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Statement of Environmental Effects

Client: Brodie McGann

Site Address: 140 Mayne Street, Gulgong

19 December 2024

Our Reference : 45078-PR01_B

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Project Name:	Change of Use to an Office Premises at 140 Mayne Street, Gulgong
Client:	Brodie McGann
Project Number:	45078
Report Reference:	45078-PR01_B
Date:	19 December 2024

Prepared by:	Reviewed by:
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1. INTRODUCTION

1.1. Background

Barnson Pty Ltd has been engaged by Brodie McGann to prepare information in support of a Development Application (DA) for the use of an existing building located at 140 Mayne Street, Gulgong as an office premises.

The subject site is located on the northern side of Mayne Street and has an area of 611.1m². The site contains an existing building that has historically been used for commercial purposes.

The project will consist of minor alterations and fit out works to the existing building and establishment of the use as an office premises. It is noted that works have been undertaken on the existing building. As such, consent is sought for the proposed use and remaining works to the existing building. The new tenant is a renewable energy company and shall use the premises as an office.

The site is zoned part E1 Local Centre and Part R1 General Residential under the *Mid-Western Regional Local Environmental Plan 2012*. The proposed development is defined as an 'office premises', which is permissible with consent in the E1 zone. As part of the site is zoned R1 General Residential, it is proposed to utilise Clause 5.3 Development Near Zone Boundaries of the LEP, which is discussed later in this report.

This application consists of:

- A completed development application form; and
- PDF copy of this written statement, including plans and supporting documents.

1.2. Proponent

The proponent for the DA is Brodie McGann.

1.3. Consultant

Barnson Pty Ltd

Jack Massey

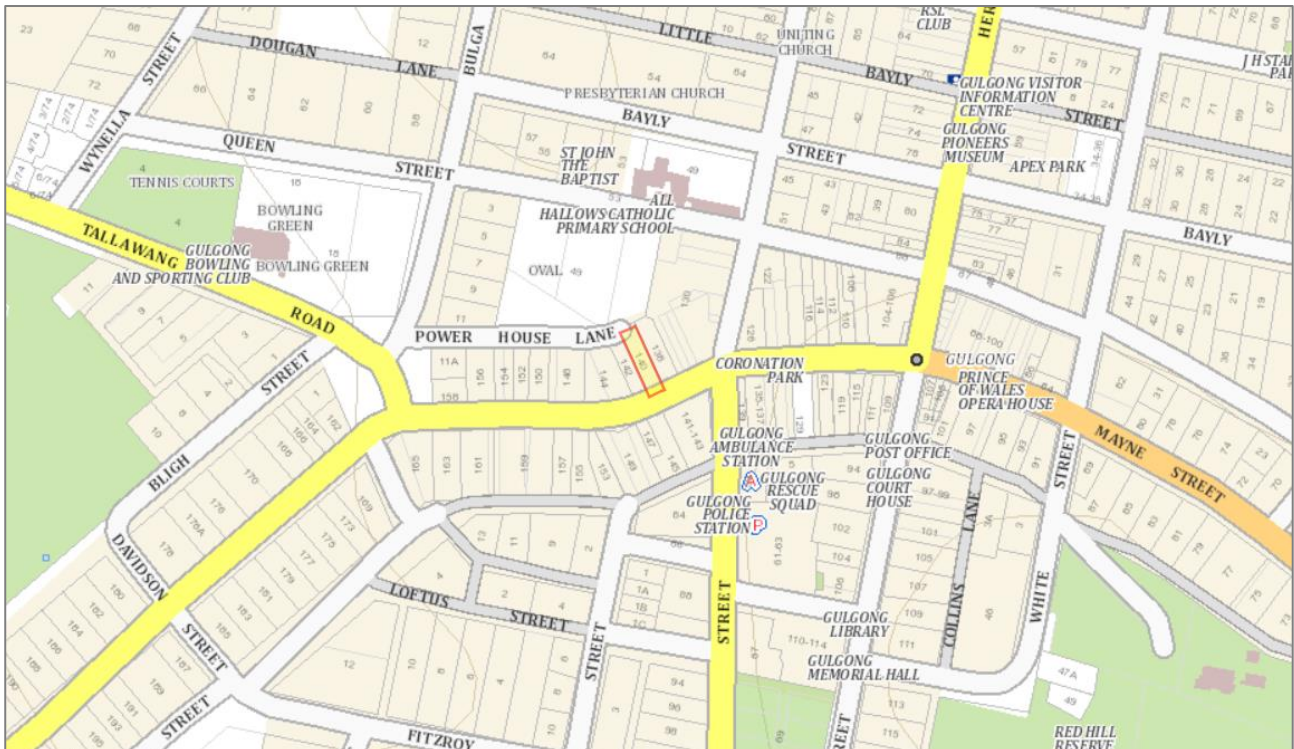
Suite 8 / 11 White Street

Tamworth NSW 2340

2. EXISTING ENVIRONMENT

2.1. Location and Title

The site the subject of this application is Lot 2 DP 1261038, known as 140 Mayne Street, Gulgong. The site is located on the northern side of Mayne Street in the township of Gulgong, as shown in Figure 1 below.



Source: (NSW Government Spatial Services, 2024)

Figure 1 – Site Location

The site has an overall area of 611.11m² (refer to Deposited Plan in Appendix A of this report). The site is improved with an existing dwelling that supports one (1) tenancy.

Refer to Figure 2 and Plates 1-2 for photos of the site and the locality.



Source: (NSW Government Spatial Services, 2024)

Figure 2 – Site Aerial



Plate 1 – View of the site from Mayne Street



Plate 2 – View of the front of the existing building

2.2. Land Use

The subject site is located in the township of Gulgong in an area characterised by commercial and business activities. The site is improved with an existing building that is capable of supporting one (1) tenant. There are commercial and business activities surrounding the subject site, with residential dwelling located within proximity. The building was previously used as a service station and mechanical workshop until the 1960s and has since been vacant/unused.

2.3. Topography

The site and surrounding locality is relatively flat throughout.

2.4. Flora and Fauna

The site is devoid of any vegetation.

2.5. Natural Hazards

The site is not mapped as being flood prone or bushfire prone under the *Mid-Western Regional Local Environmental Plan 2012* or NSW Planning Spatial Viewer.

2.6. Services

All services including reticulated water supply, sewerage, stormwater management, electricity and telephone infrastructure are connected to the site.

2.7. Access and Traffic

Access is gained to the site via the northern side of Mayne Street. There is also a rear access from Power House Street. Pedestrian access can be gained from both street networks.

2.8. Contamination

The site operated as a service station and mechanical workshop until the 1960's. A review of the historical use and potential contamination present on the site was undertaken by Envirowest consultant (reference R12568val). The Validation Report is provided in Appendix B of this report. The Validation report provided the following recommendations and conclusions:

- Two underground storage tanks (UST) were decommissioned by boring a hole in the top, disposal of contents and filling with sand. The UST have been disconnected and previously contained petrol or diesel.
- The soil surrounding the UPSS was assessed by construction of boreholes and inspection of the soil profile for visual and olfactory evidence of contamination. Validation of the soil was undertaken by collection of samples and analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethyl benzene, xylene, naphthalene (BTEXN).
- No odour or volatile organic compounds (VOC) from photoionisation detector (PID) were detected in any of the boreholes constructed.
- The TPH (C6-C36) and BTEXN levels in the soil samples collected were less than the assessment criteria.
- No contamination was detected in the soil surrounding the UPSS and the assessed area is suitable for commercial land-use.
- The site is suitable for commercial land-use.

2.9. Heritage

The site is not identified as a heritage listed item in the NSW State Heritage Register or in Schedule 5 of the *Mid-Western Regional Local Environmental Plan 2012*. However, the site is mapped as within the Gulgong Heritage Conservation Area, as shown in Figure 3 below.

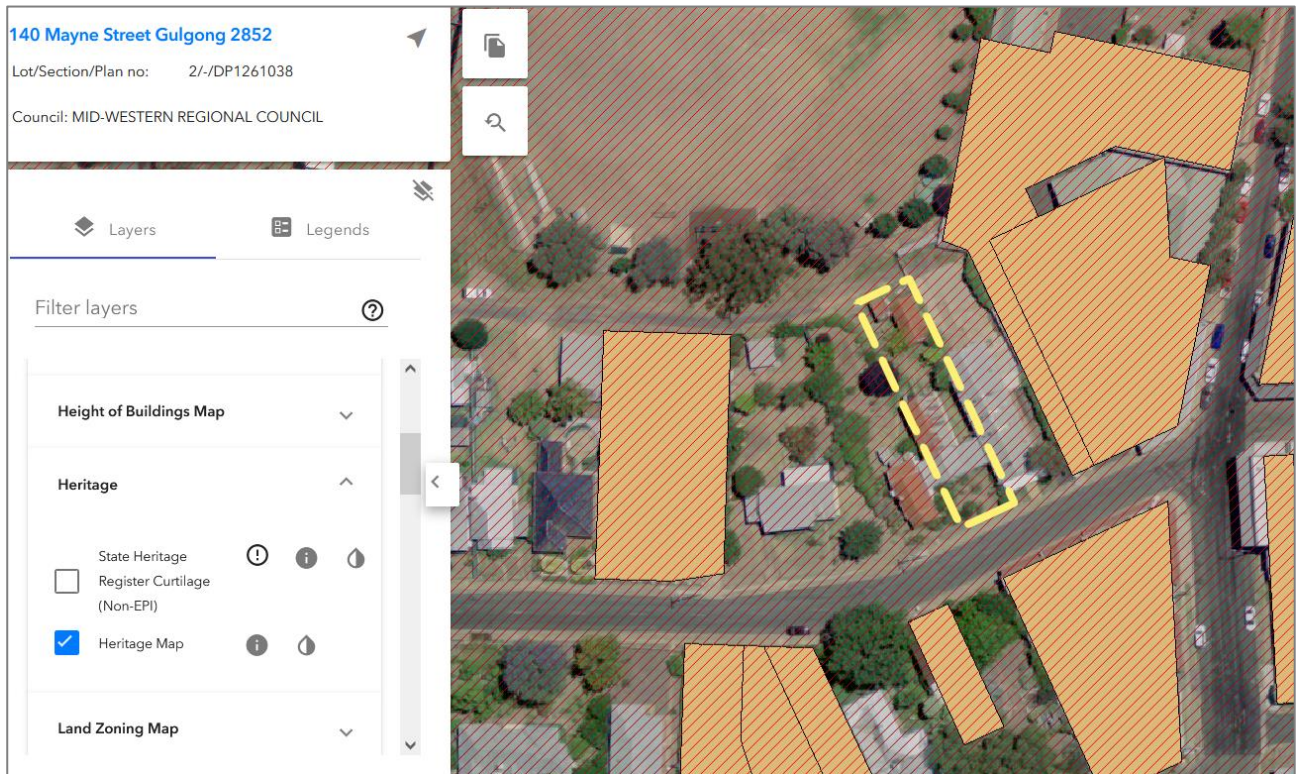


Figure 3 – LEP Heritage Mapping

3. PROPOSED DEVELOPMENT

The proposed development is for the use of an existing building as an office premises on Lot 2 DP 1261038, known as 140 Mayne Street, Gulgong. The building was previously used as a service station and mechanical workshop until the 1960s and has since been vacant/unused.

The subject application seeks approval for the use of the existing building as an office premises. The building shall be used for general office purposes. The new tenant is a renewable energy company and shall use the premises as an office.

It is noted that development works have commenced onsite without approval. The following works have been completed to date:

- Demolition works to the existing building including the removal of frame members and internal plaster linings;
- Installation of a new 100mm tick topping slab throughout the internal footprint of the structure; and
- Installation of LVL beams.

As such, consent is sought for the proposed use of the building and remaining works to allow the development to proceed. Should Council determine that a Building Information Certificate is required to be lodged for the unauthorised works, the proponent shall submit an application. It is requested that Council place this on the Development Consent as a deferred commencement condition, if required.

The following shall be included in the scope of works:

- Alterations to the existing building and internal fitout;
- Internally, the building shall consist of a reception area, accessible WC, open office, two offices to the rear, kitchen, storage rooms and meeting room;
- A new courtyard shall be included;
- Fire rating to walls, as required under the National Construction Code;
- New carpark area at the front of Mayne Street which shall be sealed with concrete. The carpark shall be provided with one accessible space with shared zone; and
- Structural Work including new beams and columns to the existing structure.

Operating hours are to be from 8:30am – 5:00pm weekdays and closed on Saturdays and Sundays and public holidays. There shall be up to six (6) staff working at the office premises at any one time, consisting of an administration person and 5 staff members.

Given the use of the building is proposed as an office premises, no deliveries would be required, other than general deliveries of paper, office supplies etc. These deliveries are anticipated to be undertaken via small vans and/or Australia Post cars.

Refer to Development Plans in Appendix C, Structural Letter in Appendix D and Statement of Heritage Impact in Appendix E of this report.

4. LAND USE ZONING

The subject site is zoned part E1 Local Centre and part R1 General Residential pursuant to the *Mid-Western Regional Local Environmental Plan 2012* (LEP). The proposed development is for an 'office premises', which is permissible with consent in the E1 zone. As part of the site is zoned R1 General Residential and an office premises is prohibited in that zone, it is proposed to utilise Clause 5.3 Development Near Zone Boundaries of the LEP. Refer to Section 5.3.2 of this report for a review of this clause.

The permissibility of the proposed development is assessed in terms of the heads of consideration in Section 4.15 of the *Environmental Planning & Assessment Act 1979*, which incorporates consideration of the LEP and the objectives and permissible uses outlined in the E1 zone, as outlined in Section 5 of this report.

5. PLANNING CONSIDERATIONS

5.1. Biodiversity Conservation Act 2016

5.1.1. Is the development likely to significantly affect threatened species?

Clause 7.2 of the *Biodiversity Conservation Act 2016* (BC Act) identifies the following circumstances where a development is likely to significantly affect threatened species:

- (a) *it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, or*
- (b) *the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or*
- (c) *it is carried out in a declared area of outstanding biodiversity value.*

Each of these is addressed below.

Section 7.3 Test

To determine whether a development is likely to significantly affect threatened species or ecological communities, or their habitats, the following is to be taken into account in accordance with Section 7.3 of the BC Act:

- (a) *in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,*
- (b) *in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:*
 - (i) *is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or*
 - (ii) *is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,*
- (c) *in relation to the habitat of a threatened species or ecological community:*
 - (i) *the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and*
 - (ii) *whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and*
 - (iii) *the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,*
- (d) *whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),*
- (e) *whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.*

Comment: The site is located within an established area in Gulgong. There are no threatened species or endangered ecological communities known to be present on the site or within proximity. Therefore, the proposed development is not likely to significantly affect threatened species or ecological communities, or their habitats.

Section 7.4 Test

Section 7.4 of the BC Act states:

- (1) *Proposed development exceeds the biodiversity offsets scheme threshold for the purposes of this Part if it is development of an extent or kind that the regulations declare to be development that exceeds the threshold.*
- (2) *In determining whether proposed development exceeds the biodiversity offsets threshold for the purposes of this Part, any part of the proposed development that involves the clearing of native vegetation on category 1-exempt land (within the meaning of Part 5A of the Local Land Services Act 2013) is to be disregarded.*

Comment: The proposed development does not involve any clearing.

Declared Area of Outstanding Biodiversity Value

The site is not mapped on the Biodiversity Value Map as being land with a high biodiversity value as defined by the BC Act.

5.1.2. Biodiversity Development Assessment Report

As outlined in Section 5.1.1, the proposed development is not likely to significantly affect threatened species as defined by Section 7.2 of the BC Act. Therefore, a Biodiversity Development Assessment Report is not required to accompany the application for development consent.

5.2. Environmental Planning & Assessment Act 1979

5.2.1. Application of Biodiversity Conservation Act 2016 & Fisheries Management Act 1994

Section 1.7 of the *Environmental Planning & Assessment Act 1979* (EP&A Act) identifies that Part 7 of the BC Act and Part 7A of the FM Act relate to the operation of the EP&A Act in relation to the terrestrial and aquatic environment. The BC Act has been addressed in Section 5.1 and it is considered that the FM Act does not apply to the subject application.

5.2.2. Evaluation

Section 4.15 of the EP&A Act (as amended) requires the Council to consider various matters in regard to the determination of the Development Application.

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

- (a) *The provisions of:*
 - (i) *any environmental planning instrument, and*
 - (ii) *any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
 - (iii) *any development control plan, and*
 - (iv) *any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and*
 - (v) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and*
 - (vi) *any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,*
- (b) *The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality;*
- (c) *The suitability of the site for the development,*
- (d) *Any submissions made in accordance with this act or the regulations,*
- (e) *The public interest.*

The proposed development has been designed with consideration to the following matters, as outlined below.

5.3. Environmental Planning Instruments

5.3.1. State Environmental Planning Policy (Resilience and Hazards) 2021

Clause 4.6 of *State Environmental Planning Policy (Resilience and Hazards) 2021* requires Council to consider the following before granting consent to a DA:

- (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.*

Comment: The site operated as a service station and mechanical workshop until the 1960's. A review of the historical use and potential contamination present on the site was undertaken by Envirowest consultant (reference R12568val). The Validation Report is provided in Appendix B of this report. The Validation report provided the following recommendations and conclusions:

- Two underground storage tanks (UST) were decommissioned by boring a hole in the top, disposal of contents and filling with sand. The UST have been disconnected and previously contained petrol or diesel.
- The soil surrounding the UPSS was assessed by construction of boreholes and inspection of the soil profile for visual and olfactory evidence of contamination. Validation of the soil was undertaken by collection of samples and analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethyl benzene, xylene, naphthalene (BTEXN).
- No odour or volatile organic compounds (VOC) from photoionisation detector (PID) were detected in any of the boreholes constructed.
- The TPH (C6-C36) and BTEXN levels in the soil samples collected were less than the assessment criteria.
- No contamination was detected in the soil surrounding the UPSS and the assessed area is suitable for commercial land-use.
- The site is suitable for commercial land-use.

Therefore, no further contamination investigations and/or reporting is required and the site is deemed suitable for the proposed office premises.

5.3.2. Mid-Western Regional Local Environmental Plan 2012

Land Use Table

The subject site is zoned part E1 Local Centre and part R1 General Residential pursuant to the *Mid-Western Regional Local Environmental Plan 2012* (LEP). It is noted that the proposed development is permissible in the E1 zone but prohibited in the R1 zone and as such, consent is sought via Clause 5.3 'Development near zone boundaries'. Pursuant to Clause 5.3 of the LEP, the proposed development is not to be inconsistent with the objectives for development in both zones. Examination of the two land use tables and relevant zone objectives is provided below.

