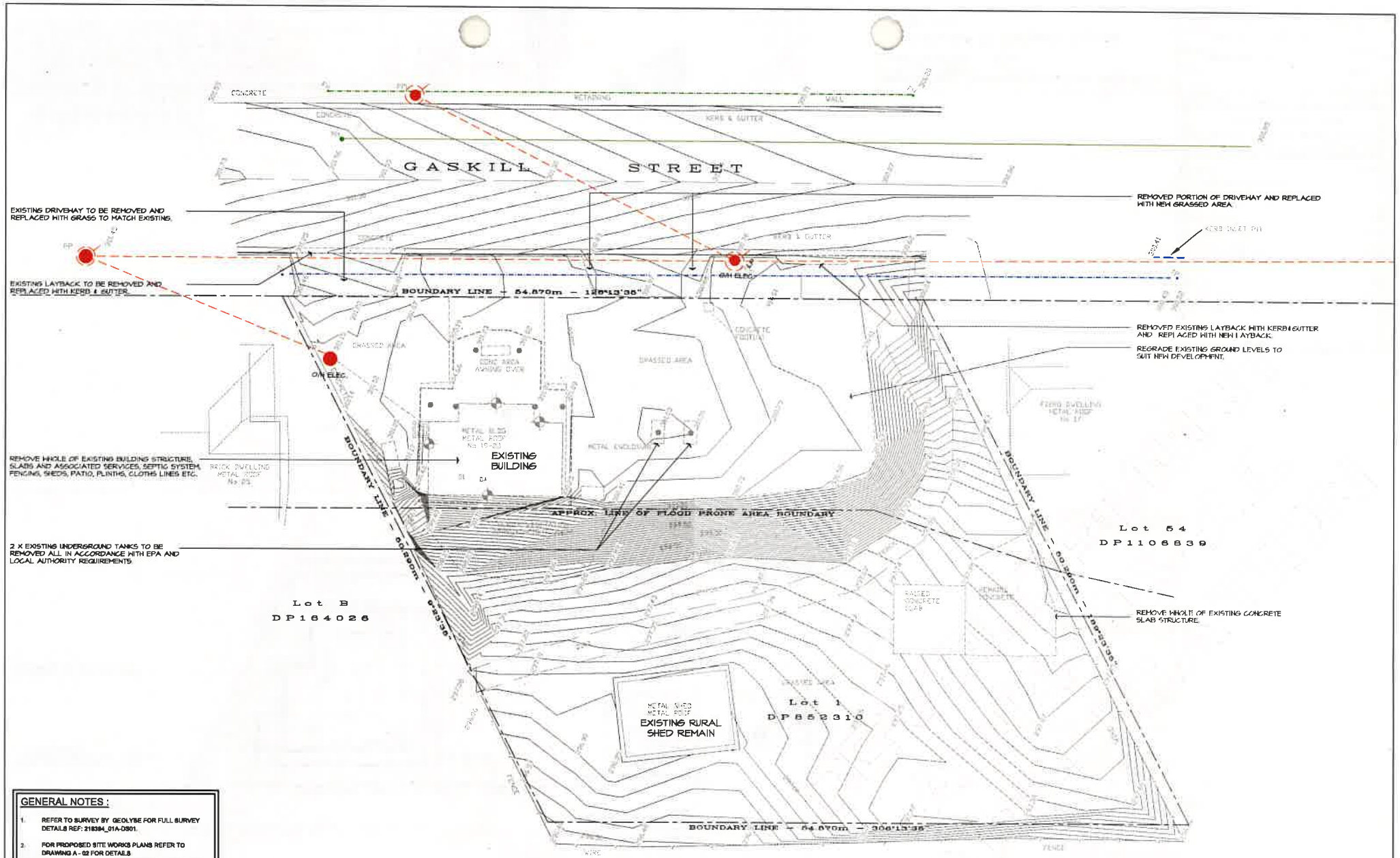
Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 1, DP:DP852310 with a Buffer of 200 meters, conducted by Stella Rufus on 06 May 2019.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.

A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



EXISTING SITE PLAN AND DEMOLITION PLAN

GENERAL NOTES :

1. REFER TO SURVEY BY GEOLYSE FOR FULL SURVEY DETAILS REF: 218394_01A-DS01.
2. FOR PROPOSED SITE WORKS PLANS REFER TO DRAWING A - 02 FOR DETAILS

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

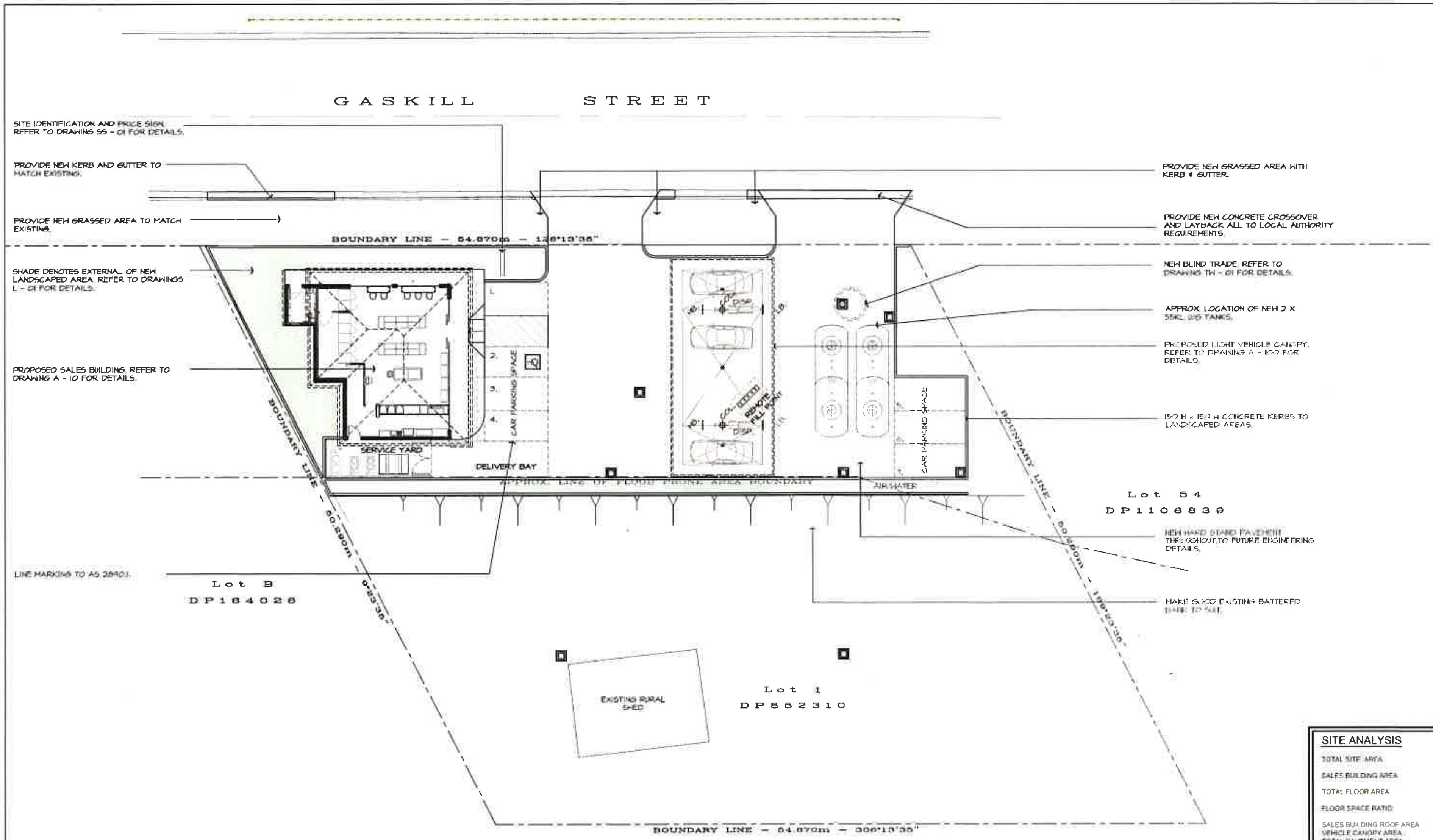
No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	MH	20.04.2018
P2	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	27.05.2014
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.06.2014
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2014
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2014

R.J. SINCLAIR Pty Ltd
Building Design
Office: Suite 8111 - Sky City
NorthWest Business Park
36 Lexington Drive
BELLA VISTA NSW 2153
Postal: PO Box 352
ROUND CORNER NSW 2158
Phone: 02 8883 9991
E-mail: design@rjsinclair.com.au
Web: www.rjsinclair.com.au
Multi-Disciplined Design & Project Management

Project: PROPOSED SERVICE STATION REBUILD
At - 25 GASKILL STREET
CANOWINDRA NSW
For: CANOWINDRA PETROLEUM Pty Ltd

Drawing Title: EXISTING SITE PLAN AND DEMOLITION PLAN

Approved	Designed
Date: SEPTEMBER 2018	Drawn: MH
Scale: 1:150 @ A1 & 1:300 @ A3	Checked
Project No: 16 - 066	Drawing No: A - 01
	Amdt.: DA2



SITE ANALYSIS

TOTAL SITE AREA	2462m²
SALES BUILDING AREA	111m²
TOTAL FLOOR AREA	111m²
FLOOR SPACE RATIO	4.5%
SALES BUILDING ROOF AREA	170m²
VEHICLE CANOPY AREA	136m²
TOTAL PAVEMENT AREA	533m²
TOTAL SITE COVERAGE	839m²
SITE COVERAGE PERCENTAGE	34%
TOTAL LANDSCAPED AREA	207m²

PARKING ANALYSIS

PARKING SPACES	7 SPACES

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	MH	20.04.2018
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	26.04.2018
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	21.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION.	VP	07.06.2019
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION.	VP	20.12.2019

R.J. SINCLAIR Pty Ltd
Building Design

Project: PROPOSED SERVICE STATION REBUILD
14 - 23 GASKILL STREET
CANOWINDRA NSW

CANOWINDRA PETROLEUM Pty Ltd

Title: PROPOSED SITE PLAN

Date: SEPTEMBER 2018
Drawn: MH
Scale: 1:150 @ A1 & 1:300 @ A3
Project No.: 16 - 066
Drawing No.: A - 02
Amdt.: DA2

SERVICE STATION DEVELOPMENT

19 - 23 GASKILL STREET

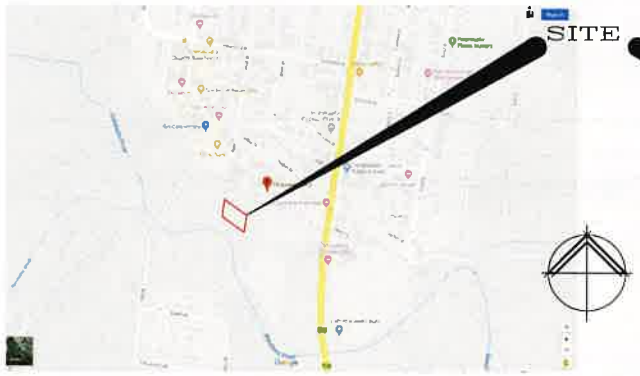
CANOWINDRA NSW.

FOR

CANOWINDRA PETROLEUM Pty Ltd

DRAWING SCHEDULE

SURVEY	216394 - 01A - DS01		DETAIL SURVEY PLAN
PREPARED BY [illegible] Pty Ltd.			
CONSTRUCTION MANAGEMENT			
	CMP01		CONSTRUCTION MANAGEMENT PLAN
	CMP02		CONSTRUCTION MANAGEMENT NOTES AND DETAILS
ARCHITECTURAL	A	00	COVER SHEET & DRAWINGS SCHEDULE
	A	01	EXISTING SITE PLAN
	A	02	PROPOSED SITE PLAN
	A	03	SITE SETOUT PLAN
	A	04	STREETSCAPE ELEVATION
	A	10	SALES BUILDING FLOOR PLAN
	A	11	SALES BUILDING SETOUT PLAN
	A	12	SALES BUILDING ROOF PLAN
	A	13	SALES BUILDING ELEVATIONS / SECTIONS
	A	13	SALES BUILDING PERSPECTIVES
	A	100	CANOPY FLOOR, CEILING AND ROOF PLAN
	A	101	CANOPY ELEVATIONS AND SECTION
LANDSCAPING	L	01	LANDSCAPE PLAN
	L	02	LANDSCAPE NOTES AND DETAILS
SIGNAGE	SS	01	SITE SIGANGE PLAN
	SS	02	SIGNAGE DETAILS
TRADE WASTE	TW	01	TRADE WASTE PLAN
	TW	02	TRADE WASTE DETAILS
STORMWATER	SD	01	CONCEPT STORMWATER DRAINAGE PLAN
TURNING STUDY	TS	01	TURNING STUDY - CARS
	TS	02	TURNING STUDY - DELIVERY TRUCKS
LIGHTING	E01-1		TITLE SHEET
PREPARED BY [illegible] LIGHTING	E01-2		GENERAL ARRANAGEMENT



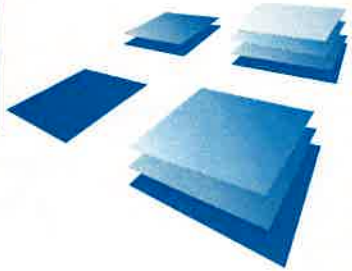
LOCATION MAP

STREET MAP IMAGE
COURTESY GoogleMaps®

PHOTO MAP

AERIAL PHOTOGRAPHY IMAGE
COURTESY NearMap®

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION



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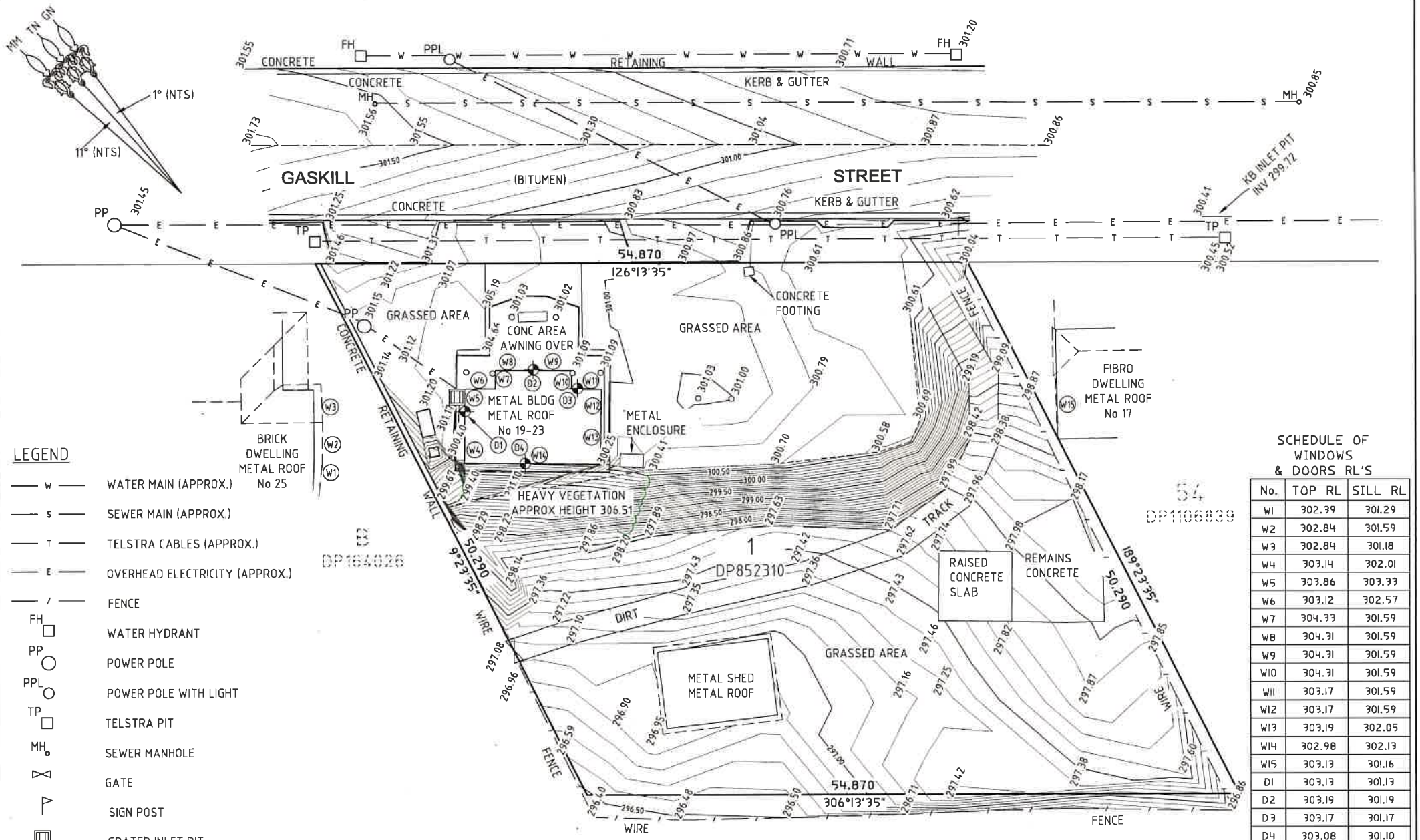
BUILDING DESIGNERS AUSTRALIA
Accredited Building Designer : 6318
Victoria : BDP 6318
Queensland : QBCC 1082714
Tasmania : ABP CC 6710

20.12.19



LEGEND

- W — WATER MAIN (APPROX.)
- S — SEWER MAIN (APPROX.)
- T — TELSTRA CABLES (APPROX.)
- E — OVERHEAD ELECTRICITY (APPROX.)
- / — FENCE
- FH — WATER HYDRANT
- PP — POWER POLE
- PPL — POWER POLE WITH LIGHT
- TP — TELSTRA PIT
- MH — SEWER MANHOLE
- GATE
- SIGN POST
- GRATED INLET PIT
- FLOOR LEVEL

SCHEDULE OF WINDOWS & DOORS RL'S

No.	TOP RL	SILL RL
W1	302.39	301.29
W2	302.84	301.59
W3	302.84	301.18
W4	303.14	302.01
W5	303.86	303.33
W6	303.12	302.57
W7	304.33	301.59
W8	304.31	301.59
W9	304.31	301.59
W10	304.31	301.59
W11	303.17	301.59
W12	303.17	301.59
W13	303.19	302.05
W14	302.98	302.13
W15	303.13	301.16
D1	303.13	301.13
D2	303.19	301.19
D3	303.17	301.17
D4	303.08	301.10