The objectives of the E1 Local Centre zone are:

- *To provide a range of retail, business and community uses that serve the needs of people who live in, work in or visit the area.*
- *To encourage investment in local commercial development that generates employment opportunities and economic growth.*
- *To enable residential development that contributes to a vibrant and active local centre and is consistent with the Council's strategic planning for residential development in the area.*
- *To encourage business, retail, community and other non-residential land uses on the ground floor of buildings.*
- *To maintain the built integrity of the area by enabling development that is sympathetic to the existing heritage buildings and features.*

- *To ensure development is consistent with the residential nature of the surrounding area.*
- *To ensure non-residential land uses are compatible with the residential amenity of the surrounding area.*

Comment: The proposed development constitutes an office premises which is permissible in the E1 zone and consistent with the objectives above.

The objectives of the R1 General Residential zone are:

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

Comment: The proposed development within the Gulgong township is an essential need for the delivery of office space for business entering and being retained within the area. The establishment of the site as an office premises shall provide for employment opportunities and support the future use of the site for office purposes, which provides for facilitates/services for residents in the area, consistent with the R1 zone objectives. Furthermore, the site has historically been used for commercial purposes and as such it is considered fit for purpose for the intended use. Gulgong is a small township with minimal commercial and business operations. The establishment of the proposed office premises to be used as offices would not hinder on any existing potential commercial or residential activities in the township. Furthermore, the proposed tenant is an energy renewals company who proposed to utilise the space as an office. A renewals energy company facilitates the day to day needs of residents by providing large scale solar, wind and energy storage projects, which eventually benefits the residents of Gulgong and surrounds by reducing electricity bills and creating net-zero target energy generation. Reduced energy bills are considered to contribute to the day to day needs of the community, especially in the current financial climate.

Height of Buildings

Clause 4.3 Height of Buildings applies to the subject site, as shown in Figure 4 below.

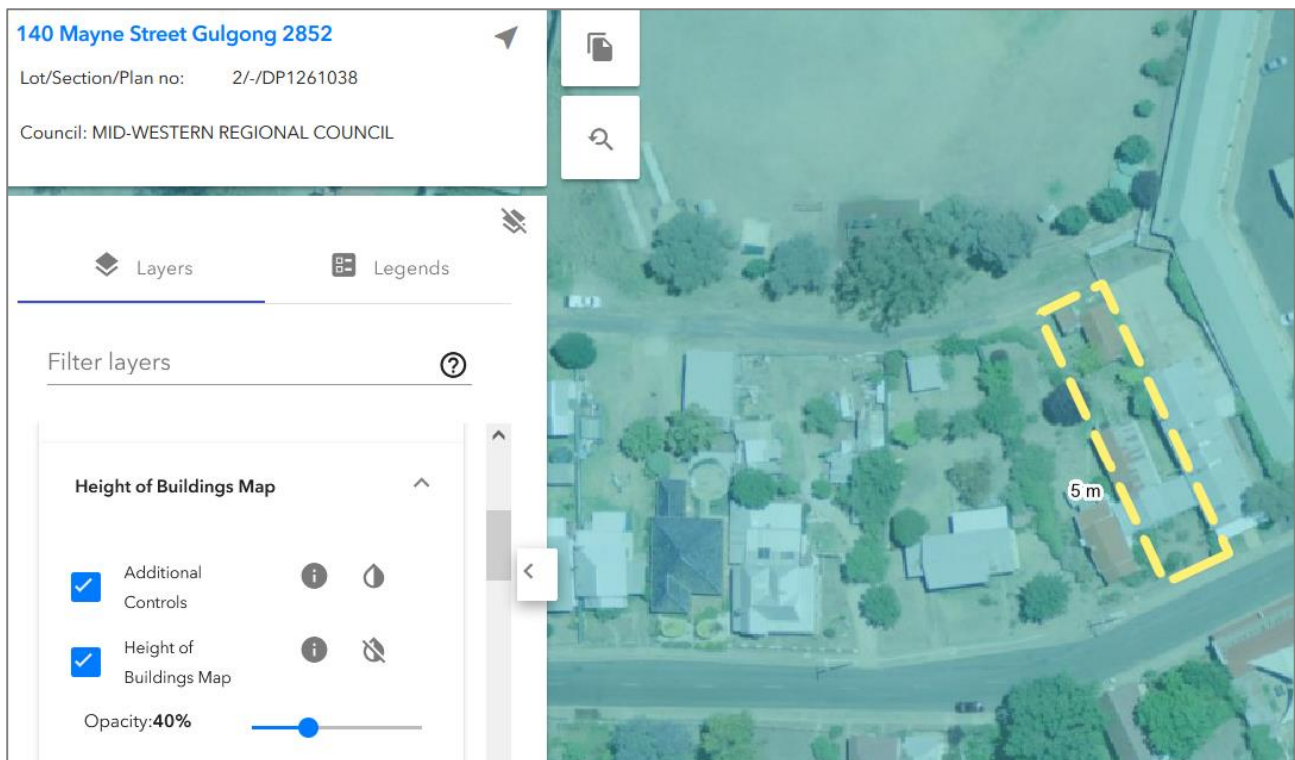


Figure 4 – LEP Height of Buildings Map

Comment: As shown above, the maximum building height applicable to the site is 5.5m, in accordance with Clause 4.3 of the LEP. Clause 4.2(2) states:

The height of a building on any land is not to exceed the maximum height shown for the land on the [Height of Buildings Map](#).

As shown on the Development Plans in Appendix C of this report, the maximum height of the proposed building is 4.2m. Therefore, the development complies with this Clause.

Development near zone boundaries

It is noted that the proposed development is permissible in the E1 zone but prohibited in the R1 zone and as such, consent is sought via Clause 5.3 'Development near zone boundaries'. Clause 5.3 of the LEP states:

5.3 Development near zone boundaries

- (1) The objective of this clause is to provide flexibility where the investigation of a site and its surroundings reveals that a use allowed on the other side of a zone boundary would enable a more logical and appropriate development of the site and be compatible with the planning objectives and land uses for the adjoining zone.*
- (2) This clause applies to so much of any land that is within the relevant distance of a boundary between any 2 zones. The relevant distance is 50 metres.*
- (3) This clause does not apply to—*

- (a) land in Zone RE1 Public Recreation, Zone C1 National Parks and Nature Reserves, Zone C2 Environmental Conservation, Zone C3 Environmental Management or Zone W1 Natural Waterways, or
 - (a1) land in Zone RU1 Primary Production, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone R2 Low Density Residential, Zone R5 Large Lot Residential, Zone E4 General Industrial or Zone SP3 Tourist, or
 - (b) land within the coastal zone, or
 - (c) land proposed to be developed for the purpose of sex services or restricted premises.
- (4) Despite the provisions of this Plan relating to the purposes for which development may be carried out, development consent may be granted to development of land to which this clause applies for any purpose that may be carried out in the adjoining zone, but only if the consent authority is satisfied that—
- (a) the development is not inconsistent with the objectives for development in both zones, and
 - (b) the carrying out of the development is desirable due to compatible land use planning, infrastructure capacity and other planning principles relating to the efficient and timely development of land.
- (5) This clause does not prescribe a development standard that may be varied under this Plan.

Comment: In relation to (2) above, the subject site has a lot width of 12.135m (refer to Deposited Plan and Detail Survey in Appendix A of this report and Figure 5 below). As such, the relevant distance between the two zones complies with this part. In relation to (3), the site is zoned E1 Local Centre and R1 General Residential, of which these zones or not mentioned within this Clause, therefore Clause 5.3 can be utilised for the proposed development. In relation to (4), the proposal is not inconsistent with each zones zone objectives, as discussed under the heading above *Land Use Table*. Furthermore, the proposed office premises is considered compatible with other land uses in the vicinity as the site adjoins a commercial zone and commercial land uses. There are no known infrastructure constraints or other planning principles that would impact upon the development. In relation to (5), it is not proposed to vary a development standard as part of this application.



Figure 5 – Land Zone Map

Heritage Conservation

Clause 5.10 Heritage Conservation applies as the site is positioned within a Heritage Conservation Area under the LEP, as shown in Figure 3 of this report.

The objectives of this clause are as follows:

- (a) to conserve the environmental heritage of Mid-Western Regional,
- (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.

Comment: As shown on the Development Plans in Appendix C, the façade of the building shall be reinstated/repurposed. The proposed reinstatement of the building's facade has been designed to harmonise with the architectural character of the locality. During the revisions to the design phase, a heritage consultant was appointed who provided commentary on the proposed façade of the building. It was determined that the part of the building should be extended forward slightly and that the façade resemble/match those similar in the Gulgong locality. A Statement of Heritage Impact has been prepared and is provided in Appendix E of this report.

This design approach ensures that the facade respects and complements the established historical streetscape, preserving the visual integrity and historical value of the heritage conservation area. By aligning with the architectural features of nearby structures, the proposed facade not only maintains the cohesive appearance of the conservation area but also contributes to the sustained appreciation of Gulgong's rich cultural heritage. This sympathetic design approach underscores the proponent's commitment to heritage conservation while accommodating the needs of contemporary use. Therefore, the proposed development is consistent with the provisions under Clause 5.10 of the LEP.



Plate 3 – View of the site adjacent building and Gulgong streetscape

5.4. Draft Environmental Planning Instruments


No draft Environmental Planning Instruments are applicable to the subject site or development.

5.5. Development Control Plans

The *Mid-Western Regional Development Control Plan 2013* (DCP) applies to the proposed development. Relevant provisions of the DCP have been addressed in Table 1 below.

Table 1 – DCP Requirements

Provision	Comment
<i>Part 4 Specific Types of Development: 4.5 Commercial Development</i>	
Building Setbacks	<p>There are no minimum front setbacks applicable to the site and side and rear setbacks are required to comply with the BCA.</p> <p>The eastern and western elevations of the building are required to be fire rated to a 90/90/90 standard. As such, fire rating has been nominated on the Development Plans in Appendix C of this report. The other side and rear setbacks comply with the BCA.</p>
Signage	Not applicable – nil proposed as part of this application.
Design	<p>The proposed development complies with these provisions in that:</p> <ul style="list-style-type: none"> • The proposed development activates the street frontage by providing a façade that is consistent with other buildings in Gulgong. The proposed carpark activates the frontage making the site easily accessible; • Windows and doors are included in the design, providing an interaction between pedestrians and the office space; • Colour schemes shall be consistent with the general locality; • As shown on the Development Plans in Appendix C, the façade of the building shall be reinstated/repurposed. The proposed reinstatement of the building's facade has been designed to harmonise with the architectural character of the locality. The new facade will closely resemble that of existing buildings in Gulgong, reflecting the traditional aesthetic that is emblematic of the heritage context in this area; • The design is consistent with buildings in the locality; • The proposed façade does not attempt to reproduce any heritage listed items. However, does seek to be consistent with the heritage theme in Gulgong. It is noted that the façade of the building on the site is not dissimilar to what is proposed, thereby retaining its appearance that has been present on the site for an extended period of time; • The site is not a corner Lot; • As the site adjoins a residential land use, appropriate fire rating is to be implemented. The building is existing and as such, increased setbacks cannot be achieved, especially considering the skinny width of the Lot. <p>Refer also to the Statement of Heritage Impact (SoHI) in Appendix E of this report.</p>
Scale form and height	The LEP has a height restriction applicable to the site of 5.5m. As shown on the Development Plans in Appendix C, the height of the structure is less than 5.5m, thereby complying with this part.

Mortimer & Church Street Mudgee	Not applicable.
Articulation and Façade Composition	<p>The façade of the building has considered other buildings in the locality, particularly the building adjacent to the east. In addition, the façade design has also considered what was there previously. The following images show what existed on the site previously and the adjacent buildings façade.</p>  <p>Discussions with a Heritage Consultant resulted in changes to the original plans of the development. In particular, it was recommended that part of the building be extended forward and the façade of the structure be changes to replicate others within the Gulgong Area.</p> <p>Refer to Development Plans in Appendix C for the new façade design and supporting Statement of Heritage Impact in Appendix E of this report.</p>
Post supported verandahs and balconies	Not applicable
Residential-Commercial Interface	<p>The proposed development is generally consistent with the provisions under this part in that:</p> <ul style="list-style-type: none"> • The building on the site has remained existing for an extended period of time and a landscape buffer between the building and residential land use to the west is not achievable; • There is no overlooking onto residential properties from the proposed development; • The site is to be used as an office premises and therefore limited noise is generated. Opening hours shall be adhered to, to ensure there are no noise impacts in the locality; • As previously mentioned, the existing building in its current location shall be retained, which has existing on the site in harmony with residential dwellings in the vicinity for an extended period of time; and

	<ul style="list-style-type: none"> Given the building is to be retained and repurposed, sunlight is not reduced to any nearby residential receptors.
Utilities and Services	Given that the proposed development is to be used as an office premises, the existing utility connections are considered capable of supporting the proposed development.
Traffic and Access	<p>Passenger vehicles are capable of entering and exiting the site in a forward direction, as shown on the swept paths in Appendix C of this report.</p> <p>All vehicle movements are sealed with concrete and the driveway shall comply with AS 2890.1, as required.</p> <p>No loading/unloading facilities are required for this type of development. Deliveries are anticipated to be infrequent and via Australia Post vans or passenger vehicles.</p>
Pedestrian Access	Pedestrian access is available to the site.
Parking	<p>Section 5.1 of the DCP provides the following car parking requirements:</p> <p style="text-align: center;"><i>Offices and Business Premises</i></p> <p style="text-align: center;"><i>1 space per 30m² Gross Floor Area (GFA)</i></p> <p>The Gross Floor Area of the building is approximately 112m². Therefore, in accordance with DCP provisions, the development requires 4 onsite car spaces. One (1) disabled space and shares space has been provided on the site.</p> <p>Section 5 of the DCP provided parking provisions for a "change of use". These provisions are as follows:</p> <p><i>Where existing premises are proposed to be redeveloped or their uses changed, the following method of calculating car parking requirements shall apply.</i></p> <ul style="list-style-type: none"> <i>a) determine the parking requirement of the previous or existing premises in accordance with the parking rates contained in this plan;</i> <i>b) determine the parking requirement of the proposed development in accordance with the parking rates contained in this plan;</i> <i>c) subtract the number of spaces determined in (a) above from the number of spaces calculated in (b) above; and</i> <i>d) the difference calculated in (c) above represents the total parking spaces to be provided.</i> <p><i>For a re-development or new development or any additional floor space in excess of 100m² car parking shall be calculated and provided in accordance with the Development Control Plan.</i></p>

	<p>Firstly, the “change of use” provisions apply to the subject proposal as the existing premises is proposed to be <i>redeveloped</i> and the <i>use changed</i>.</p> <p>As previously indicated in this report, the site was formerly used as a service station, which included vehicle repair and maintenance, along with the provision of one (1) fuel bowser. According to the DCP a service station requires 6 parking spaces per service bay, plus 2 driveway spaces per fuel bowser. Therefore, the parking requirement for the previous service station use is 8 spaces (1 service bay and 1 fuel bowser) under the provisions of this plan, as outlined in item (a) above.</p> <p>The parking requirement for the proposed use, as previously discussed, is 4 spaces, as addressed in item (b) above.</p> <p>In accordance with item (c) of these provisions, the required parking spaces are calculated by subtracting the number of spaces determined in (a) from the number calculated in (b). This calculation is as follows:</p> $4 \text{ spaces (b)} - 8 \text{ spaces (a)} = -4 \text{ spaces.}$ <p>Therefore, in accordance with item (d), the difference calculated in (c) is a deficit of 4 spaces, and as a result, no additional parking spaces are required to be provided on the site under this part of the DCP.</p> <p>The “change of use” provisions also state that any new development or additional floor space in excess of 100m² requires car parking to be calculated in accordance with the DCP provisions. The proposed development is mostly a reconfiguration/fit out of the existing building that existing on the site for an extended period of time, with the exception of the minor extension at the front and proposed new facade. The new works do not exceed to 100m². Therefore, no additional parking requirements are triggered.</p> <p>With regard to the shortfall under the DCP parking rates, it is understood that Council have questioned whether parking can be provided to the rear of the property. The proponent has advised that parking is not to be provided to the rear of the site as they have future development intentions to the rear of the property, which would be subject to a separate Development Application. Nevertheless, given the shortfall in parking and the proponents intention to not provide parking at the rear of the site, the following is provided for Council’s consideration.</p> <ul style="list-style-type: none"> • No walk in customers are anticipated to attend the site other than ad hoc meetings between the tenant and other representatives, as required. These are anticipated to be infrequent; • There shall be a maximum of six (6) staff working at the office premises at any one time. The front car parking area of the site shall be kept free for if visitors are required to the site. Due to the limited site area availability and skinny width of the block, the decision was made to ensure that staff would utilise street verges in the vicinity of the site for parking;
--	---

- The narrow width of the site limits the potential for adding parking at the rear without compromising other aspects of the development, such as usable space and keeping the land reserved for a future use;
- There is a plethora of car parking opportunities available within the street frontages of Mayne Street, Medley Street and Robinson Street that would not compromise traffic safety. Existing commercial outlets utilise these parking arrangements due to limited availability of on-site parking and largely developed Lots. It is considered that the proposed use is consistent with existing commercial uses in the locality and the use would not create any adverse impacts in terms of carparking availability;
- The subject site has historically been used for commercial purposes. It is expected that existing car parking arrangements are appropriate for the use of the site and existing retail/commercial area. The previous use did not create any adverse impacts in terms of car parking, traffic patterns, sighting distances or manoeuvrability in the area;
- The proposed use and its parking arrangements are consistent with the surrounding commercial area, where other businesses utilise street parking. The neighbourhood is already accustomed to shares and street-based parking, and the proposed development will not generate a demand that exceeds the existing capacity;
- As noted, the subject site has historically been use for a commercial premises (service station). The previous use did not cause any parking or traffic related uses, and it is anticipated that the proposed use will operate in a way that generated lesser vehicles on the site and in the locality. There is no known history of parking overflow or related complaints, suggesting the existing parking and traffic infrastructure is sufficient;
- Given the low volume of visitors and the small staff size (maximum 6 staff members), the proposed development would not generate significant traffic or parking demand. The proposed parking arrangement will not contribute to congestion or blockages on surrounding streets which are already equipped to handle occasional overflow parking.

The following Streetview images from 2024, 2022 and 2008 reveal that Mayne Street is predominately free of cars parking within the street verges, immediately west of the site. This suggests that there is adequate parking arrangements within the local nearby street network to support the proposed use and maximum of 6 staff members (i.e 6 cars) during operating hours.



Above: Streetview 2024



Above: Streetview 2022



Above: Streetview 2008

Further to the above analysis, a review of aerial imagery has been undertaken to determine the available street parking within the vicinity of the site. Google Earth imagery has been utilised, which was recorded on October 2023. However, when reviewing older imagery (i.e. March 2023, December 2022, august 2020, and so on) the conditions are consistent. We implore Council to review the historical imagery which confirms that this section of Mayne Street is scarcely utilised by local traffic for parking purposes.