REV.	DATE	DFTD.	APPD.	DETAILS
A	02/05/18	GT	SB	ISSUE FOR INFORMATION

	FILE	INITIALS	DATE
SURVEY	218394.DWG	SB	01/05/18
DESIGN	-	-	-
DRAWN/ HEC-RAS MODELLING	-	-	-
ENGINEERING/ SURVEYING APPROVAL	-	-	-

DRAWING SCALE

0 3 6 9 12 15

(A3) SCALE 1:300

DO NOT SCALE FROM THESE DRAWINGS. ALL MEASUREMENTS SHALL BE CONFIRMED ON SITE AND WITH GEOLYSE PTY. LTD. PRIOR TO CONSTRUCTION

APPROVAL AUTHORITY: CABONNE SHIRE COUNCIL

CLIENT: TENTERFIELD PETROLEUM PTY LTD

PROJECT: GASKILL STREET, CANOWINDRA
DETAIL SURVEY

GEOLYSE
ORANGE
154 PEISLEY STREET
P.O. BOX 1683
ORANGE, NSW 2800
Ph. (02) 6393 8326
Fx. (02) 6393 8326
orange@geolyse.com
www.geolyse.com

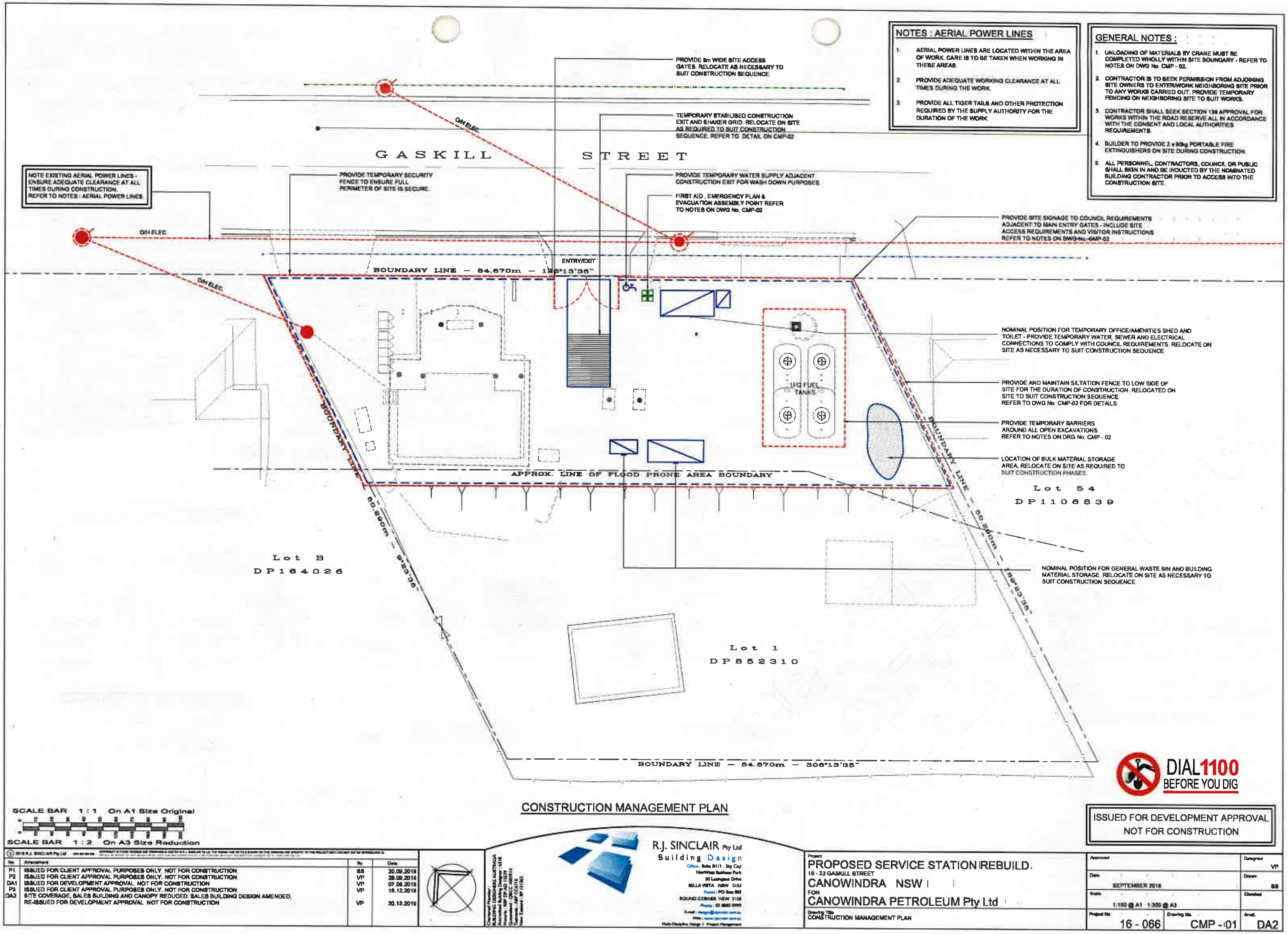
DRAWING: DETAIL SURVEY

PROJECT NUMBER: 218394 | DRAWING FILE: 218394_01A-DS01.dwg | ORIGINAL: A3

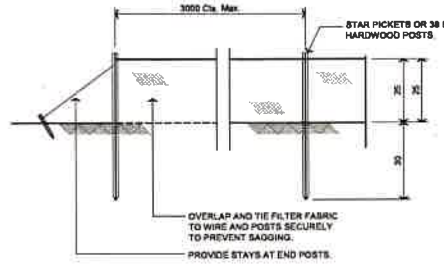
SURVEY MARK: - | R.L. - | DATUM: A.H.D.

IMAGE SOURCE: - | SET: -

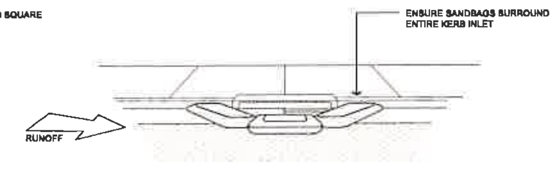
STATUS: FOR CONSTRUCTION | SHEET: DS01 OF DS01


NOTES : AERIAL POWER LINES
1. AERIAL POWER LINES ARE LOCATED WITHIN THE AREA OF WORK. CARE IS TO BE TAKEN WHEN WORKING IN THESE AREAS
2. PROVIDE ADEQUATE WORKING CLEARANCE AT ALL TIMES DURING THE WORK.
3. PROVIDE ALL TIGER TAILS AND OTHER PROTECTION REQUIRED BY THE SUPPLY AUTHORITY FOR THE DURATION OF THE WORK
GENERAL NOTES :
1. UNLOADING OF MATERIALS BY CRANE MUST BE COMPLETED WHOLLY WITHIN SITE BOUNDARY - REFER TO NOTES ON DWG No CMP - 02.
2. CONTRACTOR IS TO SEEK PERMISSION FROM ADJOINING SITE OWNERS TO ENTER/WORK NEIGHBORING SITE PRIOR TO ANY WORKS CARRIED OUT. PROVIDE TEMPORARY FENCING ON NEIGHBORING SITE TO SUIT WORKS.
3. CONTRACTOR SHALL SEEK SECTION 138 APPROVAL FOR WORKS WITHIN THE ROAD RESERVE ALL IN ACCORDANCE WITH THE CONSENT AND LOCAL AUTHORITIES REQUIREMENTS.
4. BUILDER TO PROVIDE 2 x 9Kg PORTABLE FIRE EXTINGUISHERS ON SITE DURING CONSTRUCTION.
5. ALL PERSONNEL, CONTRACTORS, COUNCIL OR PUBLIC SHALL SIGN IN AND BE INDUCTED BY THE NOMINATED BUILDING CONTRACTOR PRIOR TO ACCESS INTO THE CONSTRUCTION SITE.
PROVIDE 8m WIDE SITE ACCESS GATES. RELOCATE AS NECESSARY TO SUIT CONSTRUCTION SEQUENCE.
TEMPORARY STABILISED CONSTRUCTION EXIT AND SHAKER GRID. RELOCATE ON SITE AS REQUIRED TO SUIT CONSTRUCTION SEQUENCE. REFER TO DETAIL ON CMP-02
GASKILL STREET
O/H ELEC
NOTE EXISTING AERIAL POWER LINES - ENSURE ADEQUATE CLEARANCE AT ALL TIMES DURING CONSTRUCTION. REFER TO NOTES : AERIAL POWER LINES
PROVIDE TEMPORARY SECURITY FENCE TO ENSURE FULL PERIMETER OF SITE IS SECURE.
PROVIDE TEMPORARY WATER SUPPLY ADJACENT CONSTRUCTION EXIT FOR WASH DOWN PURPOSES.
FIRST AID , EMERGENCY PLAN & EVACUATION ASSEMBLY POINT REFER TO NOTES ON DWG No. CMP-02
PROVIDE SITE SIGNAGE TO COUNCIL REQUIREMENTS ADJACENT TO MAIN ENTRY GATES - INCLUDE SITE ACCESS REQUIREMENTS AND VISITOR INSTRUCTIONS REFER TO NOTES ON DWG No. CMP-02
ENTRY/EXIT
BOUNDARY LINE — 54.670m — 126°13'35"
NOMINAL POSITION FOR TEMPORARY OFFICE/AMENITIES SHED AND TOILET - PROVIDE TEMPORARY WATER, SEWER AND ELECTRICAL CONNECTIONS TO COMPLY WITH COUNCIL REQUIREMENTS. RELOCATE ON SITE AS NECESSARY TO SUIT CONSTRUCTION SEQUENCE
U/G FUEL TANKS
PROVIDE AND MAINTAIN SILTATION FENCE TO LOW SIDE OF SITE FOR THE DURATION OF CONSTRUCTION. RELOCATED ON SITE TO SUIT CONSTRUCTION SEQUENCE. REFER TO DWG No. CMP-02 FOR DETAILS
PROVIDE TEMPORARY BARRIERS AROUND ALL OPEN EXCAVATIONS. REFER TO NOTES ON DRG No. CMP - 02
LOCATION OF BULK MATERIAL STORAGE AREA. RELOCATE ON SITE AS REQUIRED TO SUIT CONSTRUCTION PHASES
APPROX. LINE OF FLOOD PRONE AREA BOUNDARY
BOUNDARY LINE
Lot 54
DP1106839
60.290m
9°23'35"
Lot B
DP164026
NOMINAL POSITION FOR GENERAL WASTE BIN AND BUILDING MATERIAL STORAGE. RELOCATE ON SITE AS NECESSARY TO SUIT CONSTRUCTION SEQUENCE
60.290m
189°23'35"
Lot 1
DP852310
BOUNDARY LINE — 54.670m — 306°13'35"
DIAL 1100 BEFORE YOU DIG
SCALE BAR 1 : 1 On A1 Size Original
SCALE BAR 1 : 2 On A3 Size Reduction
CONSTRUCTION MANAGEMENT PLAN
ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION
P1 ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION. SS 20.09.2018
P2 ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION. VP 28.09.2018
DA1 ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION VP 07.08.2019
P3 ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION VP 18.12.2018
DA2 SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION VP 20.12.2019
R.J. SINCLAIR Pty Ltd
Building Design
PROPOSED SERVICE STATION REBUILD.
18 - 23 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd
CONSTRUCTION MANAGEMENT PLAN
SEPTEMBER 2018
1:150 @ A1 1:300 @ A3
Project No 16 - 066
Drawing No. CMP - 01
Amdt. DA2
Designed VP
Drawn SS

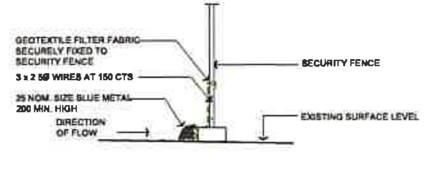
EROSION, SEDIMENT CONTROL + FENCING



TYPICAL SILT FENCE ELEVATION

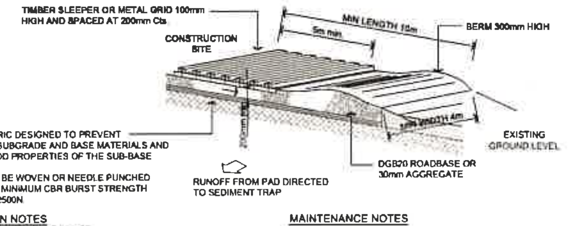


SANDBAG SEDIMENT TRAP AT EXISTING STORMWATER PIT



SILT/SECURITY FENCE DETAIL

NOTE : END OF SILT/SECURITY FENCE TO RETURN UP SLOPE TO PREVENT RUNOFF



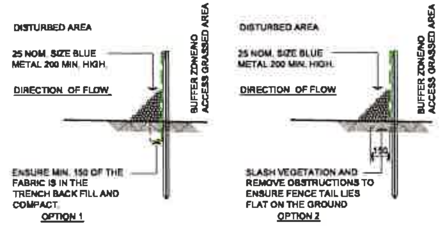
GEOTEXTILE FABRIC DESIGNED TO PREVENT INTERMIXING OF SUBGRADE AND BASE MATERIALS AND TO MAINTAIN GOOD PROPERTIES OF THE SUB-BASE LAYERS
GEOTEXTILE MAY BE WOVEN OR NEEDLE PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500N

CONSTRUCTION NOTES
1. STRIP TOPSOIL AND LEVEL SITE
2. COMPACT SUBGRADE
3. COVER AREA WITH NEEDLE PUNCHED GEOTEXTILE
4. CONSTRUCT 200MM THICK PAD OVER GEOTEXTILE USING ROADBASE OR 30MM AGGREGATE
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP WHERE THE SEDIMENT IS COLLECTED AND REMOVED

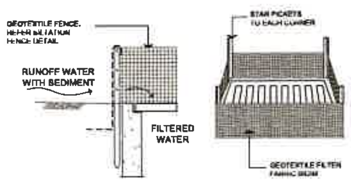
MAINTENANCE NOTES
1. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT OFF THE CONSTRUCTION SITE
2. WHEN REQUIRED, TOP DRESS WITH ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT
3. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED OFF THE CONSTRUCTION SITE MUST BE REMOVED IMMEDIATELY

TEMPORARY STABILISED CONSTRUCTION EXIT

ENSURE THAT ALL COUNCIL AND PUBLIC UTILITY ASSETS ARE MAINTAINED AND PROTECTED AT ALL TIMES IN THE VICINITY OF THE TEMPORARY CONSTRUCTION EXIT



TYPICAL SILT FENCE SECTIONS



GEOTEXTILE FILTER PIT (GFP)

GENERAL INSTRUCTIONS

E1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS, AND ANY OTHER PLANS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED AND RELATING TO DEVELOPMENT AT THE SUBJECT SITE.

E2. THE SITE SUPERINTENDENT WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THIS SPECIFICATION.

E3. ALL BUILDERS AND SUB-CONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.

CONSTRUCTION SEQUENCE

E4. THE SOIL EROSION POTENTIAL ON THIS SITE SHALL BE MINIMISED, HENCE WORKS SHALL BE UNDERTAKEN IN THE FOLLOWING SEQUENCE :
- a. INSTALL SEDIMENT FENCES AND TEMPORARY STABILISED CONSTRUCTION EXIT.
- b. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

EROSION CONTROL

E5. DURING WINDY CONDITIONS, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.

FENCING

E6. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.

E7. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.

OTHER MATTERS

E8. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER

E0 RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY. DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT.

SITE INSPECTION & MAINTENANCE

E10 EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER RAINFALL EVENTS TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIR AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED.

SAFETY + SITE MANAGEMENT NOTES

PRINCIPAL CONTRACTOR
1. REFER TO CONTRACT DOCUMENTS FOR PRINCIPAL CONTRACTOR REQUIREMENTS AND RESPONSIBILITIES

SITE ESTABLISHMENT - REFER DWG CMP - 01
1. PRINCIPAL CONTRACTOR TO PREPARE TRAFFIC MANAGEMENT PLAN, EMERGENCY PLANS, SITE INDUCTION MATERIAL
2. IDENTIFIED RISKS:
   - DBYD INFO (EXPOSE EXISTING SERVICES)
   - SITE SIGNAGE (VISITOR ACCESS REQUIREMENTS, SITE INDUCTIONS ETC.)
   - EMERGENCY MANAGEMENT PLAN / FIRST AID / EGRESS
   - TRAFFIC MANAGEMENT
3. CODES OF PRACTICE:
   - CONSTRUCTION WORK - C.O.P (SWA)
   - FIRST AID IN THE WORKPLACE - C.O.P (SWA)
   - TRAFFIC MANAGEMENT IN WORKPLACES DRAFT C.O.P (SWA)

DEMOLITION
1. DEMOLITION TO BE CARRIED OUT BY A LICENSED DEMOLITION CONTRACTOR IN ACCORDANCE WITH THE CONTRACT DOCUMENTS SCOPE OF WORKS AND CODES OF PRACTICE NOMINATED BELOW.
2. DEMOLITION CONTRACTOR TO PREPARE DETAILED DEMOLITION PLAN, TRAFFIC MANAGEMENT PLAN, WASTE MANAGEMENT PLAN, WHS PLAN, AND SWMS FOR ALL DEMOLITION WORK).
3. ALL EXISTING BUILDINGS TO BE ASSESSED FOR ASBESTOS AND HAVE ASBESTOS REMOVED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH RELEVANT CODES OF PRACTICE
4. EXISTING STRUCTURES TO BE ASSESSED BY A STRUCTURAL ENGINEER TO DETERMINE THE SAFEST METHOD FOR DEMOLITION.
6. REFER TO SAFE DESIGN REPORT FOR FUTURE DEMOLITION PROCEDURE OF PROPOSED STRUCTURES.
7. CODES OF PRACTICE:
   - DEMOLITION WORK - C.O.P (SWA)
   - CONFINED SPACES - C.O.P (SWA)
   - HOW TO SAFELY REMOVE ASBESTOS - C.O.P (SWA)
   - HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE - C.O.P (SWA)
   - DRAFT CRANES - C.O.P (SWA)

EXCAVATION
1. EXCAVATION CONTRACTOR REQUIREMENTS: GEOTECH REPORT, EXCAVATION SAFETY PLAN, DEMOLITION PLAN, WASTE MANAGEMENT, TRAFFIC MANAGEMENT, EMERGENCY PLANS
2. PREPARE A SWMS FOR ALL EXCAVATION (INCLUDING BORED PIERS)
3. PROVIDE TEMPORARY BARRIERS AROUND ALL OPEN EXCAVATION AND CHANGES IN LEVEL GREATER THAN 800mm.
4. CODES OF PRACTICE:
   - EXCAVATION WORK - C.O.P (SWA)
   - CONSTRUCTION WORK - C.O.P (SWA)
   - CONFINED SPACES - C.O.P (SWA)
   - MANAGING THE RISK OF FALLS AT WORKPLACES - C.O.P (SWA)

CONSTRUCTION
1. PRINCIPAL CONTRACTOR TO PREPARE SWMS & WHS MANAGEMENT PLANS. REFER TO TEMPLATES IN THE CONSTRUCTION WORK CODE OF PRACTICE.
2. 'DIAL BEFORE YOU DIG' REPORTS TO BE COORDINATED AND ALL EXISTING SERVICES IDENTIFIED PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO PREPARE SWMS FOR ALL WORK CARRIED OUT UNDER POWER LINES INCLUDING CONCRETE VERGE CROSSINGS, VEHICULAR DELIVERIES, MATERIALS HANDLING WITH CRANES. DETERMINE HEIGHT OF EXISTING POWER LINES AND ESTABLISH NO-GO ZONES IN ACCORDANCE WITH CODES OF PRACTICE. INSTALL WARNING SIGNAGE AND HIGH VISIBILITY BUNTING TO DELINEATE NO-GO ZONE.
4. CODES OF PRACTICE:
   - CONSTRUCTION WORK - C.O.P (SWA)
   - DRAFT CRANES - C.O.P (SWA)
   - WC01394 WORK NEAR OVERHEAD POWERLINES - C.O.P (WORKCOVER NSW)
   - MANAGING ELECTRICAL RISKS IN THE WORKPLACE - C.O.P (SWA)
   - DRAFT - WORKING IN THE VICINITY OF OVERHEAD AND UNDERGROUND ELECTRIC LINES - C.O.P'

CONFINED SPACES
1. ACCESS TO CONFINED SPACES TO BE RESTRICTED AND MANAGED IN ACCORDANCE WITH THE PRINCIPAL CONTRACTORS' WHS REPORT AND RELEVANT CODES OF PRACTICE.
2. IDENTIFIED RISKS:
   - TANKS INSTALLATION
   - EXCAVATIONS
   - ROOF VOIDS
3. CODES OF PRACTICE:
   - CONFINED SPACES - C.O.P (SWA)

SLIPS, TRIPS & FALLS
1. PRINCIPAL CONTRACTOR TO IDENTIFY RISKS OF SLIPS, TRIPS & FALLS AND INCLUDE METHODS TO ELIMINATE OR REDUCE RISK IN THE WHS MANAGEMENT PLAN.
2. MAINTAIN CONSTRUCTION SITE FREE OF LOOSE DEBRIS.
3. IDENTIFIED RISKS
   - FLOOR FINISHES (SLIP RESISTANCE)
   - STAIRS & RAMPS (SLIP RESISTANCE, HIGHLIGHTING STRIPS, TACTILES ETC.)
   - PEDESTRIAN PATHS OF TRAVEL CLEARLY MARKED
   - ROOF ACCESS PROVISIONS & FALL ARREST SYSTEMS
   - OPEN EXCAVATIONS (PROVIDE WARNING TAPE / TEMPORARY BARRIERS)
   - WORKING AT HEIGHTS (DEMOLITION, BUILDING ROOFS, SAFETY WIRE MESH ETC.)
4. CODES OF PRACTICE
   - MANAGING THE RISK OF FALLS AT WORKPLACES - C.O.P (SWA)
   - PREVENTING FALLS IN HOUSING CONSTRUCTION - C.O.P (SWA)

FALLING OBJECTS
1. PRINCIPAL CONTRACTOR TO IDENTIFY RISKS OF FALLING OBJECTS AND INCLUDE METHODS TO ELIMINATE OR REDUCE RISK IN THE WHS MANAGEMENT PLAN.
2. MOVEMENT OF MATERIAL WITH CRANES TO BE PERFORMED WHOLLY WITHIN THE SITE IN ACCORDANCE WITH SWMS.
3. IDENTIFIED RISKS:
   - WORKING AT HEIGHTS (LOOSE MATERIAL OR SMALL OBJECTS)
   - DEMOLITION OF BUILDING COMPONENTS
   - WORKING IN EXCAVATED TRENCHES (BATTERS, GEOFABRIC, FENCING ETC.)
   - TEMPORARY BRACING FOR UNFINISHED STRUCTURES
   - LIFTING BY CRANES / FORKLIFTS
4. CODES OF PRACTICE:
   - CONSTRUCTION WORK - C.O.P (SWA)
   - DEMOLITION WORK - C.O.P (SWA)
   - EXCAVATION WORK - C.O.P (SWA)
   - DRAFT CRANES - C.O.P (SWA)

OPERATIONAL USE OF BUILDING
1. THE COMPLETED SITE IS TO BE OPERATED IN ACCORDANCE WITH FUEL INDUSTRY SAFETY PROCEDURES
2. CODES OF PRACTICE
   - FIRST AID IN THE WORKPLACE - C.O.P (SWA)
   - MANAGING THE RISK OF FALLS AT WORKPLACES - C.O.P (SWA)

HAZARDOUS SUBSTANCES
1. PRINCIPAL CONTRACTOR TO IDENTIFY HAZARDOUS SUBSTANCES AT ALL STAGES OF CONSTRUCTION AND HANDLE IN ACCORDANCE WITH RELEVANT SPECIFICATIONS
2. EXISTING BUILDINGS ON THIS SITE MAY CONTAIN ASBESTOS. REFER DEMOLITION NOTES FOR FURTHER DETAIL
3. IDENTIFIED RISKS:
   - ASBESTOS
   - ABOVEGROUND LPG TANK
   - UNDERGROUND FUEL TANKS
4. CODES OF PRACTICE:
   - HOW TO SAFELY REMOVE ASBESTOS - C.O.P (SWA)
   - HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE - C.O.P (SWA)
   - MANAGING RISKS OF HAZARDOUS CHEMICALS IN THE WORKPLACE - C.O.P (SWA)
   - WC04096 SAFE HANDLING OF TIMBER PRESERVATIVES AND TREATED TIMBER - C.O.P (WORKCOVER NSW)

ABBREVIATIONS LEGEND

C.O.P.	:	CODE OF PRACTICE
DBYD	:	DIAL BEFORE YOU DIG (www.1100.com.au)
SWA	:	SAFE WORK AUSTRALIA (www.safeworkaustralia.com.au)
SWMS	:	SAFE WORK METHOD STATEMENT
WHS	:	WORKPLACE HEALTH & SAFETY

DIAL 1100 BEFORE YOU DIG

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

No.	Amendment	By	Date
P1	ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	SS	20.09.2018
P2	ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	26.09.2018
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.08.2019
P3	ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	16.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

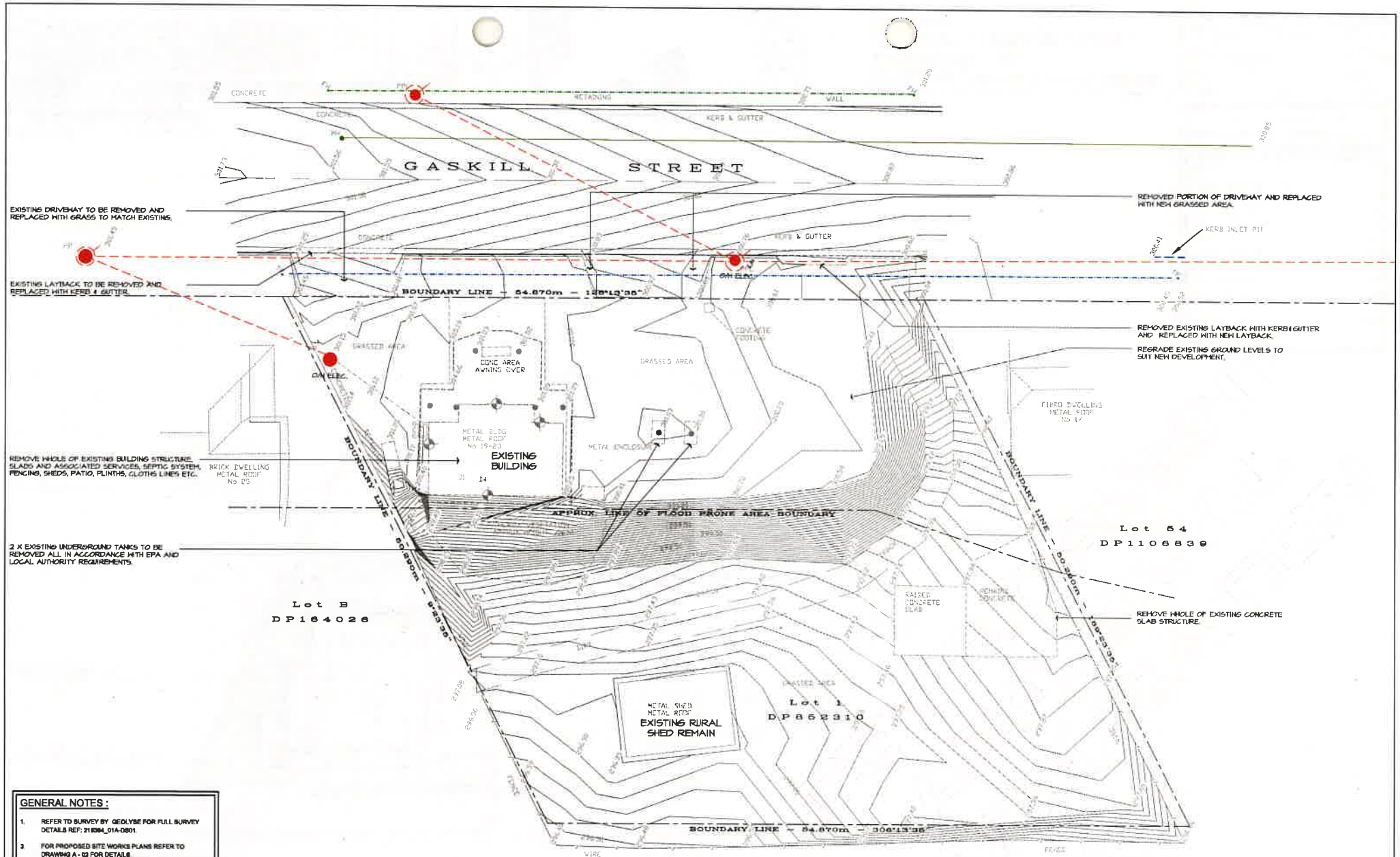
R.J. SINCLAIR Pty Ltd
Building Design

Project: PROPOSED SERVICE STATION REBUILD
19 - 23 GASKILL STREET
CANOWINDRA NSW

For: WINDRA PETROLEUM Pty Ltd

Drawing: CONSTRUCTION MANAGEMENT NOTES + DETAILS

Designed	VP	
Date: October 2017	Drawn	VP
Scale: NOT TO SCALE	Checked	
Project No: 16 - 066	Drawing No: CMP - 02	Amdt: DA2



EXISTING SITE PLAN AND DEMOLITION PLAN

GENERAL NOTES :

1. REFER TO SURVEY BY GEOLYSE FOR FULL SURVEY DETAILS REF: 218384_01A-DB01.
3. FOR PROPOSED SITE WORKS PLANS REFER TO DRAWING A - 03 FOR DETAILS.

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	MH	20.09.2018
P2	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	21.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.06.2019
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	19.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

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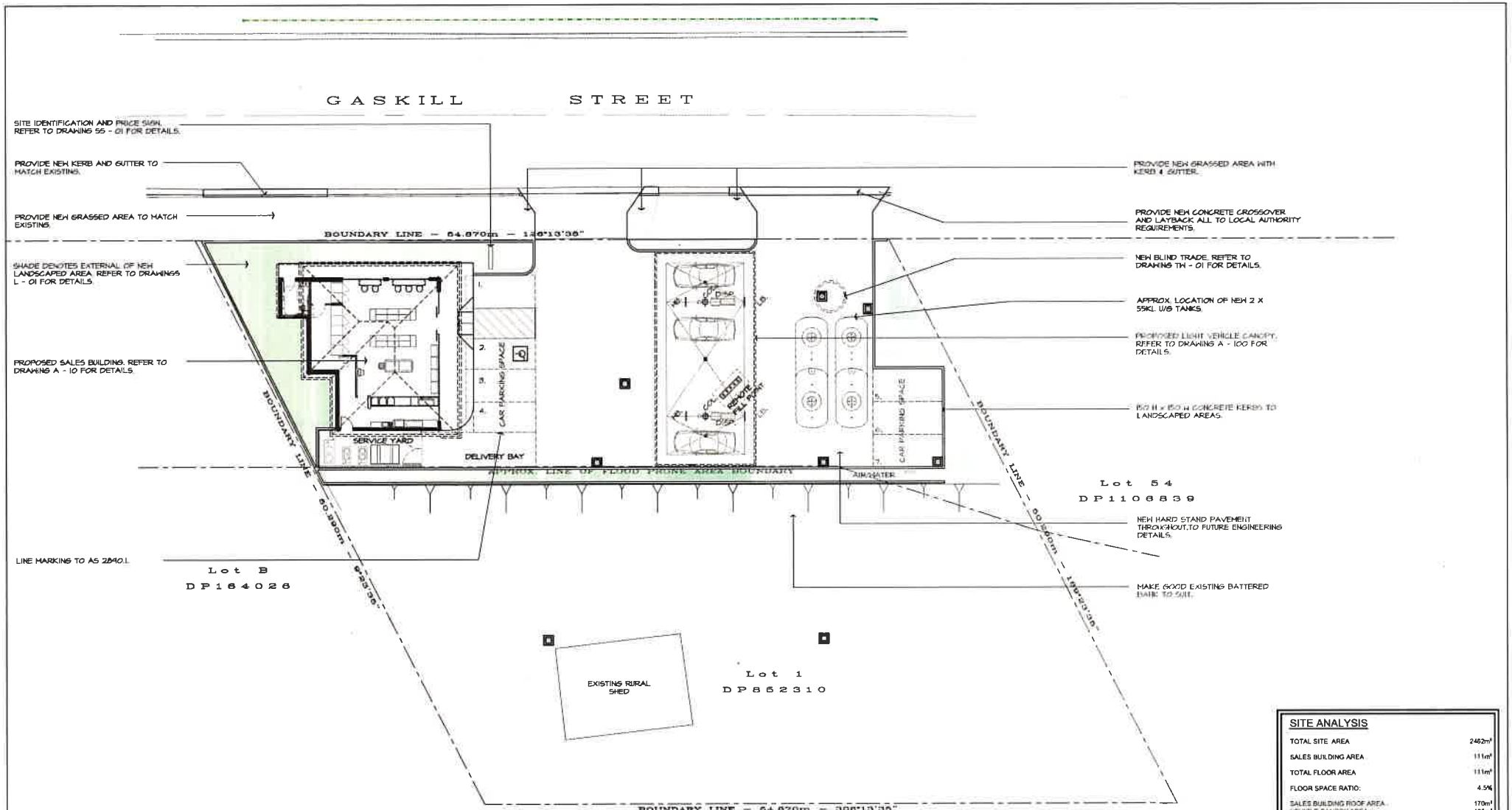
Multi-Disciplina Design + Project Management

Project
PROPOSED SERVICE STATION REBUILD
14 - 25 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd

Drawing Title
EXISTING SITE PLAN AND DEMOLITION PLAN

Approved	Designed
Date: SEPTEMBER 2018	Drawn: MH
Scale: 1:150 @ A1 & 1:300 @ A3	Checked
Project No.: 16 - 066	Drawing No.: A - 01
	Amdt.: DA2



SITE ANALYSIS

TOTAL SITE AREA	2462m²
SALES BUILDING AREA	111m²
TOTAL FLOOR AREA	111m²
FLOOR SPACE RATIO:	4.5%
SALES BUILDING ROOF AREA :	170m²
VEHICLE CANOPY AREA :	136m²
TOTAL PAVEMENT AREA	533m²
TOTAL SITE COVERAGE :	839m²
SITE COVERAGE PERCENTAGE :	34%
TOTAL LANDSCAPED AREA :	207m²

PARKING ANALYSIS

PARKING SPACES	7 SPACES

ISSUED FOR DEVELOPMENT APPROVAL
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SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	MH	20.04.2018
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	26.04.2018
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	23.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.06.2019
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

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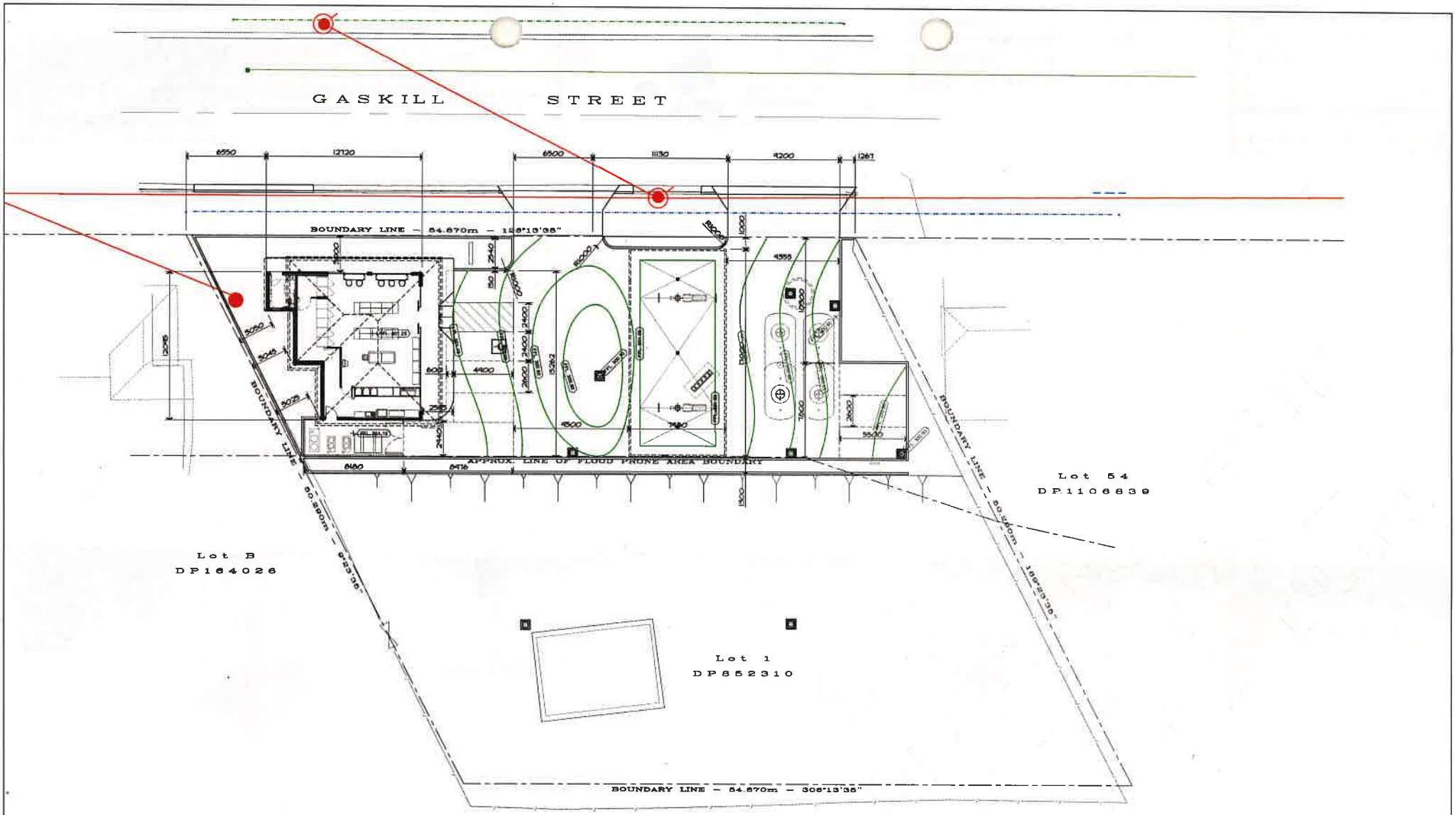
Project:
PROPOSED SERVICE STATION REBUILD
14 - 23 GASKILL STREET
CANOWINDRA NSW
FOR
C OWINDRA PETROLEUM Pty Ltd
Dwg: PROPOSED SITE PLAN