As you can see in the image above, only two cars are parked within this section of Mayne Street, both of which are parked in front of the Centennial

	Hotel. There are no cars parked fronting the site, along the northern side east of the site or directly west of the site.
Landscaping	No landscaping is proposed as due to the recommendations provided by the heritage consultant, the front setback has been reduced. The front of the site only has enough room to fit the disabled car parking space and associated shared space. As such, landscaping is not proposed at the front of the site. If Council deems necessary, the proponent is agreeable to plant 1-2 trees within the road reserve between the property boundary and road edge fronting the disabled car space. If Council deem necessary, it is requested that this be conditioned on the consent.

5.6. Any Planning Agreement entered into

No Planning Agreements entered into are known to exist in relation to the development or site.

5.7. Any Matters Prescribed by the Regulations

For the purposes of Section 4.15(1)(a)(iv) of the EP&A Act, Clause 92 of the *Environmental Planning and Assessment Regulations 2000* (EP&A Regulations) specifies the additional matters a consent authority must take into consideration when determining a DA. Any further demolition works shall be undertaken in accordance with *AS 2601-2001 The demolition of structures*.

5.8. Any Likely Impacts of the Development

5.8.1. Context & Setting

The subject site is located in an established environment which is characterised by commercial and business activities. Residential activities are located within the vicinity of the site. The development is considered to be compatible with the area and it would not impact on the context or setting in the locality.

5.8.2. Access, Transport & Traffic

Due to limited site availability and skinny width of the block and the proponents intent to further develop the rear of the site (subject to a separate application), only one onsite disabled car parking spaces are available for the proposed development. In this regard, it is considered appropriate to prevent staff parking on the site and alternatively to utilise existing off-site parking and traffic arrangements in the locality. There is a number of car parking opportunities within proximity to the

site that would support the proposed use and existing commercial area. This arrangement is considered to be appropriate and capable of supporting the use of the site without creating any adverse impacts on existing traffic processes.

5.8.3. Utilities

All services including reticulated water supply, sewerage, electricity, stormwater management and telephone infrastructure are connected to the site. The existing connections afforded to the site are considered to be capable of supporting the proposed use of the site.

5.8.4. Heritage

The proposed facade reinstatement has been carefully designed to match the architectural style of the existing buildings and façades within Gulgong, ensuring consistency with the heritage character of the Gulgong heritage conservation area. This approach not only respects the existing historical context but also enhances the overall visual coherence of the streetscape. Ultimately, the design will contribute positively to the preservation and appreciation of the area's cultural heritage.

5.8.5. Noise & Vibration

The proposed construction works will generate some noise impacts in the locality. The likelihood of noise becoming offensive can be minimised by adopting good work practice and adhering to construction hours as required by Council.

5.8.6. Social & Economic Impacts in the Locality

The proposal is considered an appropriate use of the site and surrounds, with minor works required to allow the development to proceed. The use of the building shall provide for a new office premises to the community in a convenient and suitable location. The premises is expected to create a positive economic impact for Gulgong.

5.8.7. Other

There are no other issues such as flooding, flora and fauna or bushfire that would impact upon the development or locality.

5.9. Suitability of the Site for the Proposed Development

The suitability of the site for the proposed development has been addressed in the above sections of this report. There are no prohibitive constraints posed by adjacent developments. There does not appear to be any zoning, planning or environmental matters that should hinder the proposed development of the site. In this regard, it can be concluded that the proposal fits into the locality and the site attributes are conducive for the development.

5.10. The Public Interest

The proposal is unlikely to create any negative impacts on the amenity of the area and is therefore deemed to be positive in terms of the public interest.

6. CONCLUSION

It is recommended that the proposed office premises on Lot 2 DP 1261038, known as 140 Mayne Street, Gulgong be supported on the following grounds:

- The proposal is considered acceptable in terms of the provisions of Section 4.15 of the *Environmental Planning and Assessment Act 1979*;
- The proposal is permissible with consent and consistent with the relevant development standards and provisions of the *Mid-Western Regional Local Environmental Plan 2012*;
- The proposal generally complies with the relevant provisions of the *Mid-Western Regional Council Development Control Plan 2013*;
- The proposed development is not anticipated to generate any adverse impacts in the locality; and
- The proposed development is considered suitable for the site and its surrounds.

7. REFERENCES

NSW Government. (2024, August 21). *Biodiversity Value Map*. Retrieved from <https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap>

NSW Government Spatial Services. (2024, August 21). *Six Maps*. Retrieved from <http://maps.six.nsw.gov.au/>

APPENDIX A

Title and Deposited Plan



LAND
REGISTRY
SERVICES

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 2/1261038

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
25/6/2024	1:54 PM	2	28/2/2024

LAND

LOT 2 IN DEPOSITED PLAN 1261038
AT GULGONG
LOCAL GOVERNMENT AREA MID-WESTERN REGIONAL
PARISH OF GULGONG COUNTY OF PHILLIP
PARISH OF GUNTAWANG COUNTY OF PHILLIP
TITLE DIAGRAM DP1261038

FIRST SCHEDULE

BRODIE MCGANN
MARK ANDREW MCGANN
AS JOINT TENANTS (T AT867219)
SECOND SCHEDULE (2 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 LAND EXCLUDES MINERALS WITHIN THE PART SHOWN SO INDICATED IN THE
TITLE DIAGRAM - SEE CROWN GRANT(S)

NOTATIONS

UNREGISTERED DEALINGS: NIL
*** END OF SEARCH ***
Barnson Pty Ltd (Mudgee)

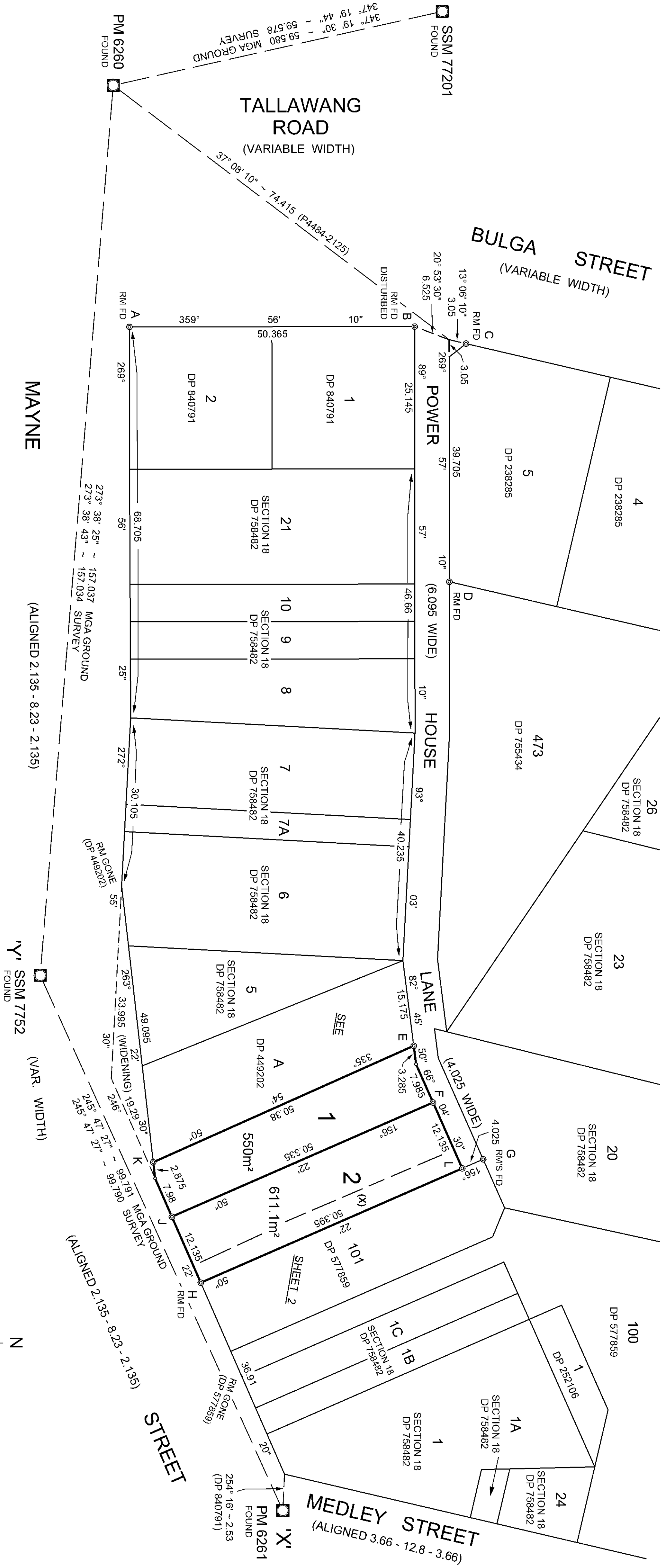
PRINTED ON 25/6/2024

* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title.
Warning: the information appearing under notations has not been formally recorded in the Register.

DYE & DURHAM TERRAIN PTY LTD - hereby certifies that the information contained in this document has been
provided electronically by the Registrar General in accordance with section 96B(2) of the Real Property Act
1900.

Note: Information contained in this document is provided by DYE & DURHAM TERRAIN PTY LTD (ABN 35 164 894 517),
<https://dyedurhamterrain.com/> an approved NSW Information Broker

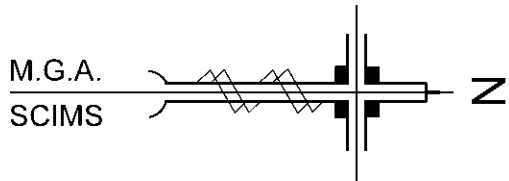
© Office of the Registrar-General 2024



REFERENCE AND PERMANENT MARKS			
COR	BEARING	DISTANCE	FROM PLAN
A	75° 42'	2.31	D.H. & WING DP 840791
B	170° 33'	0.5	G.I. PIPE - DIST'D DP 840791
C	180° 11'	0.5	G.I. PIPE BY ME
D	104° 27'	0.48	G.I. PIPE DP 840791
E	13° 02'	0.47	G.I. PIPE P4484 - 2125
F	94° 29'	2.71	D.H. & WING
G	158° 32'	0.89	G.I. PIPE
H	66° 08'	0.5	G.I. PIPE - 0.4 DEEP DP 577859
I	133° 55'	10.505	D.H. & WING DP 1150865
J	336° 22'	1	D.H. & WING DP 577859
K	326° 02'	1.015	D.H. & WING
L	335° 43'	2.895	D.H. & WING
M	140° 05'	14.305	D.H. & WING

COORDINATE SCHEDULE						
MARK	MGA COORDINATES		CLASS	ORDER	METHOD	STATE
	EASTING	NORTHING				
PM 6260	738 001.300	6 416 526.138	C	3	FROM SCIMS	FOUND
PM 6261	738 249.090	6 416 557.095	C	3	FROM SCIMS	FOUND
SSM 7752	738 158.055	6 416 516.165	C	3	FROM SCIMS	FOUND
SSM 77201	737 988.224	6 416 584.279	C	3	FROM SCIMS	FOUND
DATE OF SCIMS COORDINATES: 26th of April 2019						
MGA ZONE: 55		MGA DATUM: GDA94		COMBINED SCALE FACTOR: 1.000221		

CONNECTIONS			
FROM	TO	BEARING	DISTANCE
SSM 77201	PM 6261	96° 56' 57"	262.221
PM 6261	CORNER H	96° 57' 08"	262.213
SSM 7752	CORNER K	246° 52' 42"	39.417
		63° 00' 25"	37.572



Req:R723583 /Doc:DP-06-Feb-2020 /NSW LRS /Pg:5 ALL /Prt:03-Mar-2020 15:50 /Seq:1 of 4

© Office of the Registrar-General /Src:URBISPRO /Ref:Barnson Pty Ltd (Mudgee)

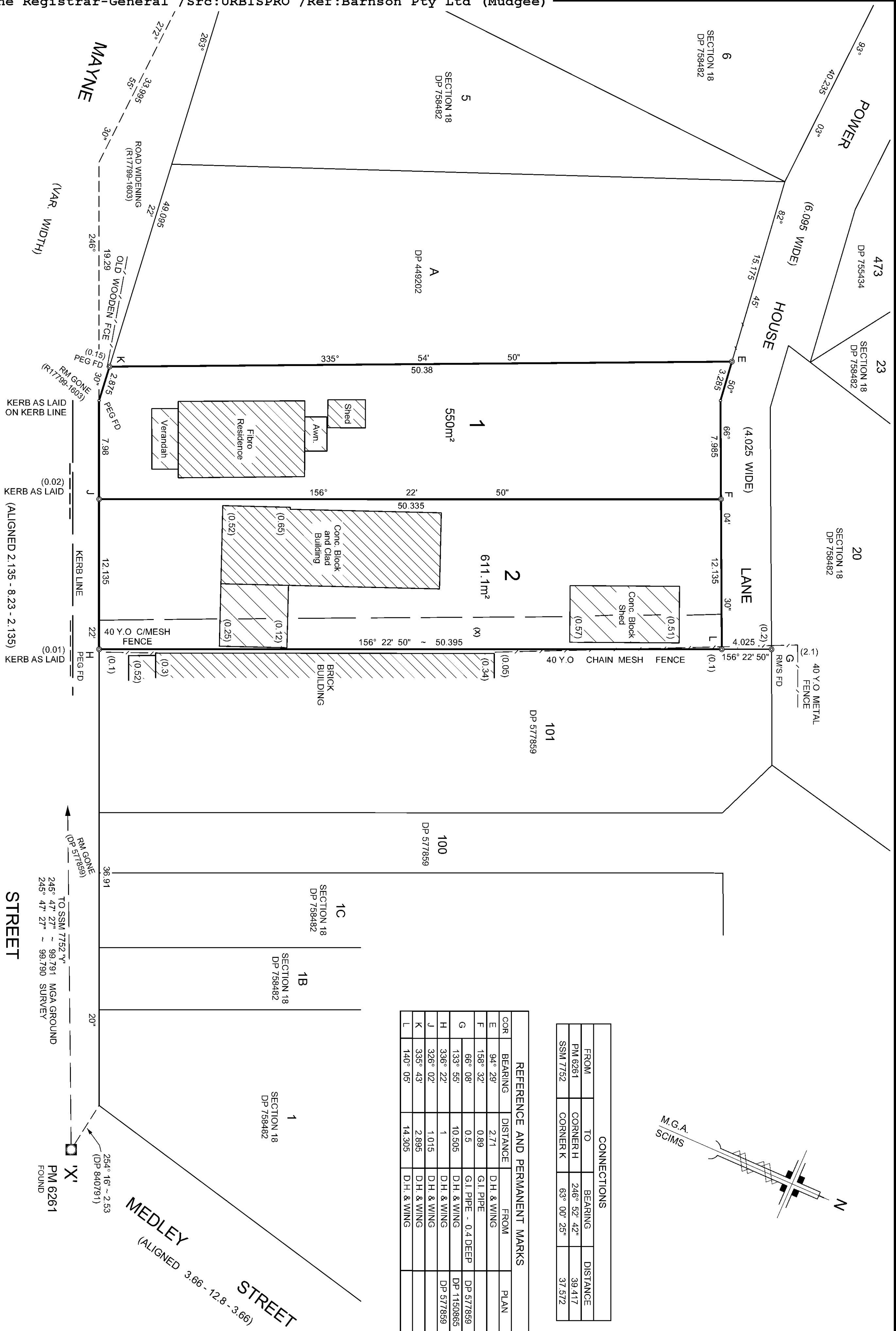
SURVEYOR
Name: Michael James Connolly
Date: 3rd May 2019
Reference: 18_013

PLAN OF SUBDIVISION OF LOT B IN DP 449202 AND
LOTS 3B, 3C & 25 OF SECTION 18 IN DP 758482

L.G.A.: Mid-Western Regional
Locality: Gulgong
Reduction Ratio: 1:500
Lengths are in metres

Registered
6.2.2020

DP1261038



CONNECTIONS			
FROM	TO	BEARING	DISTANCE
PM 6261	CORNER H	246° 52' 42"	39.417
SSM 7752	CORNER K	63° 00' 25"	37.572

REFERENCE AND PERMANENT MARKS			
COR	BEARING	DISTANCE	FROM
E	94° 29'	2.71	D.H. & WING
F	158° 32'	0.89	G.I. PIPE
G	66° 08'	0.5	G.I. PIPE - 0.4 DEEP
H	133° 55'	10.505	D.H. & WING
I	336° 22'	1	D.H. & WING
J	326° 02'	1.015	D.H. & WING
K	335° 43'	2.895	D.H. & WING
L	140° 05'	14.305	D.H. & WING

SURVEYOR
Name: Michael James Connolly
Date: 3rd May 2019
Reference: 18_013


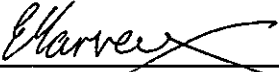



PLAN OF SUBDIVISION OF LOT B IN DP 449202 AND
LOTS 3B, 3C & 25 OF SECTION 18 IN DP 758482

L.G.A.: Mid-Western Regional
Locality: Gulgong
Reduction Ratio: 1:200
Lengths are in metres

Registered
6.2.2020

DP1261038

PLAN FORM 6 (2018)	DEPOSITED PLAN ADMINISTRATION SHEET	Sheet 1 of 2 sheet(s)										
<div style="display: flex; justify-content: space-between;"> <div> <p>Registered: 6.2.2020</p> <p>Title System: TORRENS</p> </div> <div style="text-align: right;">Office Use Only</div> </div>	<div style="display: flex; justify-content: space-between;"> <div> <p style="font-size: 24px; margin-top: 10px;">DP1261038 S</p> </div> <div style="text-align: right;">Use Only</div> </div>											
<p>PLAN OF SUBDIVISION OF LOT B IN DP 449202 AND LOTS 3B, 3C & 25 OF SECTION 18 IN DP 758482</p>	<p>LGA: MID-WESTERN REGIONAL</p> <p>Locality: GULGONG</p> <p>Parish: GUNTAWANG</p> <p>County: PHILLIP</p>											
<p style="text-align: center;">Survey Certificate</p> <p>I, MICHAEL JAMES CONNOLLY of WESTERN SURVEY Pty Ltd PO BOX 234, DUBBO NSW 2830 a surveyor registered under the <i>Surveying and Spatial Information Act 2002</i>, certify that:</p> <p>*(a) The land shown in the plan was surveyed in accordance with the <i>Surveying and Spatial Information Regulation 2017</i>, is accurate and the survey was completed on 3rd May 2019, or</p> <p>*(b) The part of the land shown in the plan (*being/*excluding **) was surveyed in accordance with the <i>Surveying and Spatial Information Regulation 2017</i>, the part surveyed is accurate and the survey was completed on, 9th January 2019 the part not surveyed was compiled in accordance with that Regulation, or</p> <p>*(c) The land shown in this plan was compiled in accordance with the <i>Surveying and Spatial Information Regulation 2017</i>.</p> <p>Datum Line: 'X' - 'Y'</p> <p>Type: *Urban/*Rural</p> <p>The terrain is *Level-Undulating / *Steep-Mountainous.</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div>Signature: </div> <div>Dated: 3 / 05 / 2019</div> </div> <p>Surveyor Identification No: 8516 Surveyor registered under the <i>Surveying and Spatial Information Act 2002</i></p> <p><small>*Strike out inappropriate words. **Specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey.</small></p>	<p style="text-align: center;">Crown Lands NSW/Western Lands Office Approval</p> <p>I, (Authorised Officer) in approving this plan certify that all necessary approvals in regard to the allocation of the land shown herein have been given.</p> <p>Signature:</p> <p>Date:</p> <p>File Number:</p> <p>Office:</p>											
<p style="text-align: center;">Subdivision Certificate</p> <p>I, <u>LINDSAY DUNSTAN</u> *Authorised Person/*General Manager/*Accredited Certifier, certify that the provisions of section 6.15 <i>Environmental Planning and Assessment Act 1979</i> have been satisfied in relation to the proposed subdivision, new road or reserve set out herein.</p> <div style="text-align: right; margin-right: 50px;"></div> <p>Signature:</p> <p>Accreditation number:</p> <p>Consent Authority: <u>MID-WESTERN REGIONAL COUNCIL</u></p> <p>Date of endorsement: <u>17 JANUARY 2020</u></p> <p>Subdivision Certificate number: <u>SC 019/2020</u></p> <p>File number: <u>DA 0291/2019</u></p> <p><small>*Strike through if inapplicable.</small></p>	<p>Plans used in the preparation of survey/compilation.</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">17799-1603</td> <td style="width:50%;">DP 840791</td> </tr> <tr> <td>8-2089</td> <td>DP 1150865</td> </tr> <tr> <td>4484-2125</td> <td></td> </tr> <tr> <td>DP 449202</td> <td></td> </tr> <tr> <td>DP 577859</td> <td></td> </tr> </table>		17799-1603	DP 840791	8-2089	DP 1150865	4484-2125		DP 449202		DP 577859	
17799-1603	DP 840791											
8-2089	DP 1150865											
4484-2125												
DP 449202												
DP 577859												
<p>Surveyor's Reference: 18_013</p>	<p>Statements of intention to dedicate public roads, create public reserves and drainage reserves, acquire/resume land.</p> <p>Signatures, Seals and Section 88B Statements should appear on PLAN FORM 6A</p>											

PLAN FORM 6A (2017)		DEPOSITED PLAN ADMINISTRATION SHEET	Sheet 2 of 2 sheet(s)
<div>Office Use Only</div> <div>Registered:  6.2.2020</div>		<div>Use Only</div> <div>DP1261038</div>	
PLAN OF SUBDIVISION OF LOT B IN DP 449202 AND LOTS 3B, 3C & 25 OF SECTION 18 IN DP 758482		<div>This sheet is for the provision of the following information as required:</div> <ul style="list-style-type: none">• A schedule of lots and addresses - See 60(c) SSI Regulation 2017• Statements of intention to create and release affecting interests in accordance with section 88B Conveyancing Act 1919• Signatures and seals- see 195D Conveyancing Act 1919• Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.	
Subdivision Certificate number: <u>SC 019/2020</u> Date of Endorsement: <u>17 JANUARY 2020</u>			
<div> ELISE CLAIRE HARVEY</div> <div><div>Signed for and on behalf of Westpac Banking Corporation ABN 33 007 457 141 by its Tier Three Attorney</div><div> Signature of Attorney:..... Name of Attorney:..... <u>Michael Smith</u> Power of Attorney registered Book 4299 no. 332 Who is personally known to me.</div><div> Signature of Witness:..... Name of Witness:..... <u>SHEENA ANDREWS</u> Address: 4-16 Montgomery Street Kogarah NSW 2217</div></div>			
<div>If space is insufficient use additional annexure sheet</div> <div></div>			
Surveyor's Reference: 18_013			



APPENDIX B

Contamination Validation Report

Validation report

Underground fuel storage tank, 140-142 Mayne Street, Gulgong NSW



Ref: R12568val

Date: 5 February 2013

Envirowest Consulting Pty Ltd ABN 18 103 955 246

• 24 William Street, PO Box 8158, Orange NSW 2800 • Tel (02) 6361 4954 •
• Fax (02) 6360 3960 • Email ec@envirowest.net.au • Web www.envirowest.net.au •

Environmental
Geotechnical
Hygienist
Services



Prepared by: Envirowest Consulting Pty Ltd
24 William Street
Orange NSW 2800

Client: Elise Harvey
221 Market Street
Mudgee NSW 2850

Authorising Officer: Greg Madafiglio PhD
Senior Environmental Scientist

Assessor: Joashim Mahon BEnvSci
Environmental Scientist

Checked by: Greg Madafiglio PhD
Senior Environmental Scientist

Report number: R12568val

Date: 5 February 2013

Executive summary

Background

A former service station is located at 140-142 Mayne Street, Gulgong NSW. The underground storage tanks (UST) located on site are not required and have been decommissioned by filling with sand. Validation of the soil surrounding the UPSS was required to confirm no contamination was located on the site in accordance with *POEO (Petroleum Storage) Regulations 2008*.

This report describes the validation of the soil surrounding the UPSS.

Objectives of the investigation

Validation of the soil surrounding the UPSS in accordance with *POEO (Petroleum Storage) Regulations 2008*.

Summary

Two underground storage tanks (UST) were decommissioned by boring a hole in the top, disposal of contents and filling with sand. The UST have been disconnected and previously contained petrol or diesel.

The soil surrounding the UPSS was assessed by construction of boreholes and inspection of the soil profile for visual and olfactory evidence of contamination. Validation of the soil was undertaken by collection of samples and analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethyl benzene, xylene, naphthalene (BTEXN).

No odour or volatile organic compounds (VOC) from photoionisation detector (PID) were detected in any of the boreholes constructed.

The TPH (C6-C36) and BTEXN levels in the soil samples collected were less than the assessment criteria.

Recommendations

No contamination was detected in the soil surrounding the UPSS and the assessed area is suitable for commercial land-use.

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1. Introduction

A former service station is located at 140-142 Mayne Street, Gulgong NSW. The underground storage tanks (UST) located on site are not required and have been decommissioned by filling with sand. Validation of the soil surrounding the UPSS was required to confirm no contamination was located on the site in accordance with *POEO (Petroleum Storage) Regulations 2008*.

2. Scope of work

Envirowest Consulting Pty Ltd was commissioned by Elise Harvey to undertake validation of the soil surrounding the UPSS at 140-142 Mayne Street, Gulgong NSW. The investigation will be undertaken according to Office of Environment and Heritage (OEH) and NEPC guidelines including *Guidelines for consultants reporting on contaminated sites and of POEO (Petroleum Storage) Regulations 2008*.

3. Site identification

Address	140-142 Mayne Street Gulgong NSW
Client	Elise Harvey
Australian Map Grid	Zone 55H E738219m N6416541m
Locality map	Figure 1
Aerial photograph	Figure 2
Site plan	Figure 3
Photograph(s)	Figure 4
Area	Approximately 100m ² . The area assessed was surrounding the disused UPSS.

4. Site description

4.1 Zoning

The site is zoned as R1 - general residential under the Mid-Western Regional Local Environmental Plan 2012.

4.2 Site visit and description

The site was inspected on 15 January 2013. The area under investigation was the soil surrounding the UPSS measuring 8m by 12m located south of the existing building on site.

4.2 Land-use

The current land-use is commercial. The investigation area was covered in vegetation consisting of red flowered mallow, cathead, kikuyu, ornamental shrubs and wire weed and adjacent to buildings. The proposed land-use is a craft shop.

4.3 Summary of council records

None known

4.4 Sources of information for historical review and site description

- Information from Warren Harvey
- Site inspections on 15 January 2013 by Greg Madafiglio and Leah Desborough
- Topographic map of area (Gulgong 1: 50,000 CMA of NSW, 1980)
- Aerial photograph 2009
- NSW OEH records of public notices under the CLM Act 1997
- Soil Landscapes of the Dubbo series
- NSW Natural Resource Atlas
- Mid-Western Regional LEP 2012

4.5 Chronological list of site uses

The site is currently vacant and the proposed use is a craft store. The UST are located south of the retail building.

The site operated as a service station and mechanical workshop until the 1960's. The UST on site are the original tanks installed. The tanks were decommissioned by filling with sand in the 1960's when the service station operation ceased.

4.6 Building and infrastructure

The site contains a retail building north of the UST and a residential dwelling west of the UST. The UPSS consisted of one fuel pump that has since been removed and two inactive UST.

4.7 Fuel storage tanks

Two disused UST are located on the site (Figure 3). The disused UST were identified by a review of site history, ground penetrating radar survey and boreholes.

Identifier	Type	Status	Product	Volume (L)
1	Underground	Decommissioned	Unknown	Unknown
2	Underground	Decommissioned	Unknown	Unknown

4.8 Potential Contaminants

Potential sources of contamination on the site were identified as the fuel UST and feeder lines.

Petroleum hydrocarbon contamination is possible in delivery, storage and dispensing of fuel and oil products, spills and overflows at refilling, leakage of UST due to corrosion and leakages of feeder lines due to pipe work failures. Contamination is possible from fuel spills and overflows at the time of refilling.

Potential contaminants include:

- Unleaded petrol – detected by laboratory analysis of TPH (C6-C36) and BTEX
- Leaded petrol – detected by laboratory analysis of lead, TPH (C6-C36) and BTEX
- Diesel – detected by laboratory analysis of TPH(C10-C36) and naphthalene

4.9 Relevant complaint history

None known

4.10 Regulatory information

The site is not listed on the NSW OEH register of contaminated sites.

4.11 Previous investigations

No reporting of the tank decommissioning was available for review. No other previous soil or groundwater contamination assessments are known to have occurred at the site.

4.12 Historical use of adjacent land

- North – Commercial, retail building
- East – Commercial
- South – Mayne Street, commercial
- West – Residential

Neighbouring land-uses are not expected to have resulted in contamination on the site.

4.13 Integrity assessment

The information obtained is accurate as the review records have allowed. The information available is considered sufficient for the purpose of the assessment and believed to be correct by the investigator.

5. Site conditions and environment

5.1 Surface cover

The investigation area was covered by vegetation consisting of red flowered mallow, cathead, kikuyu, ornamental shrubs and wire weed. The vegetation was not stunted and contained no discolouration.

5.2 Topography

The site is located on a mid-slope with an inclination 1-2%. The site has a predominantly northerly aspect.

5.3 Soil and geology

The soil from the boreholes contained fill material consisting of silty sand, clayey sand and sand up to a depth of 1000mm. The natural soil from the boreholes on the site typically comprised strong brown, brown, reddish yellow, brownish yellow to yellowish brown sandy clay to clayey sand.

The site is within the Gulgong Soil Landscape (Murphy *et al.* 1998). The natural soil materials within the landscape are dark reddish brown to reddish brown fine sandy loam to clay loam topsoil over a dark reddish brown, dark brown to brown clay loam to light medium clay.

Geology is Tinja Formation, Burrunah Formation and undifferentiated. The site is underlain by shale, siltstone, chert, limestone, arkose, andesite, tuff and tuffaceous sandstone (Murphy *et al.* 1998).

5.4 Hydrology

5.4.1 Surface water

Surface water from the site drains into the local stormwater system. Surface water flows from the site via the pavement and roadway.

5.4.2 Groundwater

The Australian Natural Resources Atlas identifies the site within the Unincorporated Area – Lachlan Fold Belt Province Groundwater Management Unit. The management unit has an area of 238,277km² with approximately 47,000 ML consumed per year. Salinity levels are variable ranging from less than 1,000µg/L to greater than 20,000µg/L. Groundwater is located in fractured rock aquifers with variable yield potential. These factors have limited the use of groundwater to stock purposes with some domestic use.

A search of the NSW Natural Resource Atlas located 13 bores within a 1km radius of the site. These bores are licenced for domestic use, irrigation, stock purposes and recreation. The bores have been drilled to depths between 27m and 96m, have standing water levels from 8m and water bearing zones from 24m. Water bearing zones are located in sand, gravel, andesite and basalt.

5.5 Evidence of contamination checklist

Site layout showing industrial processes	Nil.
Sewer and service plans	Underground services are located along the site boundary and within the site
Manufacturing processes	None known
Underground and above ground tanks	Two disused fuel UST are located on the site.
Product spills and loss history	None known
Discharges to land, water and air	None known
Disposal locations, presence of drums, wastes and fill materials	Fill identified in the boreholes up to 1m in depth.
Surface staining	No areas observed on the site
Visible signs of plant stress, bare areas	No areas of plant stress observed in vegetation on boundary areas
Odours	Nil
Ruins	Nil
Other	Nil

6. Previous assessments

Nil

7. Remediation works

Decommissioning of the tanks was undertaken in the 1960's. The tanks were reportedly decommissioned by excavating to the surface of the tanks and cutting a hole in the top of the tank. Water / fuel / sludge in the tanks was pumped out. The empty tanks were then filled with sand to 95% of the tank volume. The excavated material was backfilled and resurfaced.

Validation of the soil surrounding the UPSS is described in the following sections.

8. Validation assessment

8.1 Sampling strategy

8.1.1 Sampling design

The principal objective was to undertake sampling to validate the soil surrounding the former UPSS. A systematic sampling strategy was undertaken in the investigation area.

8.1.2 Sampling density and locations

The validation investigation was undertaken by construction of 4 boreholes (BH1 to BH4) to 1.5m depth, 3m depth or drill refusal. The soil profile was described in each borehole including visual and olfactory evidence of contamination.

The former fuel pumps, feeder lines and UST were the targeted soil sampling area in a sampling pattern on a 5m grid pattern.

8.1.3 Sampling depths

Discrete soil samples were collected from the boreholes at 500mm to 1000mm intervals. Samples were screened on site for volatile organic compounds (VOC) with a photoionisation detector (PID). Two representative discrete soil samples were selected for laboratory analysis.

VOC results are presented in the borelogs (Appendix 3). The PID calibration certificate is presented in Appendix 6.

8.2 Analytes

The potential contaminants of concern are associated with diesel and petrol. The contaminants of concern are total petroleum hydrocarbons (TPH C6-C36) and benzene, toluene, ethyl benzene, xylenes and naphthalene (BTEXN).

8.3 Sampling methods

Detailed soil sampling protocols are presented in Appendix 1. Soil samples were collected from the auger tip using a spade. The soil was transferred to a solvent rinsed glass jar with a teflon lid quickly to minimise volatile vapour loss. Discrete samples were collected.

A Toxirae photoionisation detector (PID) was used to screen the headspace gases of the sub-sample in the polythene bag. The PID provides a semi-quantitative indication of the presence of ionisable volatile organic compounds in the soil. The PID had a 10.6mV lamp, calibrated daily prior to use with isobutylene gas at 100ppm.

Tools were decontaminated between sampling locations to prevent cross contamination by: brushing to remove caked or encrusted material, washing in detergent and tap water, rinsing in deionised water rinsing with clean tap water and allowing to air dry or using a clean towel.

All sample containers were placed immediately into a cooler containing ice. A chain of custody form accompanied the transport of samples.

9. Quality assurance and quality control

9.1 Sampling design

The sampling pattern and density was in accordance with *Service Station Sampling Guidelines* (EPA 1994). Sampling locations were around the UST on a grid pattern of 5m equivalent to the sampling guideline (EPA 1994). The soil was screened at each location at 1m intervals for VOC and the highest or deepest sample was analysed in the laboratory. The depth of sampling was 3m which is 1m below the base of the UST.

The number of locations tested is thought to provide an adequate assurance that the soils sampled are representative of the area sampled.

Data quality objectives and data quality indicators are presented in Appendix 2.

9.2 Field procedures

The collection of samples was undertaken in accordance with industry accepted standard protocols (NEPC 1999). The details of the samples collected are presented in Table 1.

Discrete samples were collected and analysed. The samples were divided with a clean stainless steel spade. Half of the sample was placed in a plastic zip lock bag for VOC determination and half retained for laboratory analysis.

Sampling equipment was decontaminated between each sampling event. Samples were stored and transported under refrigeration and in insulated containers. Appropriate storage duration was observed. A chain of custody form tracked the samples to the laboratory (Appendix 3).

A single sampler was used to collect the samples using standard methods. Soil collected from the pit was a fresh sample from the tip of the auger with a hand shovel. After collection the samples were immediately placed in new glass sampling jars and placed in a cooler. Samples jar were filled to minimise headspace and maintain sample integrity.

No intra laboratory duplicate samples were analysed. Samples from all batches did not contain contaminants which confirm the absence of cross contamination during transport and storage.

Table 1. Schedule of samples and analysis (15/01/2013)

Laboratory sample ID	Sample ID (Figure 3)	Depth (mm)	Location	Analysis undertaken
2-3000	2	3000	East of UST	TPH (C6-C36), BTEXN
3-3000	3	3000	West of UST	TPH (C6-C36), BTEXN

9.3 Laboratory

Chemical analyses were conducted in the laboratories of ALS, Smithfield, NSW which is NATA registered for the tests undertaken. The laboratory has quality assurance and quality control programs. The quality control program for analysis of samples in each laboratory batch was greater than the recommended frequency of 5%. The laboratory reports including quality control evaluations are presented in the Appendix 3.

9.4 Data evaluation

The quality control and quality assurance report is presented in Appendix 2. The quality assurance/quality control reports for the data are presented in the laboratory reports.

It is concluded the analytical results are representative and the data is usable for the purposes of the investigation.

10. Assessment criteria

10.1 Soil

Land-use of the site is commercial. The appropriate land-use classification for assessing contaminants is commercial.

Soil criteria as determined by measurement of volatile organic compounds (VOC) are used to determine the potential for volatile hydrocarbon contamination. These criteria have been developed based on experience to assist in the assessment of hydrocarbon contamination levels in soil. It is important to note these generalised criteria are only a guide and that the level of VOC varies with hydrocarbon type. Soil VOC generalised criteria are outlined in Table 2.

Table 2. Generalised volatile organic compounds soil criteria

Volatile organic compounds (VOC)	Description
<20ppm	Negligible
20 to 60ppm	Low
60 to 300ppm	Moderate
>300ppm	Significant

No NSW OEH approved health based commercial thresholds are available for hydrocarbons. The sensitive land-use guidelines (EPA 1994) for hydrocarbons are intended for protection of the environment and considered conservative for commercial land-use. The sensitive land-use guidelines are thresholds for protection of the environment and will also provide protection for human health. The investigation levels of the soil for sensitive land-use are listed in Table 3 as recommended in EPA (1994).