Approved:	Designed
Date: SEPTEMBER 2018	Drawn: MH
Scale: 1:150 @ A1 & 1:300 @ A3	Checked
Project No: 16 - 066	Drawing No: A - 02
	Amdt: DA2



DIMENSIONED SITE PLAN

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
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No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY, NOT FOR CONSTRUCTION.	MH	20.04.2018
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY, NOT FOR CONSTRUCTION.	VP	26.04.2018
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL, NOT FOR CONSTRUCTION.	VP	27.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL, NOT FOR CONSTRUCTION	VP	07.06.2019
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL, NOT FOR CONSTRUCTION.	VP	13.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED, SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL, NOT FOR CONSTRUCTION	VP	20.12.2019

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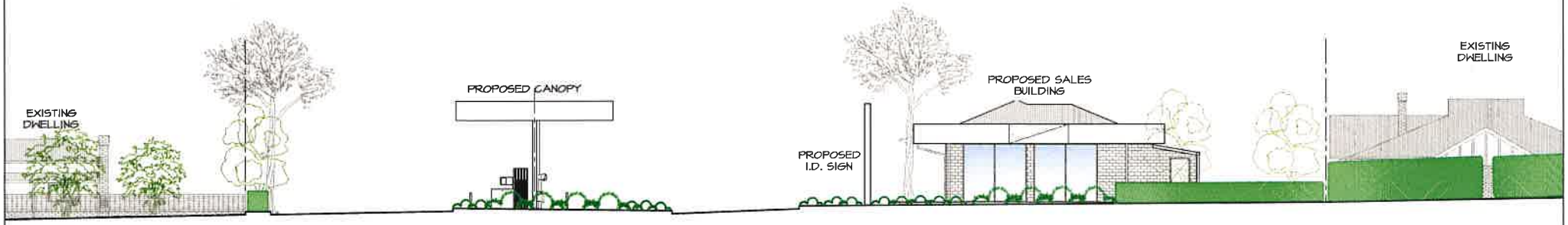
Project
PROPOSED SERVICE STATION REBUILD
14 - 25 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd

Drawing Title
DIMENSIONED SITE PLAN

Approved	Designed
Date: SEPTEMBER 2018	Drawn: MH
Scale: 1:50 @ A1 & 1:100 @ A3	Checked
Project No.: 16 - 066	Drawing No.: A - 03
	Amdt.: DA2

NOTES :

1. ADJACENT DWELLINGS SHOWN ARE BASED ON PARTIAL SURVEY INFO, PHOTOS AND GOOGLE STREEVIEWS OBTAINED OF THE EXISTING STRUCTURES.
2. LANDSCAPING SHOWN IS PURELY FOR ILLUSTRATIVE PURPOSES. REFER TO LANDSCAPE DRAWINGS FOR ACTUAL PROPOSED PLANTING SPECIES.



PROPOSED STREETSCAPE ELEVATION

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	21.05.2014
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	01.06.2014
P2	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2014
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2014

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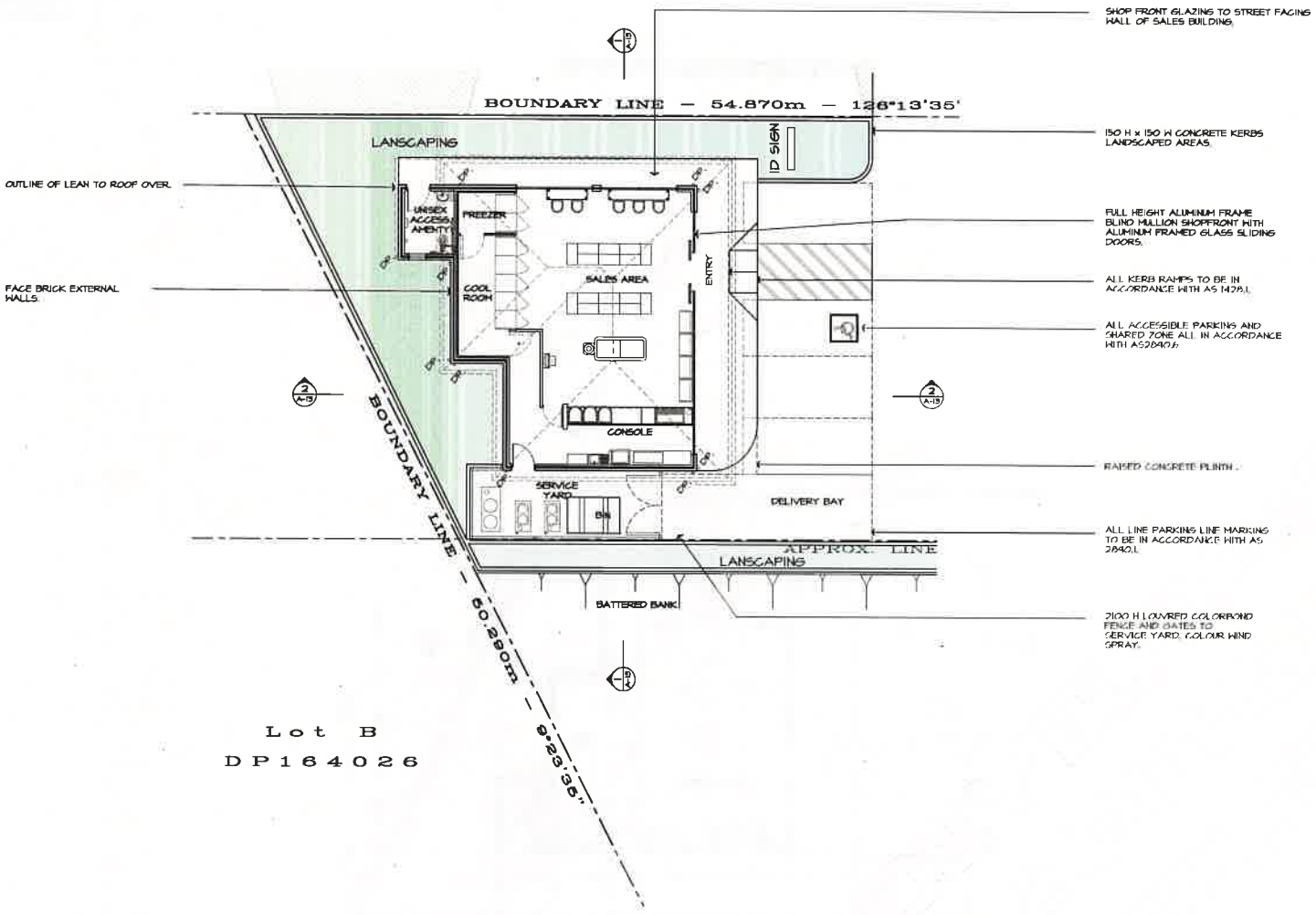
Project
PROPOSED SERVICE STATION REBUILD
41 - 25 BASKILL STREET
CANOWINDRA NSW
FOR
C WINDRA PETROLEUM Pty Ltd
On
STR... CAPE ELEVATION

Approved	Designed: VP
Date: May 2014	Drawn: VP
Scale: 1 : 100 @ A1 1 : 200 @ A3	Checked
Project No. 16 - 066	Drawing No. A - 04
	Amdt. DA2



SALES BUILDING FLOOR PLAN

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

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P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	MH	20.04.2018
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	26.04.2018
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	27.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.06.2019
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

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Phone: 02 8882 9999
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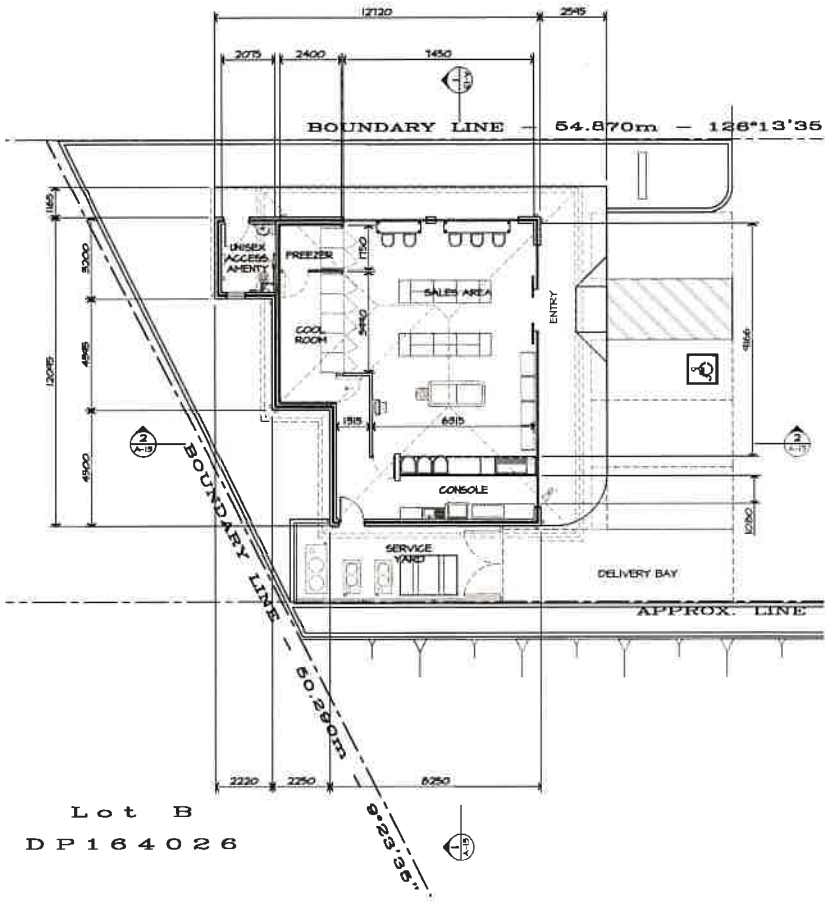
Web: www.rjsinclair.com.au
Photo Descriptive Design + Project Management

Project:
PROPOSED SERVICE STATION REBUILD
14 - 29 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd

Drawing Title:
SALES BUILDING FLOOR PLAN

Approved:	Designed:
Date: SEPTEMBER 2018	Drawn: MH
Scale: 1 : 100 @ A1 1 : 200 @ A3	Checked:
Project No.: 16 - 066	Drawing No.: A-10
	Amdt.: DA2



SALES BUILDING DIMENSION PLAN

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

No	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	MH	20.04.2016
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	26.04.2016
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	27.09.2016
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	01.06.2016
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2016
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2016

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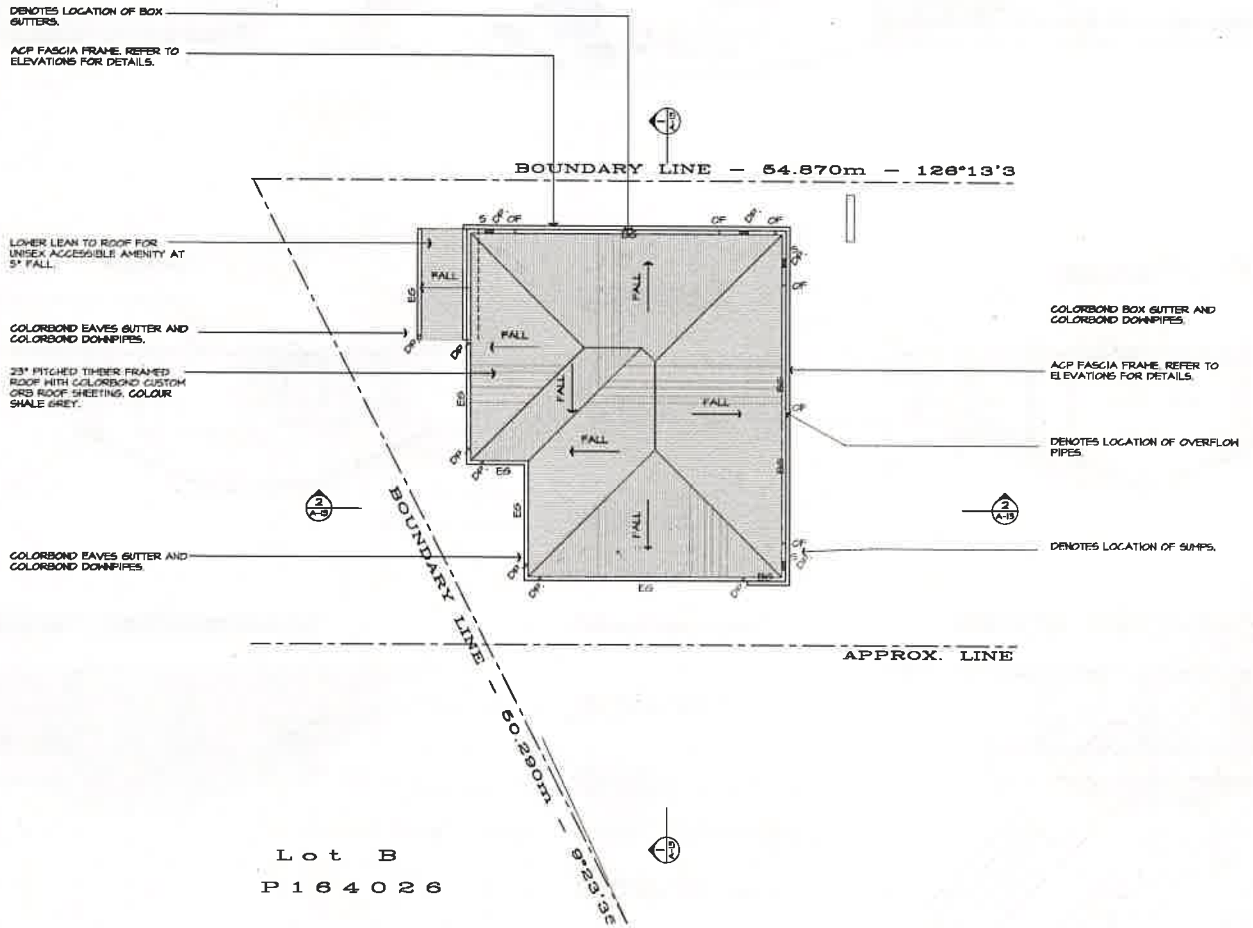
Project:
PROPOSED SERVICE STATION REBUILD
16 - 23 GASKILL STREET
CANOWINDRA NSW
FOR
C NOWINDRA PETROLEUM Pty Ltd
On
SALES BUILDING DIMENSION PLAN

Approved	Designed
Date: SEPTEMBER 2016	Drawn: MH
Scale: 1 : 100 @ A1 1 : 200 @ A3	Checked
Project No.: 16 - 066	Drawing No: A-11
	Amdt.: DA2



SALES BUILDING ROOF PLAN

SCALE BAR 1 : 1 On A1 Size Original
SCALE BAR 1 : 2 On A3 Size Reduction

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No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	MH	20.04.2018
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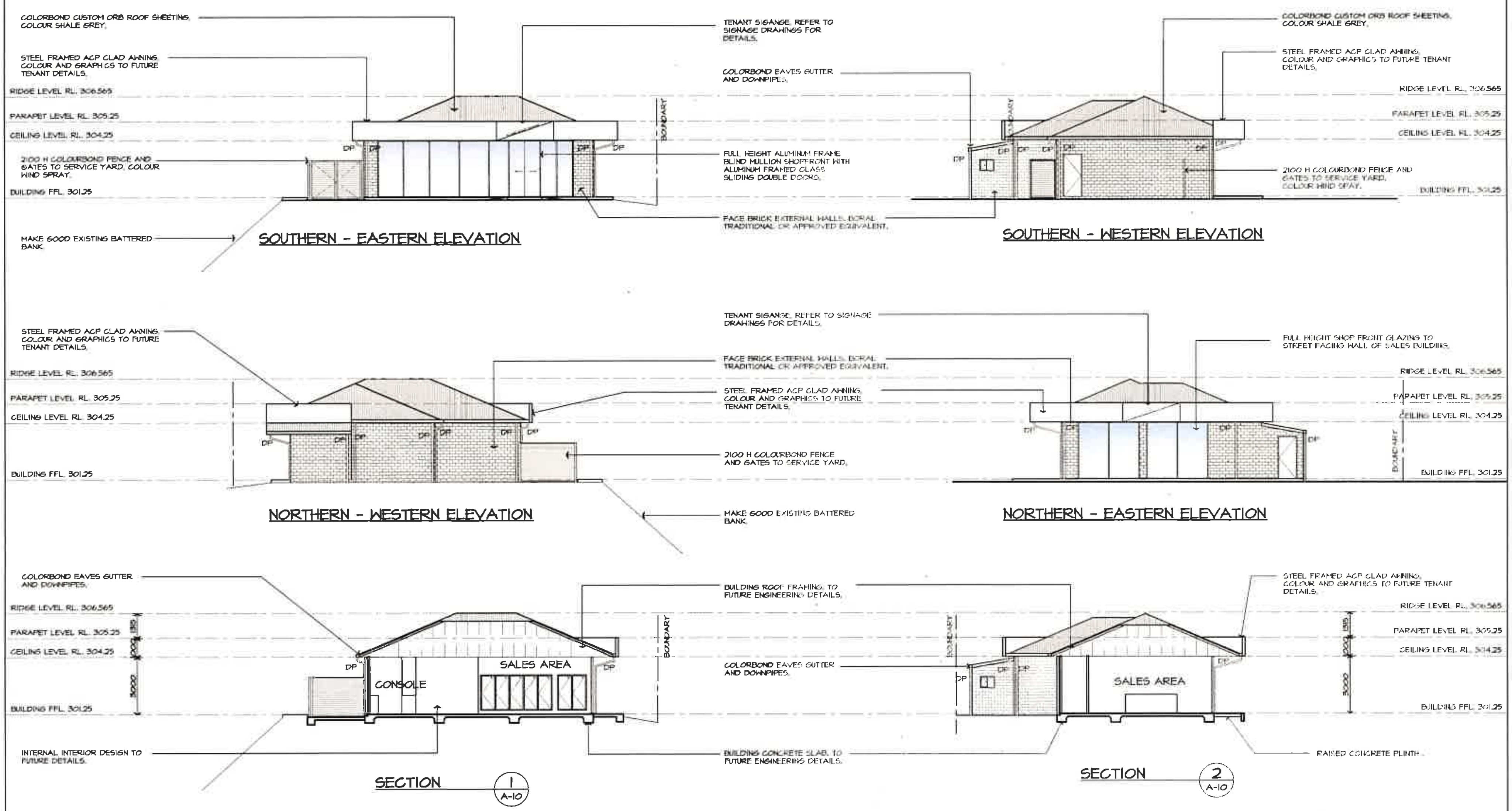
R.J. SINCLAIR Pty Ltd
Building Design
BELLA VISTA NSW 2153
ROUND CORNER NSW 2158

ISSUED FOR DEVELOPMENT APPROVAL NOT FOR CONSTRUCTION

Project: PROPOSED SERVICE STATION REBUILD
19 - 23 GASKILL STREET
CANOWINDRA NSW
FOR CANOWINDRA PETROLEUM Pty Ltd

Drawing Title: SALES BUILDING ROOF PLAN

Date	SPETEMBER 2018
Drawn	MH
Scale	1 : 100 @ A1 1 : 200 @ A3
Project No.	16 - 066
Drawing No.	A - 12
Amdt.	DA2



SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

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No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	MH	20.09.2018
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P3	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	12.10.2018
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	27.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION.	VP	07.06.2019
P5	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2019
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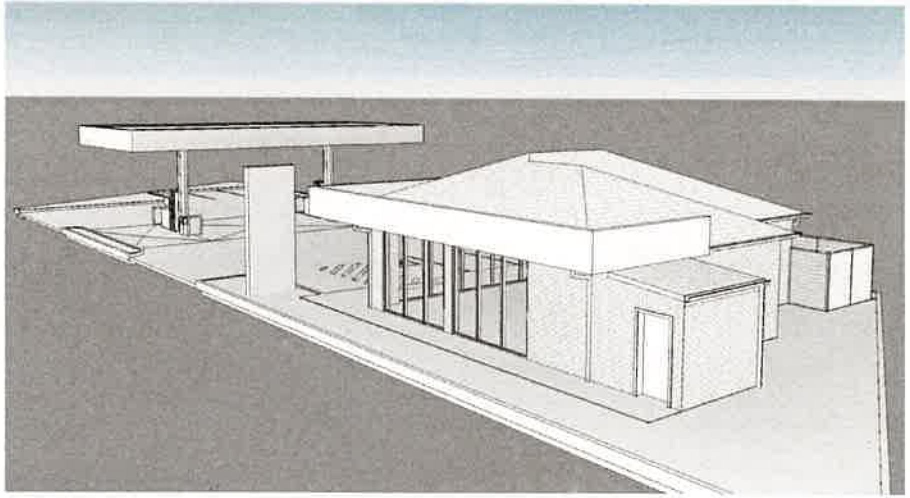
R.J. SINCLAIR Pty Ltd
Building Design

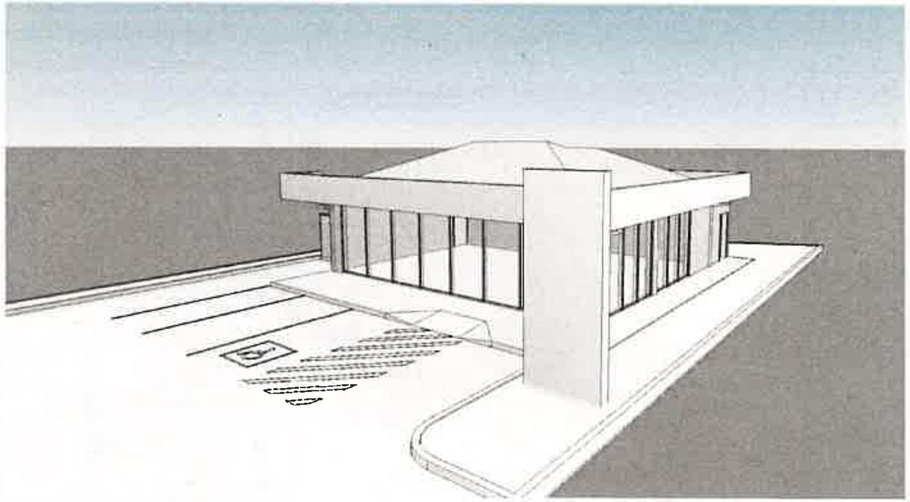
ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

Project: PROPOSED SERVICE STATION REBUILD
11 - 23 GASKILL STREET
CANOWINDRA NSW
For: C WINDRA PETROLEUM Pty Ltd
SAL BUILDING ELEVATIONS

Designed	RJS
Drawn	MH
Date	SEPTEMBER 2018
Scale	1 : 100 @ A1 1 : 200 @ A3
Project No.	16 - 066
Drawing No.	A - 13
Amdt.	DA2



3D View 1



3D View 2

SCALE BAR 1 : 1 On A1 Size Origional

SCALE BAR 1 : 2 On A3 Size Reduction

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR CLIENT APPROVAL ONLY. NOT FOR CONSTRUCTION	VP	19.12.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL ONLY. NOT FOR CONSTRUCTION.	VP	20.12.2019

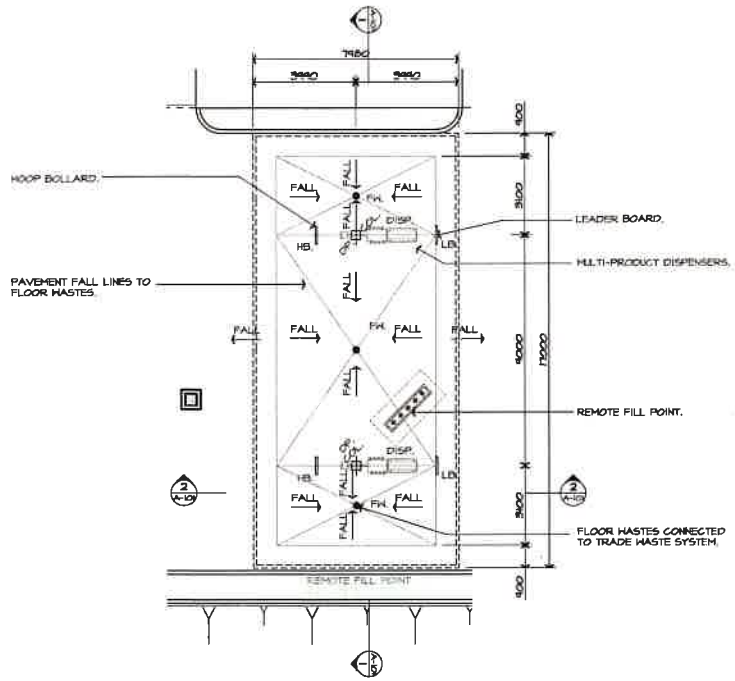
R.J. SINCLAIR Pty Ltd
Building Design
BELLA VISTA NSW 2153

Project
PROPOSED SERVICE STATION REBUILD
19 - 23 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd

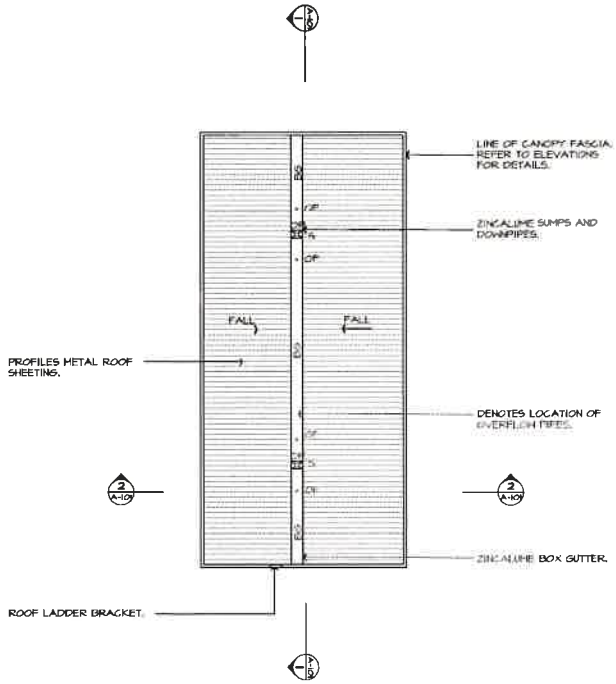
Drawing Title
SALES BUILDING PERSPECTIVES

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

Approved		Designed	VP
Date	December 2019	Drawn	VP
Scale	N.T.S.	Checked	
Project No. 16 - 066	Drawing No. A - 14	Amdt.	DA1



CANOPY FLOOR PLAN



CANOPY ROOF PLAN

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

No.	Amendment	By	Date
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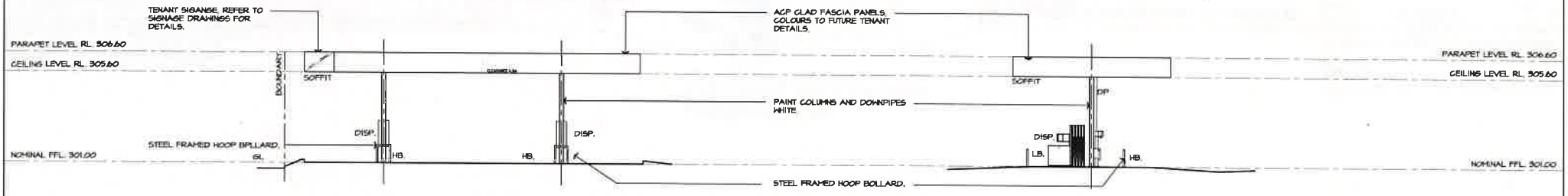
ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

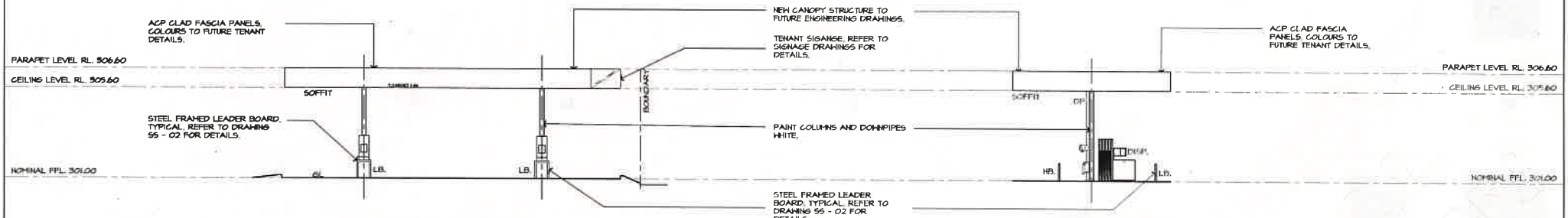
Project: PROPOSED SERVICE STATION REBUILD
14 - 28 BASKILL STREET
CANOWINDRA NSW
For: C[illegible]OWINDRA PETROLEUM Pty Ltd
Drawing: RE[illegible]ING CANOPY PLANS

Approved:	Designed: RJS
Date: AUGUST-2018	Drawn: MH
Scale: 1 : 100 @ A1 1 : 200 @ A3	Checked:
Project No.: 16 - 066	Drawing No.: A-100
	Amdt.: DA2



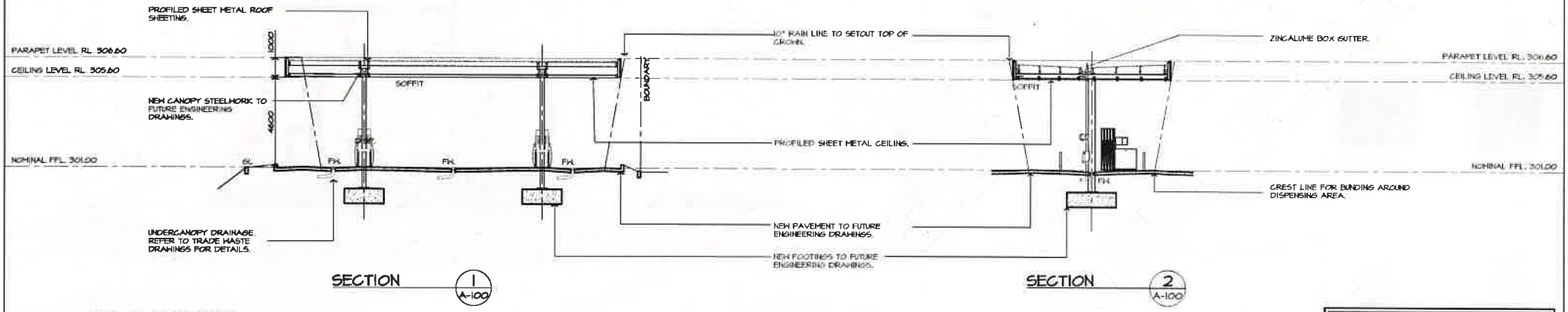
NORTHERN ELEVATION

EASTERN ELEVATION



SOUTHERN ELEVATION

WESTERN ELEVATION



SECTION 1 / A-100

SECTION 2 / A-100

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY, NOT FOR CONSTRUCTION.	MH	20.04.2018
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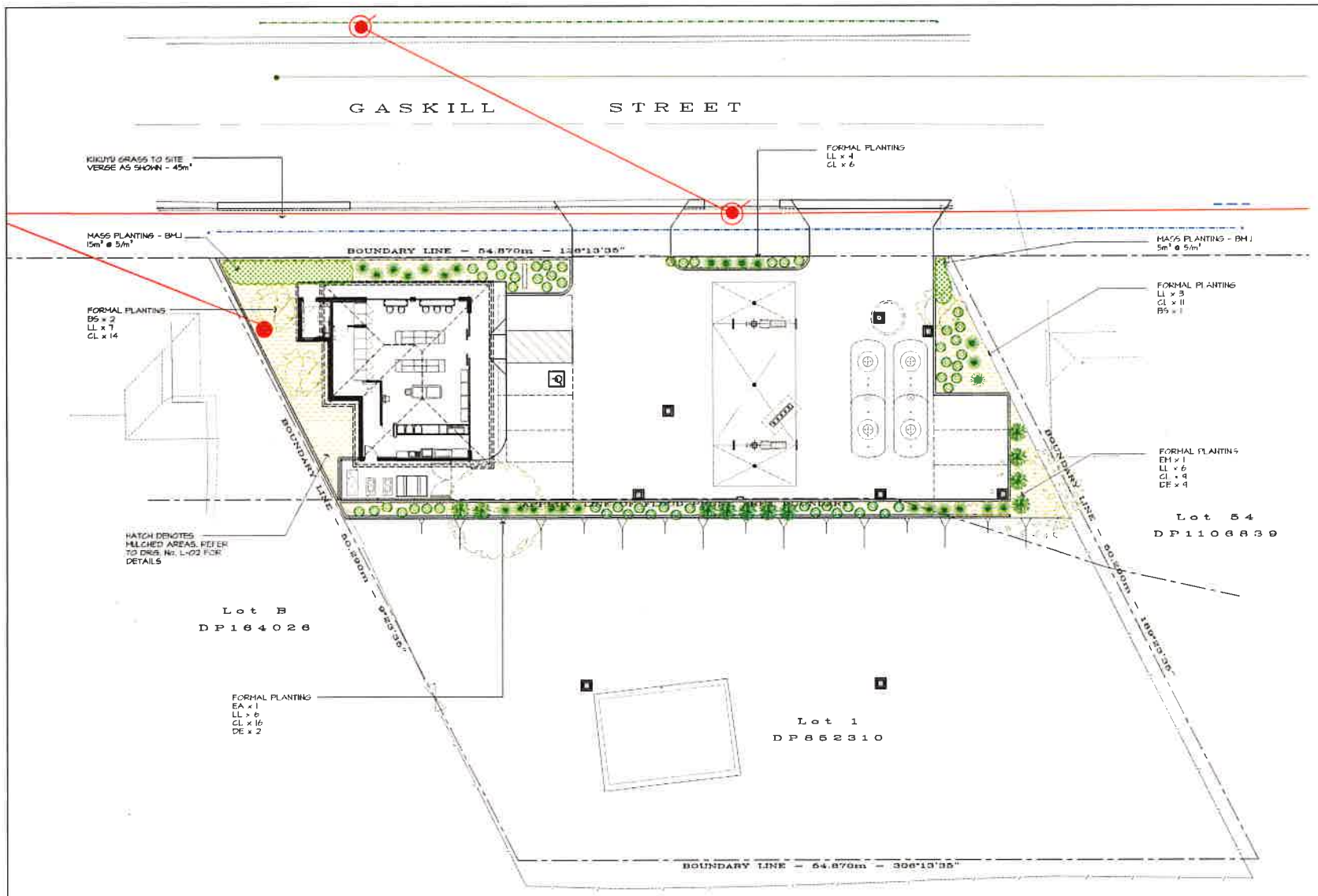
ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

Project
PROPOSED SERVICE STATION REBUILD
14 - 25 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd

Drawing Title
REBUILT CANOPY
ELEVATIONS & SECTIONS

Approved	Designed RJS
Date SEPTEMBER-2018	Drawn MH
Scale 1 : 100 @ A1 | 1 : 200 @ A3	Checked
Project No. 16 - 066	Drawing No. A-101
	Amdt. DA2



PLANT SCHEDULE

EUCALYPTUS ALBENS

WHITE BOX
25m H x10m W
60 LITRE

EA - 1 OFF

EUCALYPTUS MELLIODORA

YELLOW BOX
15m H x10m W
60 LITRE

EM - 1 OFF

PYRUS USSURIENSIS

MANCHURIAN FLOWERING PEAR
3m H x 7m W
200 mm

BS - 3 OFF

CAREX APPRESSA

TALL SEDGE
1.0m H x 0.6m W
TUBE

CA - 56 OFF

BUXUS MICROPHYLLA VAR JAPONICA

JAPANESE BOX (AS HEDGE)
0.5m H x 0.5m W
TUBE

BMJ - 20m² @ 5/m²

DORYANTHES EXCELSA

GYMEA LILY
3.0m H x 1.5m W
45 L

DE - 10 OFF

LOMANDRA LONGIFOLIA SP.