Table 3. Soil assessment criteria (mg/kg)

Analyte	Sensitive land-use (EPA 1994)
TPH (C6-C9)	65
TPH (C10-C36)	1,000
Benzene	1
Toulene	1.4 ^a /130 ^b
Ethyl-benzene	3.1 ^a /50 ^b
Xylenes	14 ^a /25 ^b
Naphthalene	-

^aprotection of the environment, ^bprotection of human health (EPA 1995)

11. Results and discussion

11.1 Visual appearance and odour

No odour, staining or VOC from PID were detected in any of the boreholes constructed.

11.2 Soil analysis results

The soil from the boreholes contained fill material consisting of silty sand, clayey sand and sand up to a depth of 1000mm. The natural soil from the boreholes on the site typically comprised strong brown, brown, reddish yellow, brownish yellow to yellowish brown sandy clay to clayey sand.

The TPH and BTEXN levels in the soil samples collected were below detection limits and less than the assessment criteria (Table 4).

Table 4. Soil analysis results (mg/kg)

Sample id.	Location (Figure 3)	TPH C6-C9	TPH C10-C36	Benzene	Toluene	Ethyl-benzene	Xylenes	Naphthalene
2-3000	East of UST	ND	ND	ND	ND	ND	ND	ND
3-3000	West of UST	ND	ND	ND	ND	ND	ND	ND
<i>Sensitive land-use threshold (EPA 1994)</i>		65	1000	1	1.4 ^a / 130 ^b	3.1 ^a / 50 ^b	14 ^a / 25 ^b	-

^aprotection of the environment, ^bprotection of human health, ND – not detected

12. Site characterisation

12.1 Environmental contamination

No contamination was identified in the soil surrounding the UPSS.

12.2 Chemical degradation products

Not applicable as no contamination was identified in the soil surrounding the UPSS.

12.3 Exposed populations

Not applicable as no contamination was identified in the soil surrounding the UPSS.

13. Conclusions and recommendations

13.1 Summary

Two underground storage tanks (UST) were decommissioned by boring a hole in the top, disposal of contents and filling with sand. The UST have been disconnected and previously contained petrol or diesel.

The soil surrounding the UPSS was assessed by construction of boreholes and inspection of the soil profile for visual and olfactory evidence of contamination. Validation of the soil was undertaken by collection of samples and analysis of total petroleum hydrocarbons (TPH) and benzene, toluene, ethyl benzene, xylene, naphthalene (BTEXN).

No odour or volatile organic compounds (VOC) from photoionisation detector (PID) were detected in any of the boreholes constructed.

The TPH (C6-C36) and BTEXN levels in the soil samples collected were less than the assessment criteria.

13.2 Assumptions used in reaching the conclusions

It is assumed the site history is accurate and no significant undetected contamination is located in areas not investigated on the site.

13.3 Extent of uncertainties in the results

Soil sampling was designed to detect residual elevated concentrations of contaminants in the soil around the UST. The sampling density analysis results are representative of the site.

13.4 Suitability of proposed use

The site is suitable for commercial land-use.

13.5 Limitations and constraints on the use of the site

Nil.

13.6 Recommendation for further work

No contamination was detected in the soil surrounding the UPSS and the assessed area is suitable for commercial land-use.

14. Report limitations and intellectual property

This report has been prepared for the use of the client to achieve the objectives given the client requirements and cost constraints. The level of confidence of the conclusion reached is governed by the scope of the investigation and the availability and quality of existing data. Where limitations or uncertainties are known, they are identified in the report. No liability can be accepted for failure to identify conditions or issues which arise in the future and which could not reasonably have been predicted using the scope of the investigation and the information obtained.

The investigation identifies the actual subsurface conditions only at those points where samples are taken, when they are taken. Data derived through sampling and subsequent laboratory testing are interpreted by geologists, engineers or scientists who then render an opinion about overall subsurface conditions, the nature and extent of the contamination, its likely impact on the proposed development and appropriate remediation measures. Actual conditions may differ from those inferred to exist, because no professional, no matter how well qualified, and no sub surface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock or time. The actual interface between materials may be far more gradual or abrupt than a report indicates. Actual conditions in areas not sampled may differ from predictions. It is thus import to understand the limitations of the investigation and recognise that we are not responsible for these limitations.

This report including data contained and its findings and conclusions remain the intellectual property of Envirowest Consulting Pty Ltd. This report should not be used by persons or for purposes other than stated and not reproduced without permission.

15. References

CMA (1980) *Gulgong Topographic Map 1:50,000* (Central Mapping Authority of New South Wales, Bathurst)

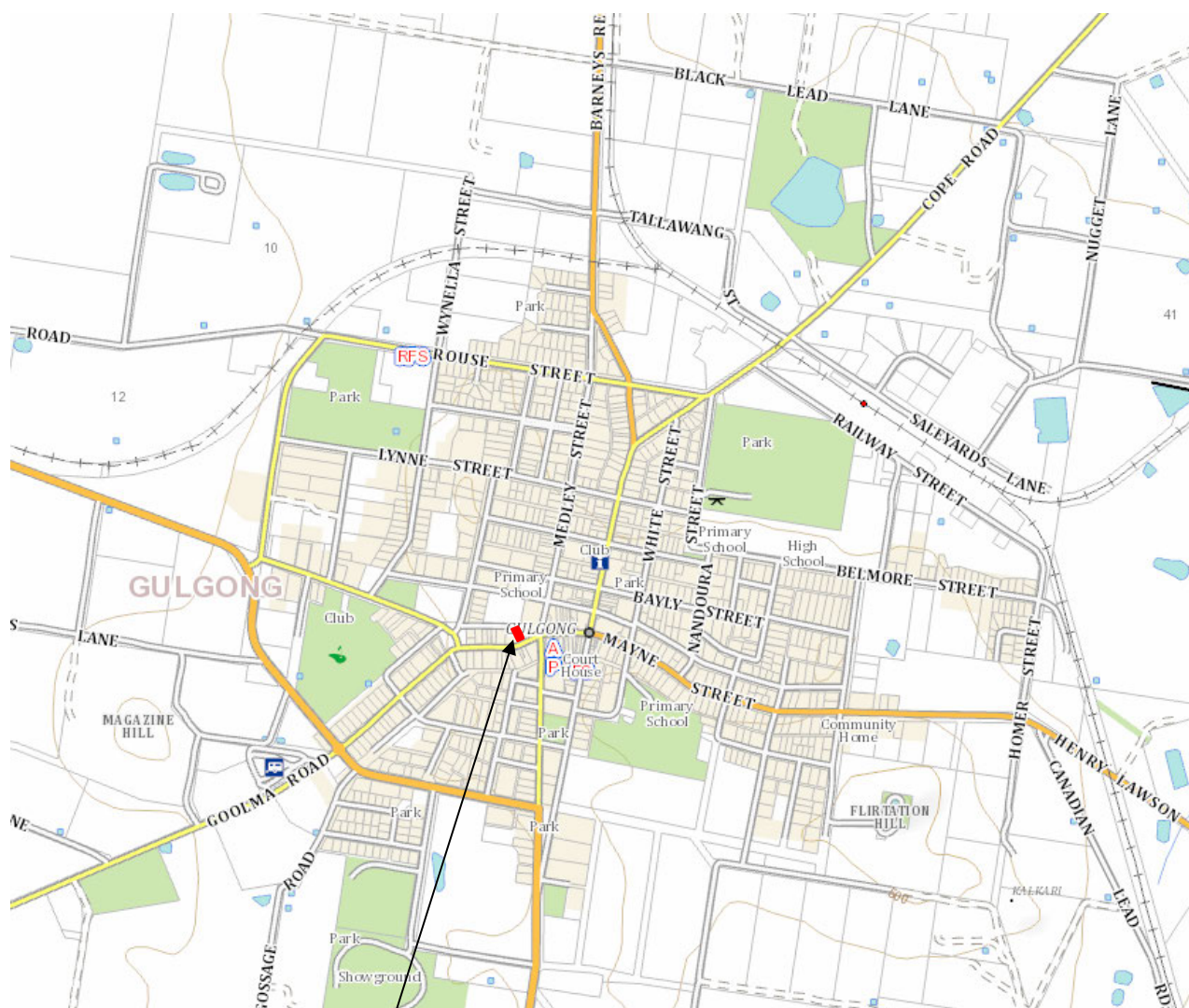
DEC (2006) *Contaminated Sites: Guidelines for the NSW Site Auditors Scheme* (NSW Environment Protection Authority, Chatswood)

EPA (1994) *Contaminated sites: Guidelines for assessing Service Station Sites* (NSW Environment Protection Authority, Chatswood)

EPA (1995) *Contaminated sites: Sampling Design Guidelines* (NSW Environment Protection Authority, Chatswood)

Murphy, BW and Lawrie, JW (1998) *Soil Landscapes of the Dubbo 1:250 000 Sheet* (Department of Land and Water Conservation of NSW, Sydney)

NEPC (1999) *National Environment Protection (Assessment of Site Contamination) Measure 1999* (National Environment Protection Council Service Corporation, Adelaide)



Site assessed

Figure 1. Locality map

140-142 Mayne Street, Gulgong NSW




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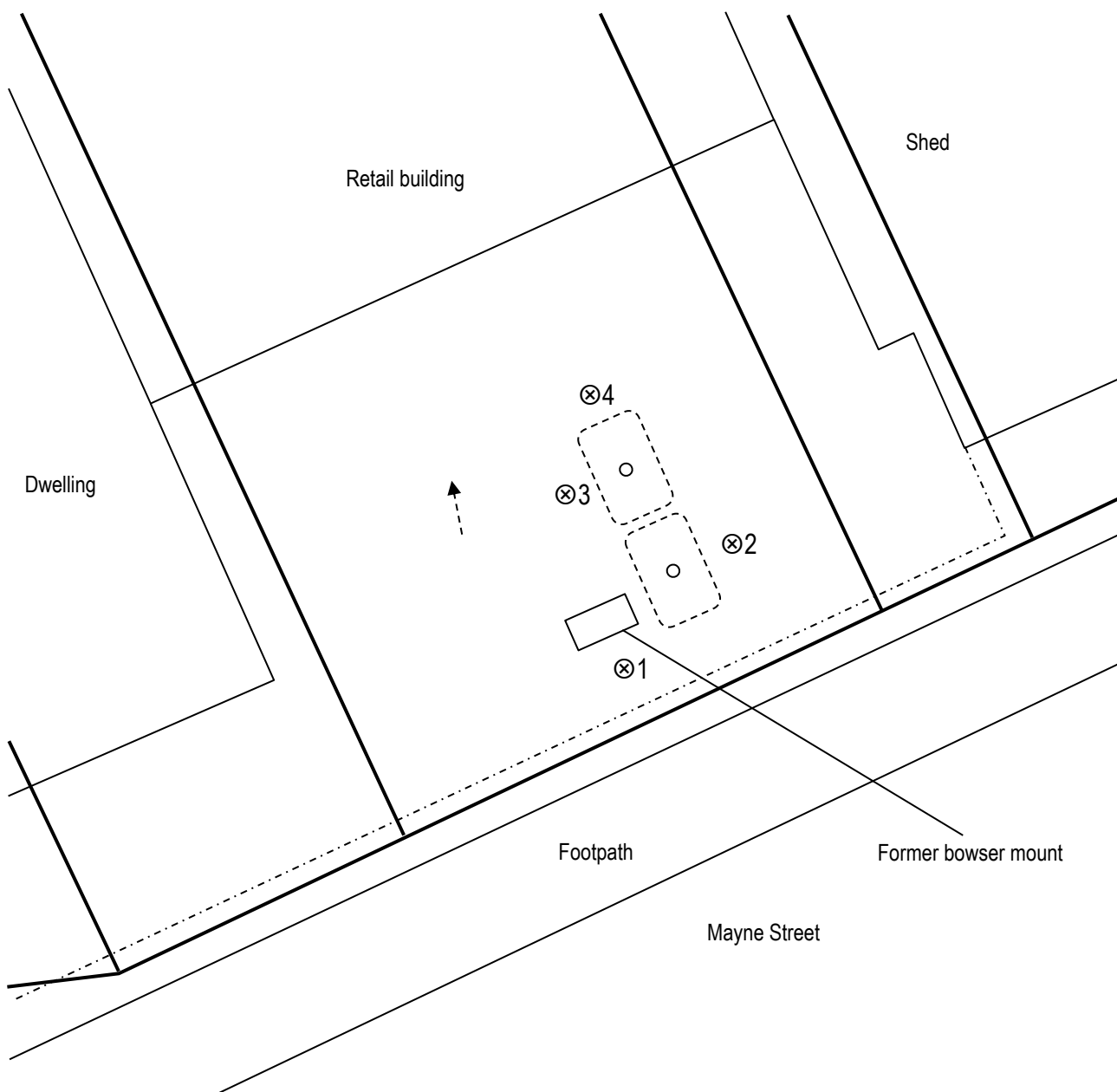
Job: R12568val

Date: 29/01/2013



Site assessed

Figure 2. Aerial photograph		
140-142 Mayne Street, Gulgong NSW		
	Envirowest Consulting Pty Ltd	
Job: R12568val	Drawn by: JM	Date: 29/01/2013



Legend

- ⊗ Borehole
- Lot boundary
- ⬢ UST
- ⤵ Slope
- - - Fence

Approximate scale 1: 150



The location of all underground services is approximate.
No responsibility is accepted for any error or omission.

Figure 3. Site plan and sampling locations

140-142 Mayne Street, Gulgong NSW



Envirowest Consulting Pty Ltd

Job: R12568val

Drawn by: JM

Date: 29/01/2013

Figure 4. Photographs of the site



Looking north east over investigation area



Looking north east over the bowser mount and UST

Appendix 1. Sampling protocol

1. Sampling

The samples will be collected from the auger tip, mattock, hand auger or excavator bucket immediately on withdrawal.

The time between retrieval of the sample and sealing of the sample container was kept to a minimum.

The material was collected using single use disposal gloves or a stainless steel spade which represented material which had not been exposed to the atmosphere prior to sampling.

All sampling jars were filled as close to the top as possible to minimise the available airspace within the jar.

2. Handling, containment and transport

Daily sampling activities will be recorded including sampling locations, numbers, observations, measurements, sampler, date and time and weather condition.

The sampling jars will be new sterile glass jars fitted with plastic lid and airtight Teflon seals, supplied by the laboratories for the purpose of collecting soil samples for analysis. Sample containers will be marked indelibly with the sample ID code to waterproof labels affixed to the body of the container.

All samples will be removed from direct sunlight as soon as possible after sampling and placed in insulated containers. Samples were stored in a refrigerator at 4°C prior to transportation to the laboratory in insulated containers with ice bricks in accordance with AS4482.1.

Handling and transportation to the laboratory will be accompanied with a chain of custody form to demonstrate the specimens are properly received, documents, processed and stored.

Maximum holding time for extraction (AS4482.1) are:

Analyte	Maximum holding time
Metals	6 months
Mercury	28 days
Sulfate	7 days
Organic carbon	7 days
OCP, OPP, PCB	14 days
TPH, BTEXN, PAH, phenols	14 days

3. Decontamination of sampling equipment

Sampling tools will be decontaminated between sampling locations by

- Removing soil adhering to the sampling equipment by scraping, brushing or wiping
- Washing with a phosphate-free detergent
- Rinsing thoroughly with clean water
- Repeating if necessary
- Dry equipment with disposable towels or air

4. Field screening with PID

Duplicate soil samples may be screened for the presence of volatile organic compounds (VOC). Soil samples will be placed in resealable plastic bags and subsequently screened for VOC with a calibrated photo ionisation detector (PID). The PID will be calibrated daily according to the manufactures instruction with 100ppm isobutylene and the calibration certificate will be attached as an appendix. The VOC will be measured using the head-space method after the samples had equilibrated in the plastic bags for 10 minutes. In addition each sample was carefully examined and the physical characteristics, colour and odour described on the borelog sheets.

Appendix 2. Quality control and quality assurance report

1. Data quality objectives (DQO)

1.1 State the problem

Two underground fuel storage tanks are located at 140-142 Mayne Street, Gulgong NSW. The tanks were not required and were filled with sand. The site requires validation to ensure no contaminants remain on-site.

1.2 Identify the decision

The land-use is commercial and the levels of contaminants should be less than the thresholds listed in Section 9. The decision problem is, do the levels of potential contaminants in the soil surrounding the UPSS exceed the assessment criteria listed in Section 10.

1.3 Identify the inputs decision

Investigation of the soil surrounding the UPSS is required. This involves determining the levels of contaminants in the soil surrounding the UPSS.

1.4 Define the boundaries of the study

The investigation area is the soil surrounding the UPSS measuring approximately 100m².

1.5 Develop a decision rule

Chemicals of concern are TPH (C6-C36) and BTEXN in the soil surrounding the UPSS.

Data quality indicators are listed in Section 2.

1.6 Specify acceptable limits on the decision errors.

The 95% upper confidence limit of average levels of samples collected are less than the threshold levels.

1.7 Optimize the design for obtaining data

Soil samples were collected from boreholes drilled around the UST in a systematic pattern. Analytes to be evaluated are TPH (C6-C36) and BTEXN as these are the identified contaminants.

2. Data quality indicators (DQI) requirements

2.1 Completeness

A measure of the amount of usable data for a data collection activity. Greater than 95% of the data must be reliable based on the quality objectives. Where greater than two quality objectives have less reliability than the acceptance criterion the data may be considered with uncertainty.

2.1.1 Field

Consideration	Requirement
Locations and depths to be sampled	Described in the sampling plan. The acceptance criterion is 95% data retrieved compared with proposed. Acceptance criterion is 100% in crucial areas.
SOP appropriate and compiled	Described in the sampling plan.
Experienced sampler	Sampler or supervisor
Documentation correct	Sampling log and chain of custody completed

2.1.2 Laboratory

Consideration	Requirement
Samples analysed	Number according to sampling and quality plan
Analytes	Number according to sampling and quality plan
Methods	EPA or other recognised methods with suitable PQL
Sample documentation	Complete including chain of custody and sample description
Sample holding times	Metals 6 months, OCP, PAH, TPH, PCB 14 days

2.2 Comparability

The confidence that data may be considered to be equivalent for each sampling and analytical event. The data must show little or no inconsistencies with results and field observations.

2.2.1 Field

Consideration	Requirement
SOP	Same sampling procedures to be used
Experienced sampler	Sampler or supervisor
Climatic conditions	Described as may influence results
Samples collected	Sample medium, size, preparation, storage, transport

2.2.2 Laboratory

Consideration	Requirement
Analytical methods	Same methods, approved methods
PQL	Same
Same laboratory	Justify if different
Same units	Justify if different

2.3 Representativeness

The confidence (expressed qualitatively) that data are representative of each media present on the site.

2.3.1 Field

Consideration	Requirement
Appropriate media sampled	Sampled according to sampling and quality plan or in accordance with the EPA (1995) sampling guidelines.
All media identified	Sampling media identified in the sampling and quality plan.