MAT RUSH
0.9m H x 1.2m W
150 mm

LL - 26

LANDSCAPE PLAN

PROVIDE SUBSOIL DRAINAGE AND PIPEWORK FOR AUTOMATIC IRRIGATION SYSTEM TO ALL LANDSCAPED AREAS, REFER TO DRG. No. L-02 FOR DETAILS. PROVIDE 40mm PVC CONDUIT UNDER CONCRETE PAVED AREAS WHERE REQUIRED.

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

No.	Amendment	By	Date
PI	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	27.05.2019
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Multi Disciplined Design + Project Management

Project:
PROPOSED SERVICE STATION REBUILD
14 - 28 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd
Drawing:
LANDSCAPE PLAN

Approved: R.J. SINCLAIR Hon. Cert.	Designed: DS
Date: May 2019	Drawn: VP
Scale: 1:150 @ A1 & 1:300 @ A3	Checked:
Project No: 16 - 066	Drawing No: L - 01
	Amdt: DA2

LANDSCAPING SPECIFICATION

VEGETATION CONTROL
ALL ON SITE VEGETATION OTHER THAN THAT FOR RETENTION IS TO BE REMOVED FROM SITE EITHER BY EXCAVATING THE UPPER 200mm OR BY USE OF HERBICIDE WITH NON-RESIDUAL EFFECT.

EXCAVATION
EXCAVATE ALL MASS (TREE/SHRUB/GROUND COVER) PLANTING AREAS TO A DEPTH OF 300mm BELOW ADJACENT FINISHED LEVELS.

CULTIVATION
ALL EXCAVATED PLANTING AREAS ARE THEN TO BE CULTIVATED BY HARROWING OR RIPPING, ENSURING NO DAMAGE OCCURS TO TREES OR SHRUBS.

PLANTING MIX
SUPPLY AND INSTALL TO ALL MASS PLANTING AREAS, IN MAXIMUM 150mm CONSOLIDATED LAYERS, A PLANTING MIX COMPRISING OF 3 PARTS TOPSOIL AND 1 PART DECOMPOSED COW MANURE OF NATURAL PH VALUE, THOROUGHLY INCORPORATE WITH PREPARED SUBGRADE AND FINISH 50mm BELOW ADJACENT LEVEL.

PLANTING
ALL PLANT MATERIAL I.E. SHRUBS AND GROUND COVERS, IS TO BE WELL GROWN OF TYPICAL FORM, NOT SOFT OR FORCED, BE HARDENED OF AND HAVE HEALTHY WELL DEVELOPED ROOT SYSTEMS, NO INDIVIDUAL PLANT IS TO BE ROOT BOUND AND EACH MUST BE FREE FROM DISEASE AND INSECT PESTS.

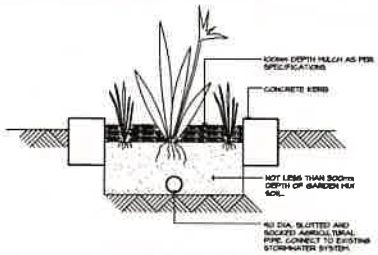
TO PLANT, EXCAVATE A HOLE TWICE THE DIAMETER OF THE ROOT BALL, PRESS FERTILIZER PELLETS EQUIVALENT TO KOKEI RELEASE AROUND BASE OF EACH HOLE AT THE RATE SPECIFIED.

TURFING
PROVIDE 200MM OF TOPSOIL TO MATCH THE TOP OF EXISTING GROUND LEVEL PRIOR TO THE LAYING OF THE TURF.
TURF TO BE WINTERSGREEN VARIETY COUCHGRASS.

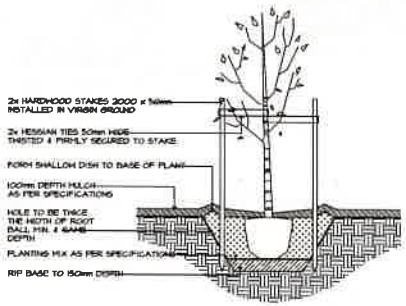
MULCHING
ALL PLANTING AREAS ARE TO BE MULCHED WITH A MINIMUM 100mm DEEP LAYER OF LOCAL RIVER SHINGLE SPALLS (ROCK CHIPS).

MAINTENANCE
THE FOLLOWING MATTERS ARE TO BE ATTENDED TO FOR A PERIOD OF 13 WEEKS:
- WATERING
- WEEDING
- FERTILIZING
- REPLACEMENT OF ANY FAILED PLANTS
- RECTIFICATION OF ANY SOIL SUBSIDENCE

IRRIGATION
THE BUILDING CONTRACTOR SHALL SUPPLY AND INSTALL AN "OFF THE SHELF" FULLY AUTOMATIC WATERING SYSTEM TO ALL LANDSCAPED AREAS. CONNECT TO RAIN WATER TANK AND PROVIDE BALL VALVE AT TANK. PROVIDE A HARVESTED RAINWATER / POTABLE WATER CROSSOVER SYSTEM, SUCH AS A "RAINBANK" COMPLETE WITH SOLENOID VALVES TO ALLOW SYSTEM TO CONTINUE OPERATING WHEN RAINWATER TANK IS EMPTY. PROVIDE A BACKFLOW PREVENTION DEVICE BETWEEN IRRIGATION SYSTEM AND SITE RETICULATION. PROVIDE AN AUTOMATIC CONTROLLER THAT PROVIDES FOR MULTIPLE ZONE SCHEDULING AND HOURLY MULTI-CYCLE OPERATION. THE CONTROLLER SHALL HAVE A MANUAL OVERRIDE. IF MICRO SPRAY HEADS ARE INCLUDED THEY SHALL BE CAPABLE OF BEING TURNED OFF OR ISOLATED DURING DESIGNATED PERIOD OF WATER RESTRICTIONS WHILE STILL BEING ABLE TO OPERATE DRIPPER. THE CONTROLLER SHALL HAVE A SECURE HOUSING AND BE PROTECTED FROM THE WEATHER. EXTEND ELECTRICAL SERVICES AS REQUIRED TO CONTROLLER, AND PROVIDE ALL CONNECTIONS WITH WATERPROOF CONNECTORS.



TYPICAL GARDEN BED SECTION
NOT TO SCALE



TYPICAL PLANTING DETAIL
NOT TO SCALE

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

No.	Amendment	By	Date
PI	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY, NOT FOR CONSTRUCTION.	VP	27.05.2019
DAI	ISSUED FOR DEVELOPMENT APPROVAL, NOT FOR CONSTRUCTION	VP	01.08.2019
DA2	SITE COVERAGE, SALES BUILDINGS AND CANOPY REDUCED, SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL, NOT FOR CONSTRUCTION	VP	20.12.2019

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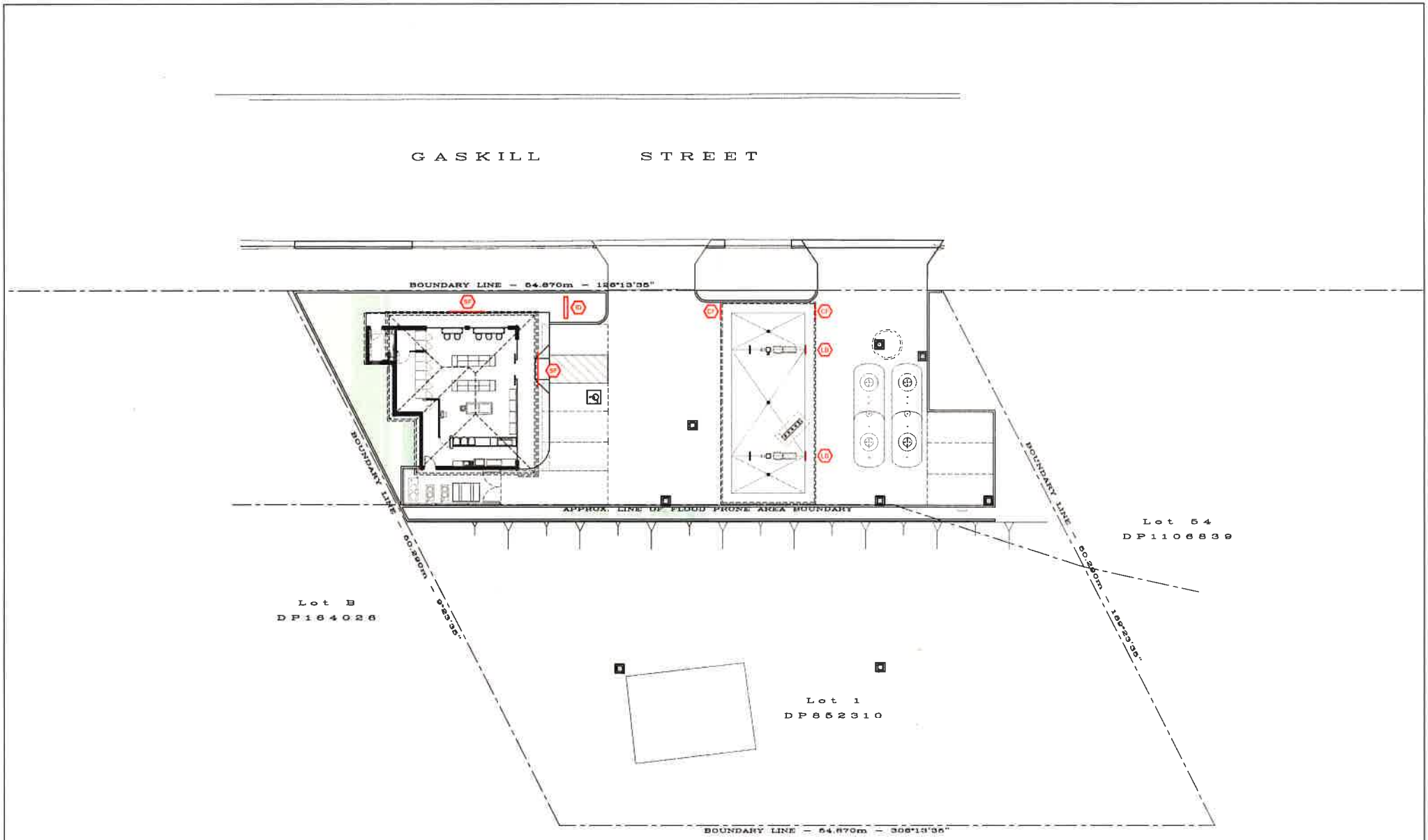
Multi-Disciplinary Design + Project Management

Project
PROPOSED SERVICE STATION REBUILD
14 - 28 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd

Drawing Title
LANDSCAPING NOTES AND DETAILS

Approved	Designed: DS
Date: May 2019	Drawn: VP
Scale: NTS	Checked:
Project No.: 16 - 066	Drawing No.: L - 02
	Amdt.: DA2



SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR CLIENT COMMENT ONLY. NOT FOR CONSTRUCTION.	MH	20.04.2018
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	26.04.2018
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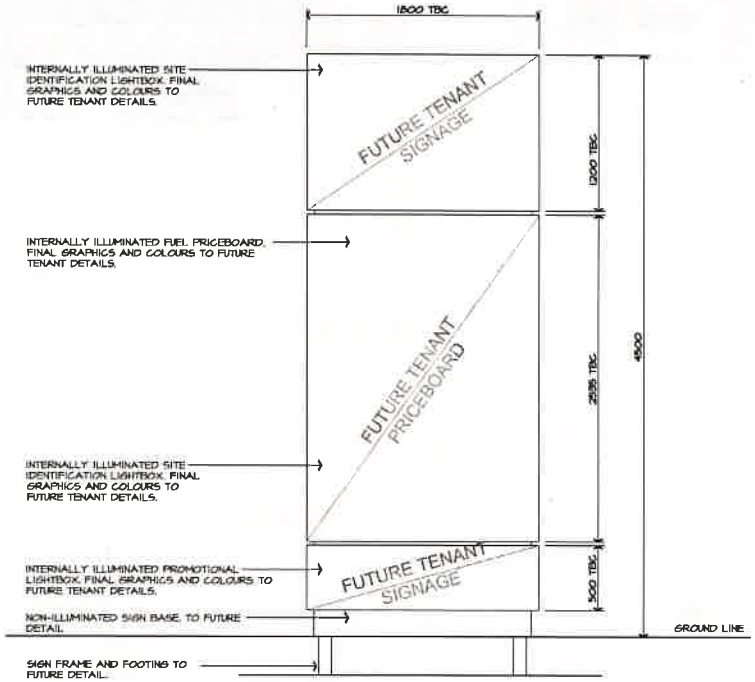
R.J. SINCLAIR Pty Ltd
Building Design

Project
PROPOSED SERVICE STATION REBUILD
14 - 28 GASKILL STREET
GANOWINDRA NSW
For
GANOWINDRA PETROLEUM Pty Ltd
Drawing
SITE PLAN

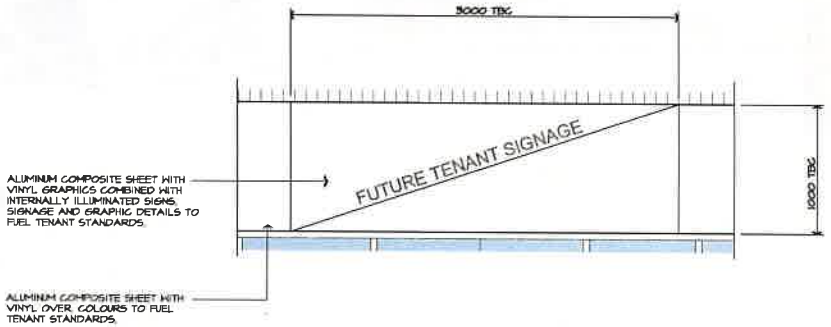
Approved	Designed: RJS
Date: SEPTEMBER 2018	Drawn: MH
Scale: 1 : 150 @ A1 1 : 300 @ A3	Checked
Project No.: 16 - 066	Drawing No.: SS - 01
	Amdt.: DA2



SITE I.D. SIGN (ID)

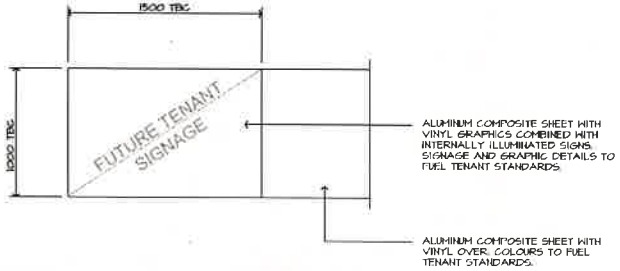
FACE AREA APPROX. 8m²

No. OFF : 1



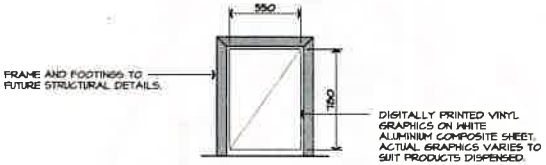
SHOP FASCIA SIGNAGE (SF)

No. OFF : 2



CANOPY FASCIA SIGNAGE (CF)

No. OFF : 2



LEADERBOARD (LB)

NON-ILLUMINATED

No. OFF : 2

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

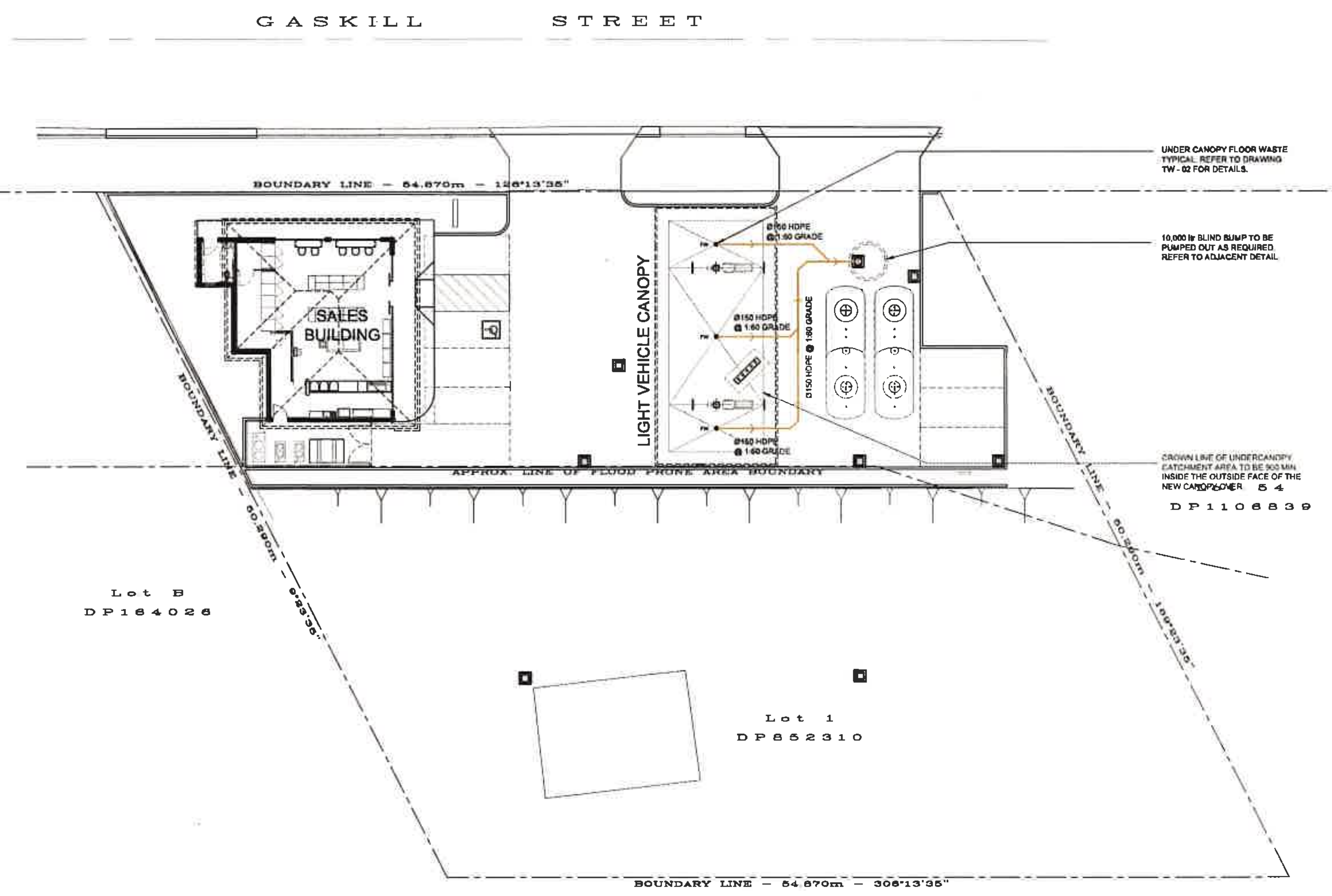
No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR CLIENT COMMENT ONLY. NOT FOR CONSTRUCTION.	MH	20.04.2018
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	12.10.2018
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	27.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.06.2019
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	19.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