2.3.2 Laboratory

Consideration	Requirement
Samples analysed	Blanks

2.4 Precision

A quantitative measure of the variability (or reproduced of the data). Is measured by standard deviation or relative percent difference (RPD). A RPD analysis is calculated and compared to the practical quantitation limit (PQL) or absolute difference AD.

- Levels greater than 10 times the PQL the RPD is 50%
- Levels between 5 and 10 times the PQL the RPD is 75%
- Levels between 2 and 5 times the PQL the RPD is 100%
- Levels less than 2 times the PQL, the AD is less than 2.5 times the PQL

Data not conforming to the acceptance criterion will be examined for determination of suitability for the purpose of site characterisation.

2.4.1 Field

Consideration	Requirement
Field duplicates	Frequency of 5%, results to be within RPD or discussion required indicate the appropriateness of SOP

2.4.2 Laboratory

Consideration	Requirement
Laboratory and inter lab duplicates	Frequency of 5%, results to be within RPD or discussion required. Inter laboratory duplicates will be one sample per batch.
Field duplicates	Frequency of 5%, results to be within RPD or discussion required
Laboratory prepared volatile trip spikes	One per sampling batch, results to be within RPD or discussion required

2.5 Accuracy

A quantitative measure of the closeness of the reported data to the true value.

Recovery data (surrogates, laboratory control samples and matrix spikes) data subject to the following control limits:

- 60 to 140% acceptable data
- 20-60% discussion required, may be considered acceptable
- 10-20% data should be considered as estimates
- 10% data should be rejected

2.5.1 Field

Consideration	Requirement
SOP	Complied
Inter laboratory duplicates	Frequency of 5%. Analysis criterion 60% RPD for levels greater than 10 times the PQL 85% RPD for levels between 5 to 10 times the PQL 100% RPD at levels between 2 to 5 times the PQL Absolute difference, 3.5 times the PQL where levels are, 2 times PQL
Field blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Rinsate blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted

2.5.2 Laboratory

Consideration	Requirement
Method blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Matrix spikes	Frequency of 5%, results to be within +/-40% or discussion required
Matrix duplicates	Sample injected with a known concentration of contaminants with tested. Frequency of 5%, results to be within +/-40% or discussion required
Surrogate spikes	QC monitoring spikes to be added to samples at the extraction process in the laboratory where applicable. Surrogates are closely related to the organic target analyte and not normally found in the natural environment. Frequency of 5%, results to be within +/-40% or discussion required
Laboratory control samples	Externally prepared reference material containing representative analytes under investigation. These will be undertaken at one per batch. It s to be within +/-40% or discussion required
Laboratory prepared spikes	Frequency of 5%, results to be within +/-40% or discussion required

3. Laboratory analysis summary

One analysis batch was undertaken over the investigation program.

The samples were analysed at the laboratories of ALS, Smithfield, NSW which is National Association of Testing Authorities (NATA) accredited for the tests undertaken. The analyses undertaken, number of samples tested and methods are presented in the following tables:

Laboratory analysis schedule

Sample id. (sampling location)	Number of samples	Duplicate	Analyses	Date collected	Substrate	Laboratory report
2-3000, 3-3000	2	0	TPH (C6-C36), BTEXN	15/01/2013	Soil	ES1301090

Analytical methods

Analyte	Laboratory methods
Metals	APHA USEPA SW846-6010
Leachable metals	APHA USEPA SW846-6010
Mercury	APHA 3112
TPH(C6-C9)	USPEA SW 846-8260B
TPH(C10-C36)	USEPA SW 846-8270B
OC/OP Pesticides, PAH, PCB	USEPA SW 846-8270B
BTEXN	USEPA SW 846-8260B

4. Field quality assurance and quality control

No field duplicate sample was collected over the investigation program.

No trip blanks or trip spikes were submitted for analysis. This is not considered to create significant uncertainty in the analysis results because of the following rationale:

- The fieldwork methods used for soil sampling were consistent throughout the project with all in situ samples collected from material which had not been subject to exposure.
- The fieldwork was completed within a short time period and consistent methods were used for soil sampling.
- Soil samples were placed in insulated cooled containers as quickly as possible, with the containers filled to minimize headspace. The sample containers were sealed immediately after the sample was collected and chilled in an esky containing ice.
- The samples were stored in a refrigerator and transported with ice bricks to ensure preservation during transport and storage.
- The samples were placed in single use jars using clean sampling tools and disposable gloves from material not in contact with other samples. This reduces the likelihood of cross contamination.

Samples in the analysis batches contained analytes below the level of detection. It is considered unlikely that contamination has occurred as a result of transport and handling.

5. Laboratory quality assurance and quality control

Sample holding times are recommended in NEPM (1999). The time between collection and extraction for all samples was less than the criteria listed below:

Analyte	Maximum holding time
Metals, cyanide, nitrogen, phosphorus	6 months
pH, EC	7 days
OCP, OPP, TPH, PCB, BTEXN, PAH	14 days

The laboratory interpretative reports are presented with individual laboratory report. Assessment is made of holding time, frequency of control samples and quality control samples. No significant outliers or non-conformities were identified. The laboratory report also contains a detailed description of preparation methods and analytical methods.

The results, quality report, interpretative report and chain of custody are presented in the attached appendices. The quality report contains the laboratory duplicates, spikes, laboratory control samples, blanks and where appropriate matrix spike recovery (surrogate).

6. Data quality indicators (DQI) analysis

6.1 Completeness

A measure of the amount of usable data for a data collection activity (total to be greater than 95%).

The data set was found to be complete based on the scope of work. No critical areas of contamination were omitted from the data set.

6.1.1 Field

Consideration	Accepted	Comment
Locations to be sampled	Yes	In accordance with sampling methodology, described in the report. Sampling locations described in figures.
Depth to be sampled	Yes	In accordance with sampling methodology
SOP appropriate and compiled	Yes	In accordance with sampling methodology
Experienced sampler	Yes	Sampled with stainless steel spade into lab prepared containers, decontamination between samples, latex gloves worn by sampler
Documentation correct	Yes	Same soil sampler, environmental scientist
		Sampling log completed
		Chain of custody completed

6.1.2 Laboratory

Consideration	Accepted	Comment
Samples analysed	Yes	All critical samples analysed in accordance with chain of custody and analysis plan
Analytes	Yes	All analytes in accordance with chain of custody and analysis plan
Methods	Yes	Analysed in NATA accredited laboratory with recognised methods and suitable PQL
Sample documentation	Yes	Completed including chain of custody and sample results and quality results report for each batch
Sample holding times	Yes	Metals less than 6 months, nitrogen and phosphorus 7 days, OCP, TPH, PCB, BTEXN, PAH less than 14 days
		Holding time outliers are due to incorrect sampling date on jars and chain of custody.

6.2 Comparability

The confidence that data may be considered to be equivalent for each sampling and analytical event.

The data sets were found to be acceptable.

6.2.1 Field

Consideration	Accepted	Comment
SOP	Yes	Same sampling procedures used and sampled on one date
Experienced sampler	Yes	Experienced scientist
Climatic conditions	Yes	Sampling log
Samples collected	Yes	Suitable size, storage and transport

6.2.2 Laboratory

Consideration	Accepted	Comment
Analytical methods	Yes	Same methods all samples, in accordance with NEPM(1999) or USEPA
PQL	Yes	Suitable for analytes
Same laboratory	Yes	ALS Environmental is NATA accredited for the test
Same units	Yes	-

6.3 Representativeness

The confidence (expressed qualitatively) that data are representative of each media present on the site.

The data sets were found to be acceptable.

6.3.1 Field

Consideration	Accepted	Comment
Appropriate media sampled	Yes	Sampled according to sampling and quality plan
All media identified	Yes	Soil
		Sampling media identified in the sampling and quality plan

6.3.2 Laboratory

Consideration	Accepted	Comment
Samples analysed	Yes	Undertaken in NATA accredited laboratory.

6.4 Precision

A quantitative measure of the variability (or reproduced of the data).

The data sets were found to be acceptable.

6.4.1 Field

Consideration	Accepted	Comment
SOP	Yes	Complied
Field duplicates	No	No field duplicate collected

6.4.2 Laboratory

Consideration	Accepted	Comment
Laboratory and inter lab duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required.
Field duplicates	N/A	Frequency of 5%, results to be within +/-40%.
Laboratory prepared volatile trip spikes	N/A	No trip spikes analysed

6.5 Accuracy

A quantitative measure of the closeness of the reported data to the true value.

The data sets were found to be acceptable.

6.5.1 Field

Consideration	Accepted	Comment
SOP	Yes	Complied
Field blanks	N/A	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Rinsate blanks	N/A	Frequency of 5%, <5 times the PQL, PQL may be adjusted

6.5.2 Laboratory

Consideration	Accepted	Comment
Method blanks	Yes	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Matrix spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required.
Matrix duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Surrogate spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Laboratory control samples	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Laboratory prepared spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required

No trip blanks or trip spikes were submitted for analysis. This is not considered to create significant uncertainty in the analysis results because of the following rationale:

- The fieldwork methods used for soil sampling were consistent throughout the project with all in situ samples collected from material which had not been subject to exposure.
- The fieldwork was completed within a short time period and consistent methods were used for soil sampling.
- Soil samples were placed in insulated cooled containers as quickly as possible, with the containers filled to minimize headspace. The sample containers were sealed immediately after the sample was collected and chilled in an esky containing ice.
- The samples were stored in a refrigerator and transported with ice bricks to ensure preservation during transport and storage.
- The samples were placed in single use jars using clean sampling tools and disposable gloves from material not in contact with other samples. This reduces the likelihood of cross contamination.
- Samples in the analysis batches contained analytes below the level of detection. It is considered unlikely that contamination has occurred as a result of transport and handling.

7. Conclusion




All media appropriate to the objectives of this investigation have been adequately analysed and no area of significant uncertainty exist.

It is concluded the data is usable for the purposes of the investigation.

Quality control and assurance is undertaken to ensure the representativeness and integrity of samples, and the accuracy and reliability of analysis results.

Appendix 3. Borelogs







Bore log sheet

Job: R12568val Client: Elise Harvey Site: 140-142 Mayne Street Gulgong NSW		Borehole No: 1 South of bowsers		Sampling method: EVH auger drill Logged by: LD Date: 15/01/2013				
Depth (m)	Graphic	DESCRIPTION. Soil type/rock, grain size, structure, colour, minor components	Texture group	Samples	Moisture	Consistency	Plasticity	VOC (ppm)
0.5		FILL, SILTY SAND, brown with gravel No hydrocarbon odour	SM	VOC	M	F	L	0.0
1.0		CLAYEY SAND, strong brown with gravel	SC		M	St	M	
1.5		SANDY CLAY, strong brown No hydrocarbon odour	Cl	VOC	M	St	M	0.0
2.0		End of hole						
2.5								
3.0								
3.5								
4.0								
Slope/nature of surface: Depression Ground water: Nil Soil salinity: Nil			Remarks (fill, odour, root holes): Fill to 600mm. No hydrocarbon odour.					

Samples	Moisture	Consistency	Plasticity
E – Environmental D – Disturbed U – Undisturbed VOC- volatile organic compounds (ppm)	D – Dry M – Moist, can be moulded W – Wet, free water on hands Wp – plastic limit Wl – liquid limit	Hand penetrometers (kPa) or description: VS – very soft , exudes between fingers S – soft, moulded by light finger pressure F – firm, moulded slightly by fingers St – stiff, can't be moulded by fingers, indented by thumb VSt – very stiff, indented with difficulty by thumb	NP – Non plastic T – Trace VL – Very low L – Low M – Medium H – High VH – Very high

Envirowest Consulting Pty Ltd, 24 William St Orange, NSW



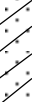



Bore log sheet

Job: R12568val Client: Elise Harvey Site: 140-142 Mayne Street Gulgong NSW		Borehole No: 2 East of UST		Sampling method: EVH auger drill Logged by: LD Date: 15/01/2013				
Depth (m)	Graphic log	DESCRIPTION. Soil type/rock, grain size, structure, colour, minor components	Texture group	Samples	Moisture	Consistency	Plasticity	VOC (ppm)
0.5		FILL, SAND, yellowish brown No hydrocarbon odour	SP	VOC	M	F	VL	0.0
1.0		FILL, CLAYEY SAND, strong brown with gravel and trace glass No hydrocarbon odour	SC	VOC	M	St	L	0.0
1.5		SANDY CLAY, reddish yellow	CI		M	St	M	
2.0		SANDY CLAY, brownish yellow No hydrocarbon odour	CI	VOC	M	St	M	0.0
2.5		CLAYEY SAND, brownish yellow	SC		M	St	M	
3.0		Weathered siltstone No hydrocarbon odour		E				0.0
3.5		End of hole						
4.0								
Slope/nature of surface: 1% N Ground water: Nil Soil salinity: Nil			Remarks (fill, odour, root holes): Fill to 1000mm. No hydrocarbon odour.					

Samples	Moisture	Consistency	Plasticity
E – Environmental D – Disturbed U – Undisturbed VOC- volatile organic compounds (ppm)	D – Dry M – Moist, can be moulded W – Wet, free water on hands Wp – plastic limit Wl – liquid limit	Hand penetrometers (kPa) or description: VS – very soft , exudes between fingers S – soft, moulded by light finger pressure F – firm, moulded slightly by fingers St – stiff, can't be moulded by fingers, indented by thumb VSt – very stiff, indented with difficulty by thumb	NP – Non plastic T – Trace VL – Very low L – Low M – Medium H – High VH – Very high

Envirowest Consulting Pty Ltd, 24 William St Orange, NSW









Bore log sheet

Job: R12568val Client: Elise Harvey Site: 140-142 Mayne Street Gulgong NSW			Borehole No: 3 West of UST		Sampling method: EVH auger drill Logged by: LD Date: 15/01/2013			
Depth (m)	Gratic	DESCRIPTION. Soil type/rock, grain size, structure, colour, minor components	Texture group	Samples	Moisture	Consistency	Plasticity	VOC (ppm)
0.5		FILL, SILTY SAND, pale brownish yellow No hydrocarbon odour	SM	VOC	M	F	L	0.0
1.0		CLAYEY SAND, brown with gravel No hydrocarbon odour	SC	VOC	M	St	M	0.0
1.5		SANDY CLAY, yellowish brown	CI		M	St	M	
2.0		CLAYEY SAND, brownish yellow No hydrocarbon odour	SC	VOC	M	St	M	0.0
2.5		Fine to coarse gravel						
3.0		Weathered siltstone, olive No hydrocarbon odour		E				0.0
3.5		End of hole						
4.0								
Slope/nature of surface: 1% SW Ground water: Nil Soil salinity: Nil			Remarks (fill, odour, root holes): Fill to 600mm. No hydrocarbon odour.					

Samples	Moisture	Consistency	Plasticity
E – Environmental D – Disturbed U – Undisturbed VOC- volatile organic compounds (ppm)	D – Dry M – Moist, can be moulded W – Wet, free water on hands Wp – plastic limit Wl – liquid limit	Hand penetrometers (kPa) or description: VS – very soft, exudes between fingers S – soft, moulded by light finger pressure F – firm, moulded slightly by fingers St – stiff, can't be moulded by fingers, indented by thumb VSt – very stiff, indented with difficulty by thumb	NP – Non plastic T – Trace VL – Very low L – Low M – Medium H – High VH – Very high

Envirowest Consulting Pty Ltd, 24 William St Orange, NSW

Bore log sheet

Job: R12568val Client: Elise Harvey Site: 140-142 Mayne Street Gulgong NSW		Borehole No: 4 North of UST		Sampling method: EVH auger drill Logged by: LD Date: 15/01/2013				
Depth (m)	Graphic log	DESCRIPTION. Soil type/rock, grain size, structure, colour, minor components	Texture group	Samples	Moisture	Consistency	Plasticity	VOC (ppm)
0.5		FILL, SAND, brownish yellow	SP	VOC	M	F	VL	0.0
1.0		FILL, SILTY SAND, brown	SM	VOC	M	F	L	0.0
1.5		SANDY CLAY, strong brown	CI		M	St	M	
2.0		CLAYEY SAND, yellowish brown with gravel	SC	VOC	M	St	M	0.0
2.5								
3.0		Weathered siltstone, dark yellowish brown		VOC				0.0
3.5		End of hole						
4.0								
Slope/nature of surface: 1% N Ground water: Nil Soil salinity: Nil			Remarks (fill, odour, root holes): Fill to 1000mm. No hydrocarbon odour.					

Samples	Moisture	Consistency	Plasticity
E – Environmental D – Disturbed U – Undisturbed VOC- volatile organic compounds (ppm)	D – Dry M – Moist, can be moulded W – Wet, free water on hands Wp – plastic limit Wl – liquid limit	Hand penetrometers (kPa) or description: VS – very soft , exudes between fingers S – soft, moulded by light finger pressure F – firm, moulded slightly by fingers St – stiff, can't be moulded by fingers, indented by thumb VSt – very stiff, indented with difficulty by thumb	NP – Non plastic T – Trace VL – Very low L – Low M – Medium H – High VH – Very high

Envirowest Consulting Pty Ltd, 24 William St Orange, NSW

Appendix 4. ALS environmental laboratory report ES1301090 and chain of custody form

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES1301090	Page	: 1 of 4
Client	: ENVIROWEST CONSULTING	Laboratory	: Environmental Division Sydney
Contact	: MS LEAH DESBOROUGH	Contact	: Client Services
Address	: PO BOX 9158 ORANGE NSW, AUSTRALIA 2800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: leah@envirowest.net.au	E-mail	: sydney@alsglobal.com
Telephone	: +61 63614954	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 63603960	Facsimile	: +61-2-8784 8500
Project	: 12568	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: 12568		
C-O-C number	: 12568	Date Samples Received	: 17-JAN-2013
Sampler	: LD	Issue Date	: 23-JAN-2013
Site	: 12568		
Quote number	: SY/448/12	No. of samples received	: 2
		No. of samples analysed	: 2

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

Accredited for compliance with
ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Phalak Inthaksone	Laboratory Manager - Organics	Sydney Inorganics
Phalak Inthaksone	Laboratory Manager - Organics	Sydney Organics
Phalak Inthaksone	Laboratory Manager - Organics	Sydney Organics



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting



Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Client sample ID

				2-3000	3-3000	----	----	----
Client sampling date / time				15-JAN-2013 15:00	15-JAN-2013 15:00	----	----	----
Compound	CAS Number	LOR	Unit	ES1301090-001	ES1301090-002	----	----	----
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	5.9	4.1	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	----	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	----	----	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg	<1	<1	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	88.5	95.0	----	----	----
Toluene-D8	2037-26-5	0.1	%	88.2	91.6	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	82.0	84.4	----	----	----



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	72.8	133.2
Toluene-D8	2037-26-5	73.9	132.1
4-Bromofluorobenzene	460-00-4	71.6	130.0

Environmental Division

QUALITY CONTROL REPORT

Work Order	: ES1301090	Page	: 1 of 7
Client	: ENVIROWEST CONSULTING	Laboratory	: Environmental Division Sydney
Contact	: MS LEAH DESBOROUGH	Contact	: Client Services
Address	: PO BOX 9158 ORANGE NSW, AUSTRALIA 2800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: leah@envirowest.net.au	E-mail	: sydney@alsglobal.com
Telephone	: +61 63614954	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 63603960	Facsimile	: +61-2-8784 8500
Project	: 12568	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: 12568	Date Samples Received	: 17-JAN-2013
C-O-C number	: 12568	Issue Date	: 23-JAN-2013
Sampler	: LD	No. of samples received	: 2
Order number	: 12568	No. of samples analysed	: 2
Quote number	: SY/448/12		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits



NATA Accredited Laboratory 825

Accredited for compliance with
ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Phalak Inthaksone	Laboratory Manager - Organics	Sydney Inorganics
Phalak Inthaksone	Laboratory Manager - Organics	Sydney Organics
Phalak Inthaksone	Laboratory Manager - Organics	Sydney Organics



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
 CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 RPD = Relative Percentage Difference
 # = Indicates failed QC



Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result between 10 and 20 times LOR:- 0% - 50%; Result > 20 times LOR:- 0% - 20%.

Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EA055: Moisture Content (QC Lot: 2693769)									
ES1301089-003	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	6.5	6.3	4.1	No Limit
ES1301166-002	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	13.3	13.4	0.0	0% - 50%
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2690642)									
ES1300975-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES1301090-002	3-3000	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2691222)									
ES1300824-002	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	1260	1090	14.4	0% - 20%
		EP071: C29 - C36 Fraction	----	100	mg/kg	1320	1100	17.4	0% - 20%
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES1300975-010	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2690642)									
ES1300975-001	Anonymous	EP080: C6 - C10 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES1301090-002	3-3000	EP080: C6 - C10 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2691222)									
ES1300824-002	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	2220	1880	16.7	0% - 20%
		EP071: >C34 - C40 Fraction	----	100	mg/kg	660	580	13.0	0% - 20%
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES1300975-010	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080: BTEXN (QC Lot: 2690642)									
ES1300975-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES1301090-002	3-3000	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEXN (QC Lot: 2690642) - continued									
ES1301090-002	3-3000	EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit



Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			LCS	Low
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2690642)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	118	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2691222)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	200 mg/kg	101	59	131
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	300 mg/kg	107	74	138
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	200 mg/kg	115	63	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2690642)								
EP080: C6 - C10 Fraction	----	10	mg/kg	<10	31 mg/kg	106	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2691222)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	250 mg/kg	103	59	131
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	350 mg/kg	116	74	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----
		50	mg/kg	----	150 mg/kg	106	63	131
EP080: BTEXN (QCLot: 2690642)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	88.4	62	120
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	100	62	128
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	97.5	58	118
EP080: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	2 mg/kg	98.0	60	120
	106-42-3							
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	102	60	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	74.7	62	138

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery (%) MS	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number			Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2690642)							
ES1300975-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	102	70	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2691222)							
ES1300824-002	Anonymous	EP071: C10 - C14 Fraction	----	640 mg/kg	103	73	137
		EP071: C15 - C28 Fraction	----	3140 mg/kg	114	53	131
		EP071: C29 - C36 Fraction	----	2860 mg/kg	111	52	132

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Sub-Matrix: SOIL				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number		MS	MSD	Low	High	Value	Control Lim
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2690642)										
ES1300975-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	102	----	70	130	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2690642)										
ES1300975-001	Anonymous	EP080: C6 - C10 Fraction	----	37.5 mg/kg	89.8	----	70	130	----	----
EP080: BTEXN (QCLot: 2690642)										
ES1300975-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	76.1	----	70	130	----	----
		EP080: Toluene	108-88-3	2.5 mg/kg	85.9	----	70	130	----	----
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	85.2	----	70	130	----	----
		EP080: meta- & para-Xylene	108-38-3	2.5 mg/kg	85.5	----	70	130	----	----
			106-42-3							
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	88.8	----	70	130	----	----
		EP080: Naphthalene	91-20-3	2.5 mg/kg	70.2	----	70	130	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2691222)										
ES1300824-002	Anonymous	EP071: C10 - C14 Fraction	----	640 mg/kg	103	----	73	137	----	----
		EP071: C15 - C28 Fraction	----	3140 mg/kg	114	----	53	131	----	----
		EP071: C29 - C36 Fraction	----	2860 mg/kg	111	----	52	132	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2691222)										



Sub-Matrix: SOIL

Sub-Matrix: SOIL				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2691222) - continued										
ES1300824-002	Anonymous	EP071: >C10 - C16 Fraction	----	850 mg/kg	122	----	73	137	----	----
		EP071: >C16 - C34 Fraction	----	4800 mg/kg	107	----	53	131	----	----
		EP071: >C34 - C40 Fraction	----	2400 mg/kg	63.7	----	52	132	----	----

Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: ES1301090	Page	: 1 of 5
Client	: ENVIROWEST CONSULTING	Laboratory	: Environmental Division Sydney
Contact	: MS LEAH DESBOROUGH	Contact	: Client Services
Address	: PO BOX 9158 ORANGE NSW, AUSTRALIA 2800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: leah@envirowest.net.au	E-mail	: sydney@alsglobal.com
Telephone	: +61 63614954	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 63603960	Facsimile	: +61-2-8784 8500
Project	: 12568	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: 12568	Date Samples Received	: 17-JAN-2013
C-O-C number	: 12568	Issue Date	: 23-JAN-2013
Sampler	: LD	No. of samples received	: 2
Order number	: 12568	No. of samples analysed	: 2
Quote number	: SY/448/12		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers



Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, APHA, AS and NEPM (1999). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **SOIL**

Evaluation: * = Holding time breach ; ✓ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA055: Moisture Content								
Soil Glass Jar - Unpreserved (EA055-103) 2-3000, 3-3000	15-JAN-2013	----	----	----	21-JAN-2013	29-JAN-2013	✓	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
Soil Glass Jar - Unpreserved (EP071) 2-3000, 3-3000	15-JAN-2013	18-JAN-2013	29-JAN-2013	✓	21-JAN-2013	27-FEB-2013	✓	
EP080: BTEX								
Soil Glass Jar - Unpreserved (EP080) 2-3000, 3-3000	15-JAN-2013	18-JAN-2013	29-JAN-2013	✓	18-JAN-2013	29-JAN-2013	✓	
EP080: BTEXN								
Soil Glass Jar - Unpreserved (EP080) 2-3000, 3-3000	15-JAN-2013	18-JAN-2013	29-JAN-2013	✓	18-JAN-2013	29-JAN-2013	✓	
EP080/071: Total Petroleum Hydrocarbons								
Soil Glass Jar - Unpreserved (EP080) 2-3000, 3-3000	15-JAN-2013	18-JAN-2013	29-JAN-2013	✓	18-JAN-2013	29-JAN-2013	✓	



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: ✖ = Quality Control frequency not within specification ; ✔ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	2	14	14.3	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	13	15.4	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	11	18.2	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
TPH - Semivolatile Fraction	EP071	1	13	7.7	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
TPH - Semivolatile Fraction	EP071	1	13	7.7	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	11	9.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
TPH - Semivolatile Fraction	EP071	1	13	7.7	5.0	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	11	9.1	5.0	✓	ALS QCS3 requirement



Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

<i>Analytical Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2010 Draft) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
TPH - Semivolatile Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)
TPH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
<i>Preparation Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
Methanolic Extraction of Soils for Purge and Trap	* ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.



Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.
- For all matrices, no Laboratory Control outliers occur.
- For all matrices, no Matrix Spike outliers occur.

Regular Sample Surrogates

- For all regular sample matrices, no surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.

Sheet 1 of 1

Time:

Date 12/1/13 Time 09:00

Please return completed form to Envirowest Consulting. *A = 200mL solvent rinsed glass jar with Teflon lined lid, B = 2x40mL vials solvent rinsed Teflon lined septum caps, C 1x500mL glass bottles, solvent rinsed, Teflon lined cap, D= 200mL plastic bottle with nitric acid.

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

Telephone: +61-2-8784 8555

Appendix 5. Sampling log**Sampling log**

Client	Elise Harvey
Contact	-
Job number	12568
Location	140-142 Mayne Street, Gulgong NSW
Date	15 January 2013
Investigator(s)	Greg Madafiglio and Leah Desborough
Weather conditions	Fine

Sample id	Matrix	Time	Analysis required	Observations/comments
2-3000	Soil	-	TPH(C6-C36), BTEXN	Borehole 2 at 3m
3-3000	Soil	-	TPH(C6-C36), BTEXN	Borehole 3 at 3m

Appendix 6. PID calibration certificate

**CALIBRATION CERTIFICATE**Equipment DescriptionBrand: Rae
Type: Toxirae
Model: PGM-30

Item	Test	Pass	Fail	Comments
Battery	Type (NiCd, NiMH, Dry)	✓		NiCd
	Internal			
	Fuse/PCB			
	Charger/Ext power			
Switch/keypad	Operation	✓		
Display	Operation	✓		
Filters	Condition			
Pump	Motor	✓		
	Bearings			
	Flow	✓		
	Valves, Diaphragm			
PCB/Electronics	Condition			
Connectors	Condition	✓		
Sensors	PID	✓		10.6 eV
	Other			
Alarms	Beeper			
	Alarm code	✓		Standard
Software	Firmware version	✓		1.22
Other tests				

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specification:

Sensor	Date	Calibration gas and concentration	CF	CV	Certified	Gas bottle No.	Instrument reading	
							before	after
PID		Isobutylene 100ppm	1		Internal	79	102	100

CF=conversion factor, C=compensated value; CV=CF*span gas

Calibrated by: G Madafiglio

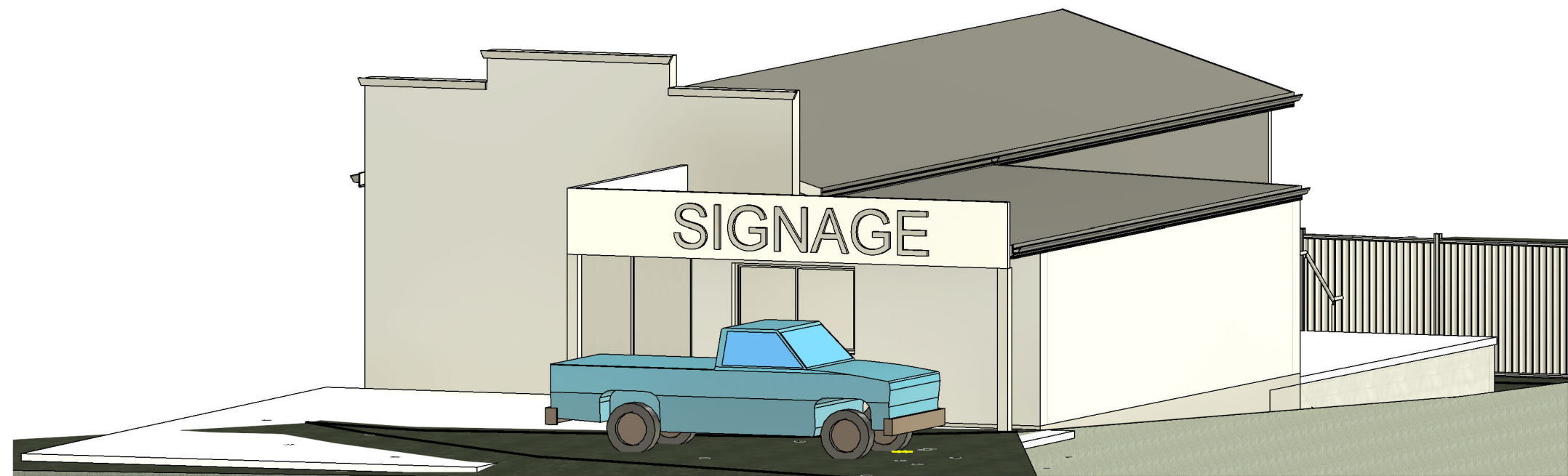
Signed:

Date: 20.7.12

Next Calibration due on: 20.1.13

APPENDIX C

Development Plans



CHANGE OF USE

140 MAYNE STREET
GULGONG NSW 2852

LOCALITY PLAN.



mayne street, gulgonglot 2, dp 1261038

DRAWING SCHEDULE.

A1	COVER SHEET	REV F	DATED 19.12.2024
A2	EXISTING SITE PLAN	REV F	DATED 19.12.2024
A3	PROPOSED SITE PLAN	REV F	DATED 19.12.2024
A4	EXISTING FLOOR PLAN	REV F	DATED 19.12.2024
A5	DEMO FLOOR PLAN	REV F	DATED 19.12.2024
A6	PROPOSED FLOOR PLAN	REV F	DATED 19.12.2024
A7	ELEVATIONS 1	REV F	DATED 19.12.2024
A8	ELEVATIONS 2	REV F	DATED 19.12.2024

PROJECT DESCRIPTION.

For the purpose of the Building Code of Australia, Vol. 1, 2022, the development may be described as follows:

- classification - NCC 'part A6'**
The building has been classified as a 'Class 5' building - office
- rise in stories - NCC 'part C2D3'**
The building has a rise in stories of one.
- effective height - NCC 'schedule 1 definitions'**
The building has an effective height of zero, ie less than 25.0m.
- type of construction required - NCC 'part A6, part C2D2 - table C2D2'**
Class 5 building - Type 'C' construction. The building has been deemed 'conditioned' excluding the toilets & airlocks.
- climate zone - NCC 'schedule 1 definitions'**
The building is located within climate zone 6.

GENERAL NOTES.

In addition to the National Construction Code series, Building Code of Australia Vol. 1, 2022, the Plumbing Code of Australia, 2022 & the building regulations applicable to the state of New South Wales, the following applicable Australian Standards & codes of practice are to be adhered to through the documentation & construction works;

- AS1668 – Mechanical ventilation & air conditioning in Buildings
- AS3000 – Electrical installations; buildings, structures & premises (known as the saa wiring rules)
- AS1428.1 – General requirements for access – buildings
- AS2890.6 – Off-street parking; mandatory requirements
- AS1680.0 – Interior lighting - safe movement

These drawings shall be read in conjunction with all architectural & other consultants drawings & specifications & with such other written instructions as may be issued during the course of the contract. All discrepancies shall be referred to 'Barnson Pty Ltd' for a decision before proceeding with the work.

All dimensions are in millimetres unless stated otherwise & levels are expressed in metres. Figured dimensions are to be taken in preference to scaled dimensions unless otherwise stated. All dimensions are nominal, and those relevant to setting out & off-site work shall be verified by the contractor before construction & fabrication.

BARNSON PTY LTD

address Unit 4, 108-110 Market Street
Mudgee, NSW 2850
phone 1300 BARNSON (1300 227 676)
email generalenquiry@barnson.com.au
web barnson.com.au

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH GENERAL BUILDING DRAWINGS, SPECIFICATIONS & OTHER CONSULTANTS DRAWINGS APPLICABLE TO THIS PROJECT. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE. DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. REPORT DISCREPANCIES TO BARNSON PTY LTD. NO PART OF THIS DRAWING MAY BE REPRODUCED IN ANY WAY WITHOUT THE WRITTEN PERMISSION OF BARNSON PTY LTD.

Rev.	Date	Amendment
A	20.08.2024	CONCEPT PLANS FOR REVIEW
B	23.08.2024	ADD RECEPTION DESK + STORE. ADD VEHICLE PATHS
C	28.08.2024	MOVE ACCESS WC, ADD SKILLION ROOF, REMOVE AWNING ROOF, REVISE DOORS
D	10.09.2024	REVISE CARPORT ROOF, ACCESS WC
E	30.09.2024	FURTHER INFO ADDED
F	19.12.2024	REVISE MEETING ROOM AND FRONT FACADE

Project.
CHANGE OF USE

Site Address.
**140 MAYNE STREET
GULGONG NSW 2852**
Client.
Brodie McGann

Drawing Title.
EXISTING SITE PLAN

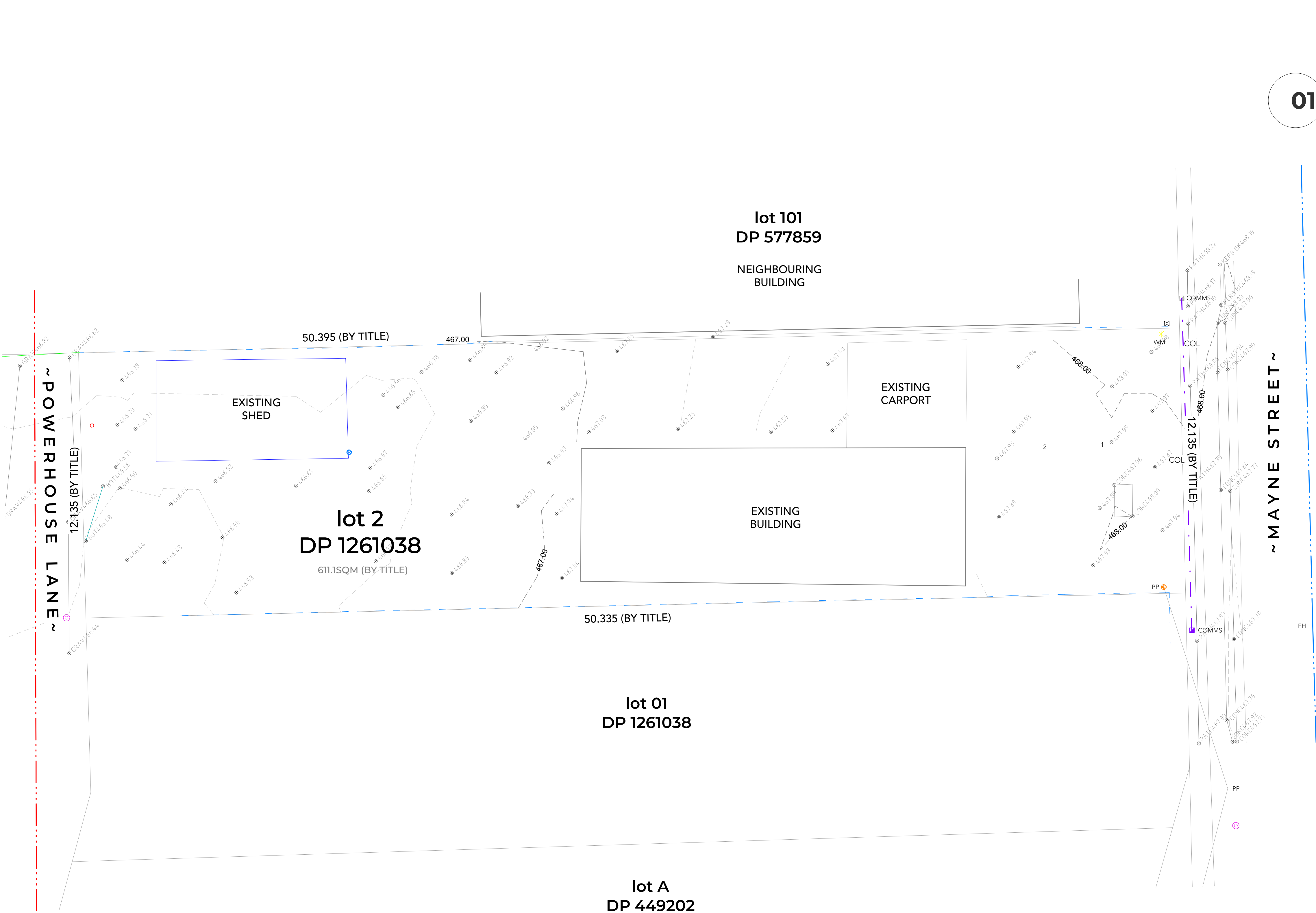
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Sheet. **02 of 08**
Project No. **45078**

Drawing No.