R.J. SINCLAIR Pty Ltd
Building Design

Project
PROPOSED SERVICE STATION REBUILD
#1 - 23 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd

Drawing Title
SIGNAGE DETAILS

Approved	Designed: RJS
Date: SEPTEMBER 2018	Drawn: MH
Scale: 1 : 20 @ A1 1 : 40 @ A3	Checked:
Project No. 16 - 066	Drawing No. SS - 02
	Amdt. DA2



TRADE WASTE PLAN

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

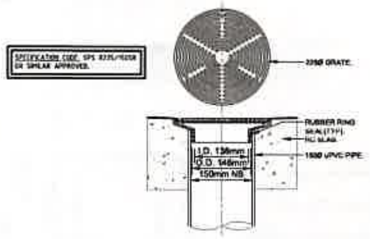
No	Amendment	By	Date
P1	PRELIMINARY ISSUE. FOR APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	25.09.2018
P2	PRELIMINARY ISSUE. FOR APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	28.09.2018
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION	VP	27.05.2018
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.08.2018
P4	ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION	VP	18.12.2018
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

R.J. SINCLAIR Pty Ltd
Building Design

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

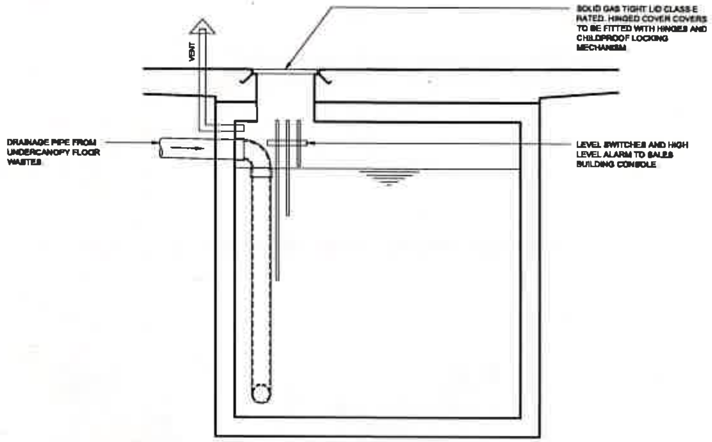
Project: PROPOSED SERVICE STATION REBUILD
18 - 23 GASKILL STREET
CANOWINDRA NSW
FOR: WINDRA PETROLEUM Pty Ltd
Drawing: TRADE WASTE PLAN

Approved		Designed	VP
Date	September 2018	Drawn	VP
Scale	1:150 @ A1 & 1:300 @ A3	Checked	
Project No 16 - 066	Drawing No TW - 01	Amdt.	DA2



UNDER CANOPY 150mmØ FLOOR WASTE

NOT TO SCALE



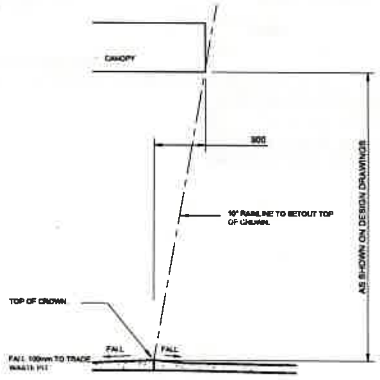
BLIND SUMP

10,000 LITRES Nom. STORAGE

TRADE WASTE SCHEMATIC ELEVATION

NOTES

1. ALL TANKS, EQUIPMENT Etc. IS TO BE SUPPLIED AND INSTALLED BY THE BUILDING CONTRACTOR UNLESS NOTED OTHERWISE.
2. ALL TANKS ARE TO BE PRECAST CONCRETE, AND FITTED WITH LADDER RUNGS IN ACCORDANCE WITH AUSTRALIAN STANDARDS, FOR CLEANOUT PURPOSES. ALL TANKS TO BE FITTED WITH A TRAFFICABLE MANHOLE WITH HINGES AND CHILDPROOF LOCKING MECHANISM. ALL STEELWORK IS TO BE HOT DIPPED GALV.
3. HIGH LEVEL ALARM SYSTEM TO BE INSTALLED SO THAT VISUAL AND AUDIO ALARMS ARE ACTIVATED. PROVIDE VISUAL ALARM (AUDIO AND VISUAL) IN SERVICE STATION CONSOLE AREA. SITE OPERATOR TO ARRANGE DISPOSAL OF SUMP CONTENTS OFF-SITE WITH A SUITABLE TRADE WASTE CONTRACTOR.



BUNDING TYPICAL DETAIL

SCALE 1:50

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE. FOR APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	25.09.2018
P2	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	27.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.06.2019
P3	ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	18.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

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NorWest Business Park
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Postal: PO Box
ROUND CORNER NSW 2158
Multi-Discipline Design + Project Management

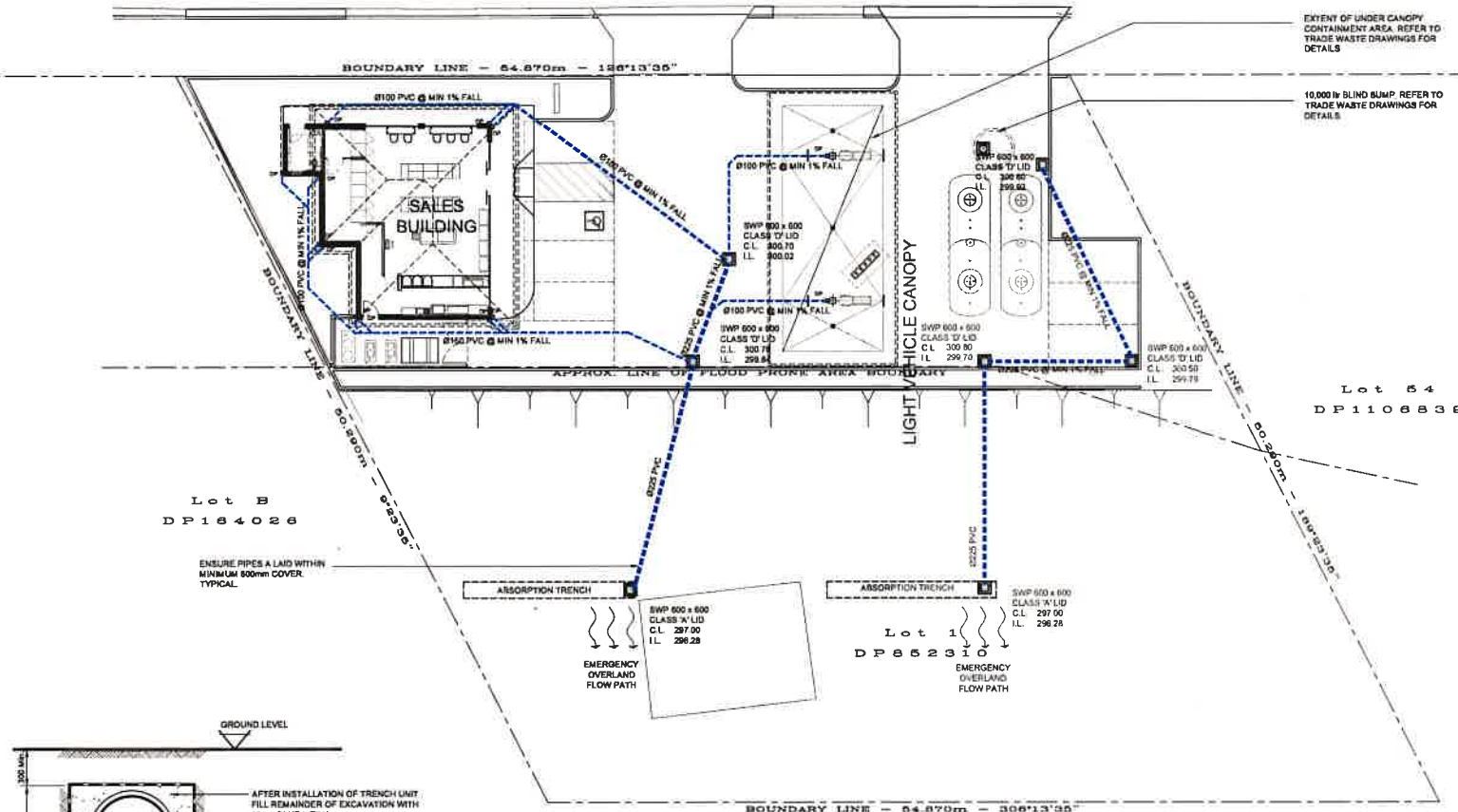
Project
PROPOSED SERVICE STATION REBUILD
19 - 23 GASKILL STREET
CANOWINDRA NSW
FOR
CANOWINDRA PETROLEUM Pty Ltd

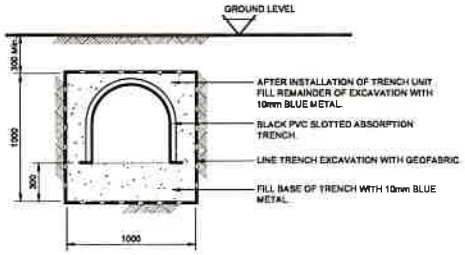
Drawing Title: TRADE WASTE DETAILS

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

Date	September 2018
Scale	1:20 @ A1 & 1:40 @ A3
Designed	VP
Drawn	VP
Project No.	16 - 066
Drawing No.	TW - 02
Amdt.	DA2

GASKILL STREET





ABSORPTION TRENCH DETAIL

FINAL TRENCH LENGTHS TO BE CONFIRMED BY FUTURE INFILTRATION RATES PROVIDED BY GEOTECHNICAL ENGINEER.

CONCEPT STORMWATER DRAINAGE PLAN

NOTES :

1. CONCEPT DRAINAGE PLAN ONLY. FINAL DESIGN SUBJECT TO DEVELOPMENT CONSENT AND RELEVANT CONDITIONS.
2. FOR EXISTING LEVELS AND CONTOURS REFER TO SURVEY BY GEOLYSE PTY LTD.
3. FOR PROPOSED LEVELS AND CONTOURS REFER TO DRAWING A - 03

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE. FOR APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	24.05.2018
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.06.2018
P2	ISSUED FOR CLIENT APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	18.12.2018
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2018

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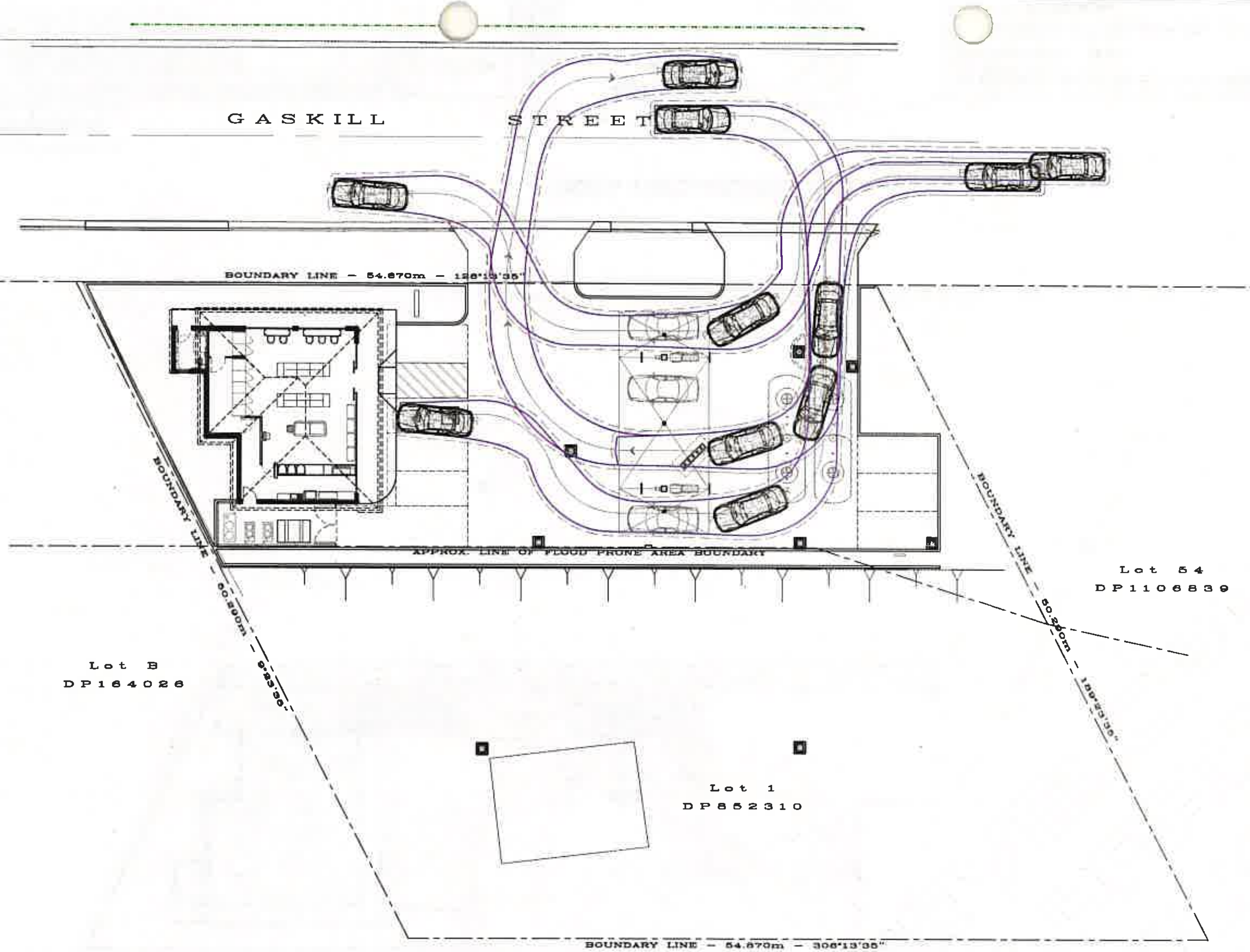
E-mail: design@rjsinclair.com.au
Web: www.rjsinclair.com.au
Multi Disciplined Design + Project Management

PROJECT: PROPOSED SERVICE STATION REBUILD
19 - 23 GASKILL STREET
CANOWINDRA NSW
FOR: C WINDRA PETROLEUM Pty Ltd
DRG: STORMWATER DRAINAGE PLAN

Approved	Designed: VP
Date: May 2018	Drawn: VP
Scale: 1:150 @ A1 & 1:300 @ A3	Checked
Project No.: 16 - 066	Drawing No.: SD - 01
	Amdt.: DA2



VEHICLE TYPE	CAR
LENGTH OVERALL	5.2m
WIDTH OVERALL	1.94m
TRACK	1.84m
WHEELBASE	3.05
LOCK TO LOCK TIME	6.0s
STEERING ANGLE	33.8°

THE VEHICLE TURNING PATHS SHOWN ON THIS DRAWING HAVE BEEN GENERATED USING AutoTURN 9.0, CONFIGURED TO MEET THE REQUIREMENTS OF AUSTROADS 2013 AS DETAILED ABOVE.

TURNING STUDY - LARGE CARS

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

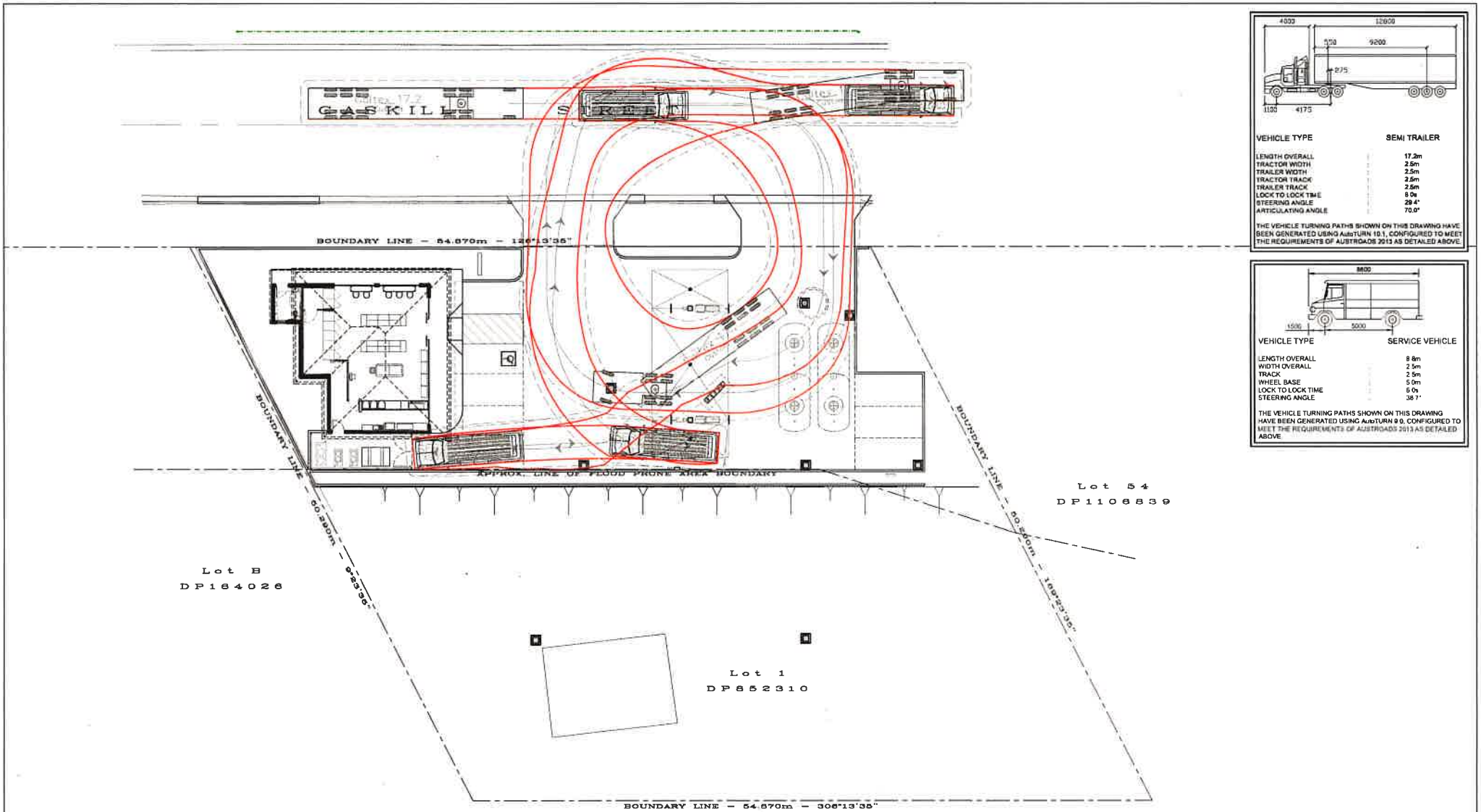
No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	25.04.2018
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	26.04.2018
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	21.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION.	VP	07.06.2019
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

R.J. SINCLAIR Pty Ltd
Building Design
BELLA VISTA NSW 2153
ROUND CORNER NSW 2158

Project: PROPOSED SERVICE STATION REBUILD
11 - 25 GASKILL STREET
CANOWINDRA NSW
FOR CANOWINDRA PETROLEUM Pty Ltd

Drawing Title: TURNING STUDY - LARGE CARS

Date	SEPTEMBER 2018
Scale	1:150 @ A1 & 1:300 @ A3
Project No.	16 - 066
Drawing No.	TS - 01
Amdt.	DA2
Designed	VP
Drawn	VP



VEHICLE TYPE	SEMI TRAILER
LENGTH OVERALL	17.2m
TRACTOR WIDTH	2.5m
TRAILER WIDTH	2.5m
TRACTOR TRACK	2.5m
TRAILER TRACK	2.5m
LOCK TO LOCK TIME	8.0s
STEERING ANGLE	29.4°
ARTICULATING ANGLE	70.0°

THE VEHICLE TURNING PATHS SHOWN ON THIS DRAWING HAVE BEEN GENERATED USING AutoTURN 10.1, CONFIGURED TO MEET THE REQUIREMENTS OF AUSTROADS 2013 AS DETAILED ABOVE.

VEHICLE TYPE	SERVICE VEHICLE
LENGTH OVERALL	8.8m
WIDTH OVERALL	2.5m
TRACK	2.5m
WHEEL BASE	5.0m
LOCK TO LOCK TIME	6.0s
STEERING ANGLE	38.7°

THE VEHICLE TURNING PATHS SHOWN ON THIS DRAWING HAVE BEEN GENERATED USING AutoTURN 9.0, CONFIGURED TO MEET THE REQUIREMENTS OF AUSTROADS 2013 AS DETAILED ABOVE.

TURNING STUDY - DELIVERY TRUCKS

SCALE BAR 1 : 1 On A1 Size Original

SCALE BAR 1 : 2 On A3 Size Reduction

No.	Amendment	By	Date
P1	PRELIMINARY ISSUE FOR APPROVAL PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	25.04.2018
P2	PRELIMINARY ISSUE FOR DISCUSSION PURPOSES ONLY. NOT FOR CONSTRUCTION.	VP	26.04.2018
P3	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	21.05.2019
DA1	ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	07.06.2019
P4	PRELIMINARY ISSUE FOR FINAL CLIENT APPROVAL. NOT FOR CONSTRUCTION.	VP	13.12.2019
DA2	SITE COVERAGE, SALES BUILDING AND CANOPY REDUCED. SALES BUILDING DESIGN AMENDED. RE-ISSUED FOR DEVELOPMENT APPROVAL. NOT FOR CONSTRUCTION	VP	20.12.2019

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Suite 311, Sky City
Nor-West Business Park
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BELLA VISTA NSW 2153
Postal : PO Box 882
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Phone : 02 8883 9999

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

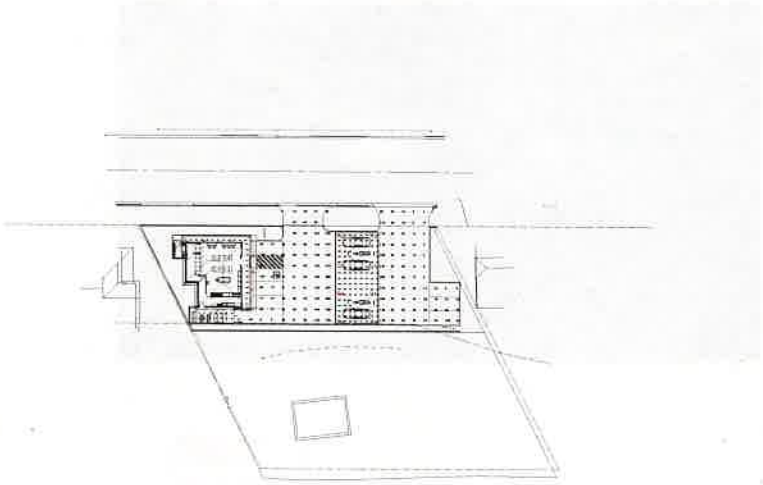
Project: PROPOSED SERVICE STATION REBUILD
M - 23 GASKILL STREET
CANOWINDRA NSW
For: C OWINDRA PETROLEUM Pty Ltd
Dr: TURNING STUDY - DELIVERY TRUCKS

Approved	Designed: VP
Date: SEPTEMBER 2018	Drawn: VP
Scale: 1:150 @ A1 & 1:300 @ A3	Checked:
Project No: 16 - 066	Drawing No: TS - 02
	Amdt: DA2

SERVICE STATION DEVELOPMENT
19-23 GASKILL STREET CANOWINDRA NSW

EXTERIOR LIGHTING AND OBTRUSIVE LIGHT ANALYSIS

LOCALITY PLAN
NOT TO SCALE



SITE PLAN
NOT TO SCALE

DRAWING SCHEDULE			
DRAWING NUMBER	SHEET	REVISION	TITLE
RJS0004-E01	1	A	TITLE PAGE
RJS0004-E01	2	A	GENERAL ARRANGEMENT

STATEMENT OF COMPLIANCE:

1. PHOTOMETRIC DATA WAS PROVIDED BY MANUFACTURER. SOFTWARE USED FOR CALCULATIONS IS AGI32.
2. CALCULATIONS PRODUCED BY TRENT DUTTON- MIES AND RLP
3. PROPOSED LIGHTING SCHEME COMPLIES WITH AS4282 A3 ZONE- 2019 WITH 1800mm HIGH OPAQUE FENCES INSTALLED ON BOTH SIDE BOUNDARIES ADJACENT THE RESIDENCES.
4. SIGNAGE MUST NOT EXCEED THE VALUES OF AVERAGE SURFACE LUMINANCE NOMINATED IN TABLE 3.5 OF AS4282 - 2019 FOR A A3 ZONE. CONTACT RUBIDIUM LIGHT FOR EVALUATION & CLARIFICATION.

TABLE 3.5

MAXIMUM AVERAGE LUMINANCE OF SURFACES (cd/m²)

Application conditions	Environmental zones				
	A0	A1	A2	A3	A4
See Clause 3.3.5.4	0.1	0.1	150	250	350

FOR APPROVAL

Rev.	Date	Drn.	Description	Chkd.
0	21/5/19	SAF	ISSUED FOR APPROVAL	
A	20-12-19	TD	LIGHTING LAYOUT CHANGED TO MATCH NEW SITE LAYOUT	SAF

Project: PROPOSED SERVICE STATION
19-23 GASKILL ST
CANOWINDRA, NSW

Title: ELECTRICAL SERVICES
LIGHTING LAYOUT
TITLE SHEET

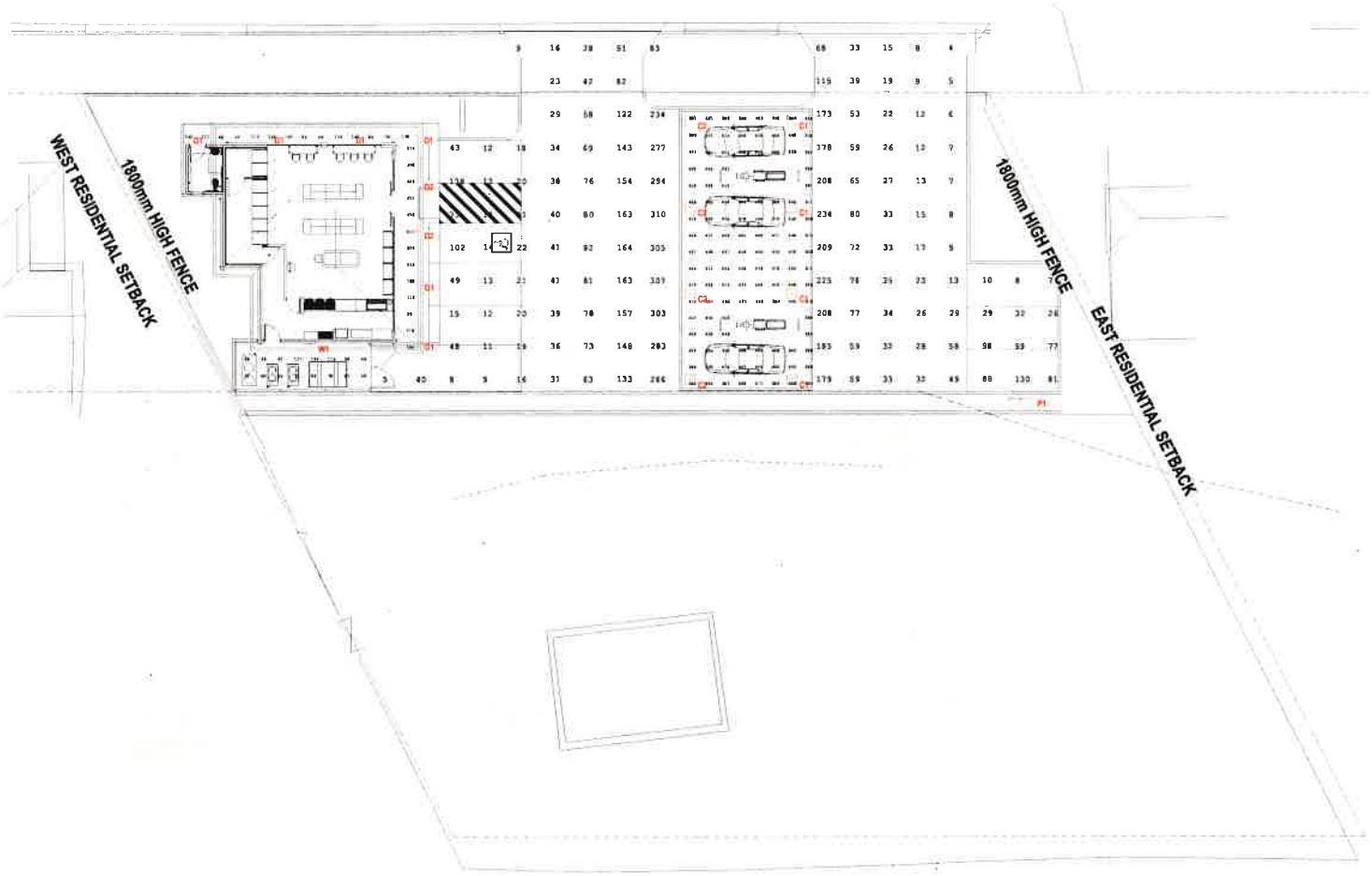
Drawn: SAF Chk TD Date: 21/5/19
Scale: N.T.S
Drawing No. RJS0004-E01-1 Rev A Size A3

Rubidium Light
M +61 400 364 091
A 13 Owens Street
Loganholme QLD 4129
E trent_dutton@rubidiumlight.com.au

Rb rubidium light

NORTH RESIDENTIAL SETBACK

GASKIL ROAD



Obtrusive Light - Compliance Report
AS/NZS 4282:2019, A3 - Medium District Brightness, Curfew
Filename: RJS0004-1
20/12/2019 8:54:25 AM

Illuminance
Maximum Allowable Value: 2 Lux

Calculations Tested (3):

Calculation Label	Test Results	Max. Illum.
EAST RESIDENTIAL SETBACK_Ill_Seg1	PASS	2
WEST RESIDENTIAL SETBACK_Ill_Seg1	PASS	0
NORTH RESIDENTIAL SETBACK_Ill_Seg1	PASS	0

Luminous Intensity (Cd) At Vertical Planes
Maximum Allowable Value: 2500 Cd

Calculations Tested (3):

Calculation Label	Test Results
EAST RESIDENTIAL SETBACK_Cd_Seg1	PASS
WEST RESIDENTIAL SETBACK_Cd_Seg1	PASS
NORTH RESIDENTIAL SETBACK_Cd_Seg1	PASS

Threshold Increment (TI)
Maximum Allowable Value: 20 %

Calculations Tested (2):

Calculation Label	Adaptation Luminance	Test Results
TI GASKILL EAST	10	PASS
TI GASKILL WEST	10	PASS

Upward Waste Light Ratio (UWLR)
Maximum Allowable Value: 2.0 %

Calculated UWLR: 0.0 %
Test Results: PASS

NOTES:

THIS DRAWING IS INTENDED TO DEMONSTRATE THE DESIGN CONCEPT ONLY. IT IS EXPECTED THAT THE SCHEME WILL BE FURTHER DEVELOPED.

THE PROPOSED LIGHTING SCHEME COMPLIES WITH AS1158.3.1:2005 AND GENERAL FUEL RETAILER BRIEFS.

THE LIGHT LOSS FACTOR APPLIED TO THESE CALCULATIONS IS IN ACCORDANCE WITH AS1158.3.1:2005 AND IS BASED UPON THE FOLLOWING:

- IP5X OR IP6X LUMINAIRE
- CLEANING CYCLE OF 1 YEARS IN NORMAL POLLUTION CATEGORY AREA
- 10 YEAR DESIGN LIFE
- SPOT REPLACEMENT OF FAILED LAMPS

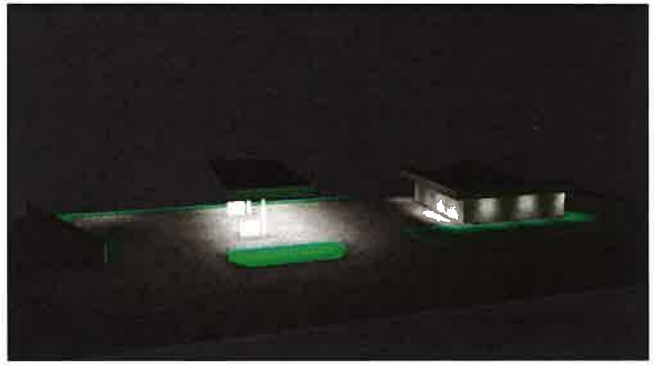
COMPLIANCE WITH AS4282 IS DEMONSTRATED FOR A3 ZONE AREAS FOR PRE AND POST-CURFEW OPERATION.

ALL OBTRUSIVE LIGHT ANALYSIS HAS BEEN EVALUATED AT INITIAL LUMINAIRE OUTPUT.

1800mm HIGH FENCES MUST BE INSTALLED TO ACHIEVE COMPLIANCE.

FOR CLARITY, ONLY HORIZONTAL ILLUMINANCE PLANES ARE SHOWN.

PHOTOMETRIC DATA WAS PROVIDED BY MANUFACTURER.
SOFTWARE USED FOR CALCULATIONS: AGI32.



APPROX. RENDER - VIEW FROM WESTBOUND GASKILL ROAD
NOT TO SCALE

Luminaire Schedule

Symbol	Qty	Label	Description	Lum. Lumens	LLF
	4	C1	LSI HAMILTON CRUS-AC-LED-VHO-50 158W 4000K FORWARD THROW OPTIC LED CANOPY LIGHT RECESSED INTO FUEL CANOPY @ 4.6m AFFL	17262	0.800
	4	C2	LSI HAMILTON CRUS-SC-LED-VHO-40 159W 4000K LED CANOPY LIGHT RECESSED INTO FUEL CANOPY @ 4.6m AFFL	22418	0.800
	6	D1	TREND XDF154 18W 4000K WIDE OPTIC LED WEATHERPROOF DOWNLIGHT RECESSED INTO SALES BLD EAVE @ 3m AFFL	1636	0.800
	2	D2	TREND XDF55 55W 4000K WIDE OPTIC LED WEATHERPROOF DOWNLIGHT RECESSED INTO SALES BLD EAVE @ 3m AFFL	6101	0.800
	1	P1	CREE ARE-EDG 4M DA 08 E UL 8K 133W 4000K TYPE IV OPTIC LED AREA LIGHT POLE MOUNTED @ 3m AFFL	11036	0.800
	1	W1	CREE XSPWAx3FC-U 43W TYPE III OPTIC LED AREA LIGHT WALL MOUNTED AT 2.5m	4187	0.800

Calculation Summary

Label	Avg	Max	Min	Min/Avg	Min/Max
BOWSER Ev	178	185	164	0.9	0.9
HARDSTAND	73	310	4	0.1	0.0
PLANT ENCOSURE	87	127	26	0.4	0.2
UNDER CANOPY	413	504	259	0.6	0.5
UNDER SALES BLD AWNING	185	471	35	0.2	0.1
PWD CAR SPACE	46	102	14	0.3	0.1

FOR APPROVAL

Rev.	Date	Drn.	Description	Chkd.
0	21/5/19	SAF	ISSUED FOR APPROVAL	
A	20-12-19	TD	LIGHTING LAYOUT CHANGED TO MATCH NEW SITE LAYOUT	SAF

Project:
PROPOSED SERVICE STATION
19-23 GASKILL ST
CANOWINDRA, NSW

Title:
ELECTRICAL SERVICES
LIGHTING LAYOUT
GENERAL ARRANGEMENT

Drawn: SAF Chk: TD Date: 21/5/19
Scale: 1:300
Drawing No. RJS0004-E01-2 Rev A Size A3

Rubidium Light
M +61 400 384 001
A 13 Cimaru Street
Loganholme QLD 4129
E liam_dutton@rubidiumlight.com.au

rubidium light