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**45078-
DA2**

ISSUE FOR DA



01 EXISTING SITE PLAN

Scale 1 : 100 @ A1



EXISTING SITE LEGEND.

	proposed boundary		existing vegetations
	existing boundary		existing fence line
	existing easement		underground stormwater
	existing major contours		underground sewer
	existing minor contours		underground telecommunications line
	existing buildings & structures		overhead electrical lines
	existing concrete paths		underground electrical lines
	existing driveways		underground water lines



02

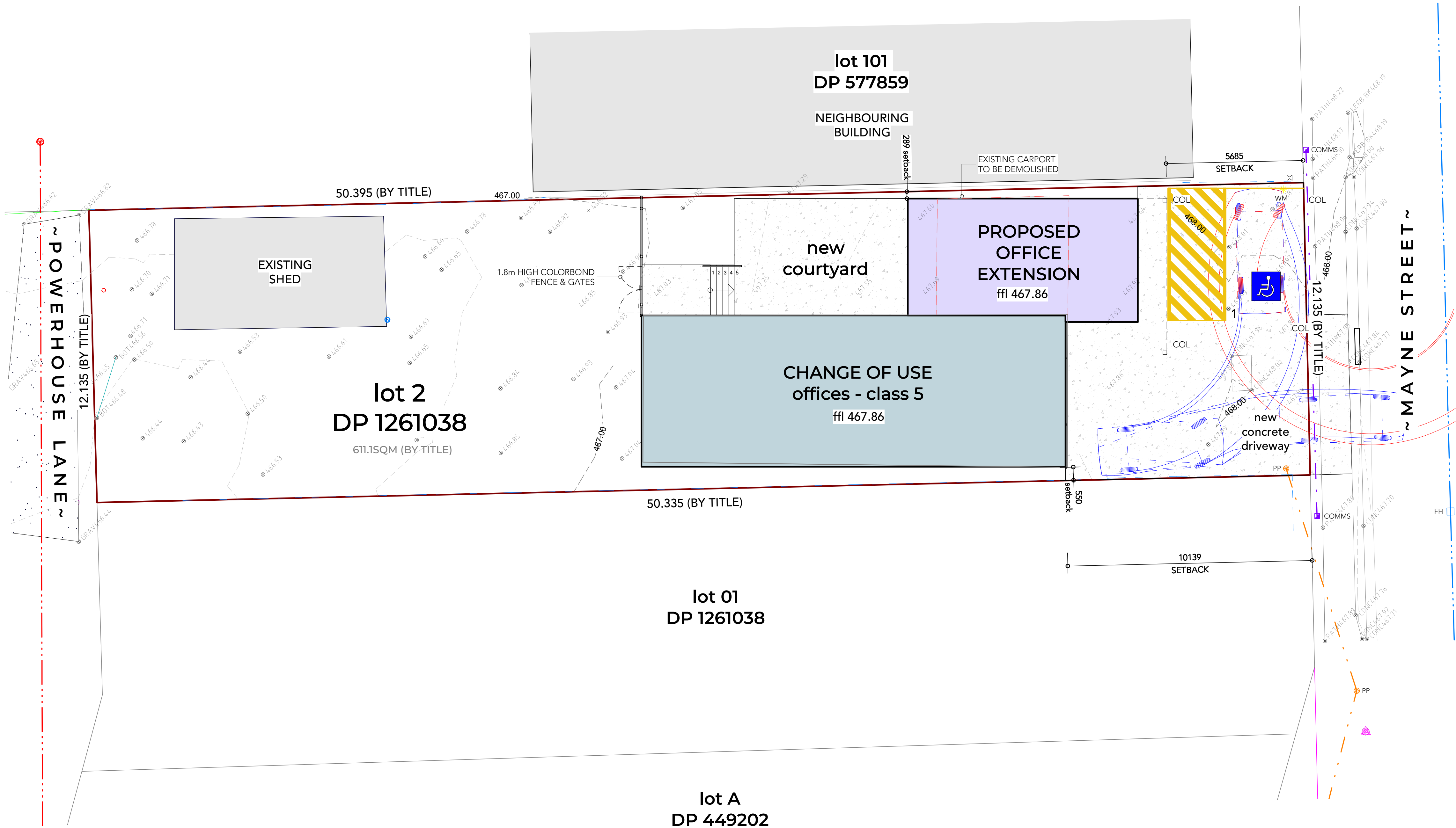
PROPOSED SITE PLAN

Scale 1 : 100 @ A1



EXISTING SITE LEGEND.

- | | | | |
|--|---------------------------------|--|-------------------------------------|
| | proposed boundary | | existing vegetations |
| | existing boundary | | existing fence line |
| | existing easement | | underground stormwater |
| | existing major contours | | underground sewer |
| | existing minor contours | | underground telecommunications line |
| | existing buildings & structures | | overhead electrical lines |
| | existing concrete paths | | underground electrical lines |
| | existing driveways | | underground water lines |



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F	19.12.2024	REVISE MEETING ROOM AND FRONT FACADE

Project.
CHANGE OF USE

Site Address.
140 MAYNE STREET
GULGONG NSW 2852
Client.
Brodie McGann

Drawing Title.
PROPOSED SITE PLAN

Scale. As indicated @ A1
Sheet. 03 of 08
Project No. 45078

Drawn.
Checked.
Revision.

LO
NS
F

Drawing No.

45078-
DA3

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Project.
CHANGE OF USE

Site Address.
**140 MAYNE STREET
GULGONG NSW 2852**
Client.
Brodie McGann

Drawing Title.
EXISTING FLOOR PLAN

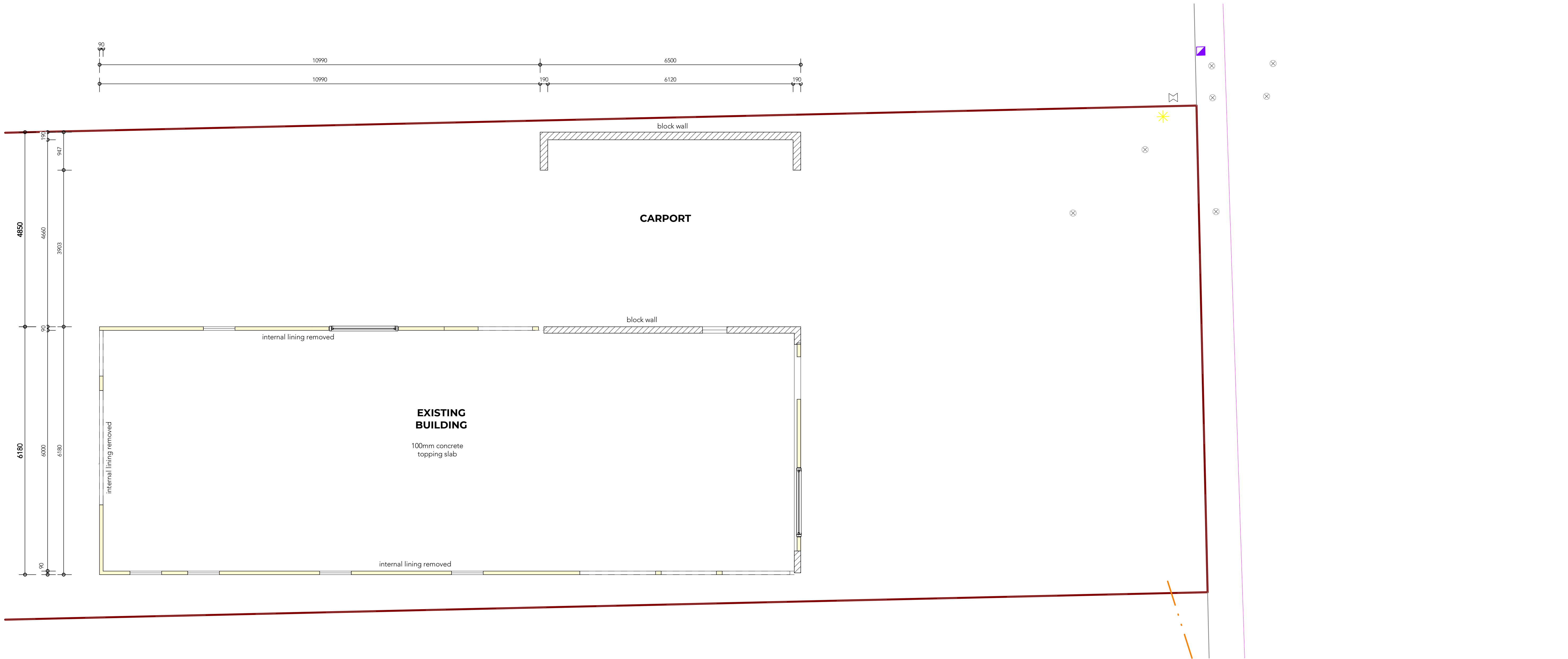
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Project No. **45078**

Drawing No.

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**45078-
DA4**

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F	19.12.2024	REVISE MEETING ROOM AND FRONT FACADE

Project.
CHANGE OF USE

Site Address.
**140 MAYNE STREET
GULGONG NSW 2852**
Client.
Brodie McGann

Drawing Title.
DEMO FLOOR PLAN

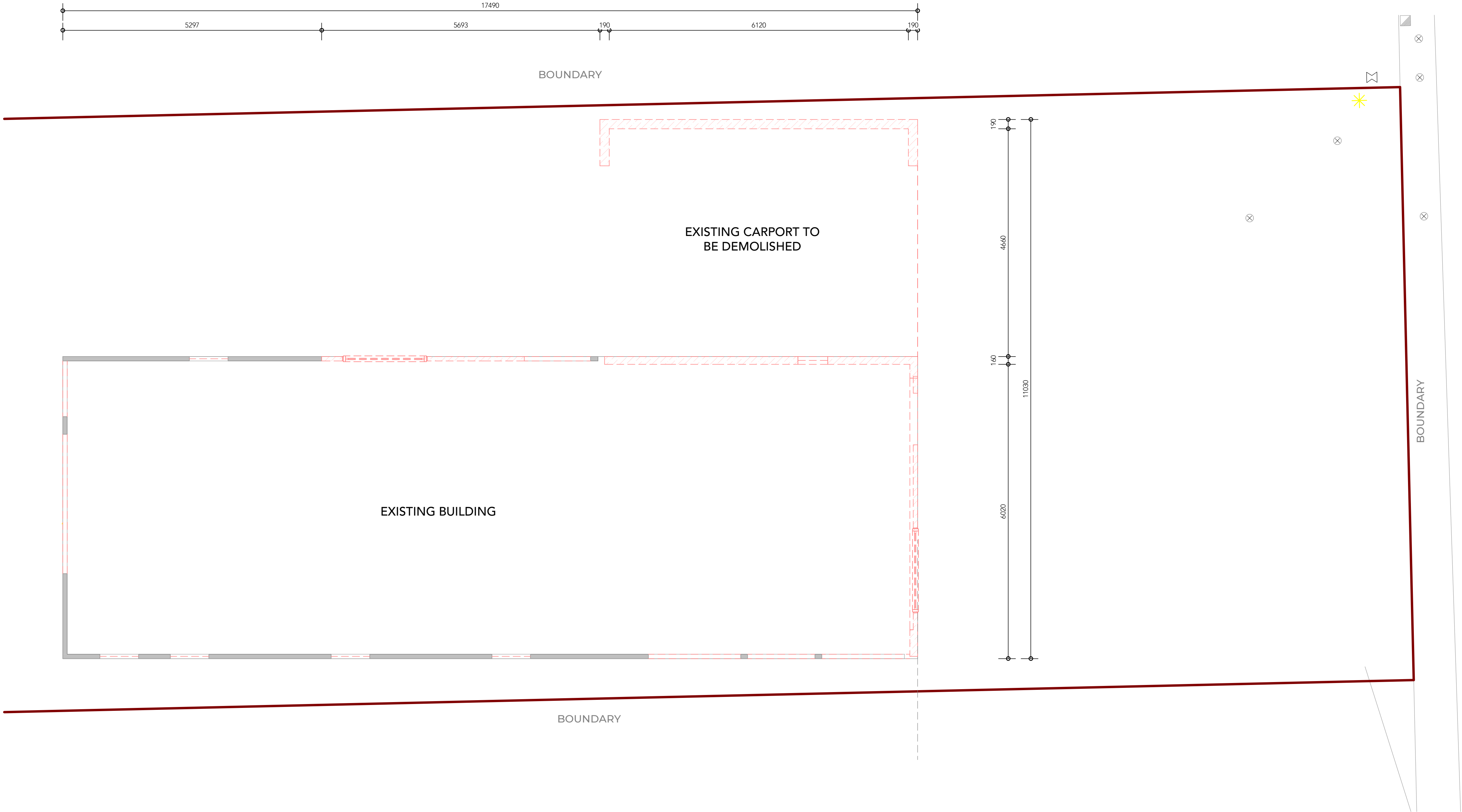
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Sheet. **05 of 08**
Project No. **45078**

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**45078-
DA5**

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04

DEMOLITION PLAN

Scale 1 : 50 @ A1



DEMOLITION LEGEND.

- denotes existing elements to be demolished, make good to existing surfaces
- denotes existing walls to be demolished, make good to existing surfaces
- denotes existing doors to be demolished, make good to existing surfaces
- denotes existing windows to be demolished, make good to existing surfaces

DEMOLITION NOTES.

The precautions & procedures to be taken before & during the demolitions works shall be in accordance with the building regulations applicable to the state of New South Wales & the following Australian standards & codes of practice.

- 'AS 2601-2001 - demolition of structures' & the following additional requirements:
- AS 2436 - 1981 guide to noise control
- O.H&S - code of practice for demolition-1991 no. 14
- O.H&S - asbestos regulations - 2003

The relevant statutory authorities shall be notified in advance & their approvals or services, if necessary shall be obtained.

Security fencing shall be provided around the perimeter of the demolition site & any additional precautionary measures taken, as my be necessary to prevent unauthorised entry to the site at all times during the demolition & construction period.

The erection of hoardings, outriggers & scaffolding shall be constructed in accordance with the requirements of the relevant authorities & the applicable Australian standards.

All electrical, gas, water, sewer & other service lines not required in the demolition process shall be shut off, capped or disconnected at or outside the building line, before the demolition works commences. Any service retained for demolition will be adequately protected.

All protection works to the adjoining properties (as required) will be in place before demolition works.

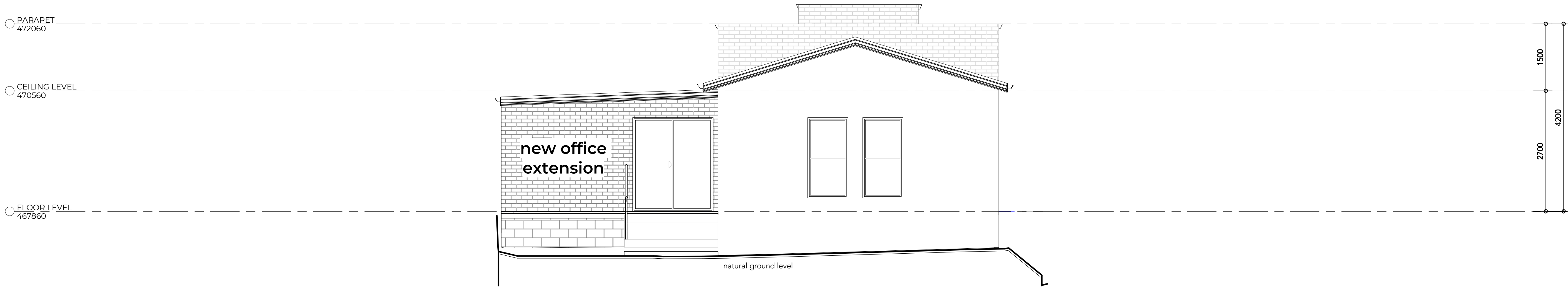
Demolition & removal of the building shall be undertaken in a careful & proper manner & with a minimum disturbance to the adjoining buildings & to the public & occupants.

All practible precautions shall be taken to avoid danger from collapse of a building when any part of a framed member is removed.

No wall, chimney or other structure shall be left free standing & unattended without temporary bracing or supports in such a condition that it may collapse due to wind or vibration.

Procedures & method of demolition will be adequate to prevent injury to persons & avoid damage to neighbouring buildings.

No combustible material & rubbish will be left on site as to cause a fire hazard.

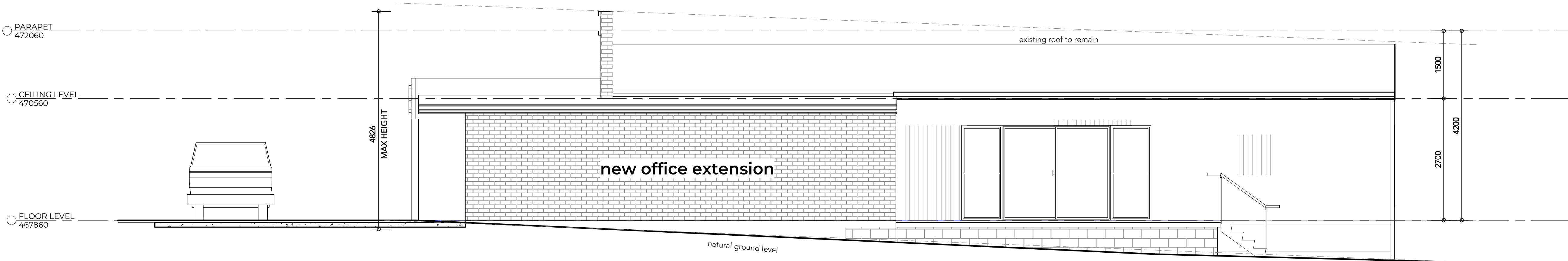


06

NORTH FACADE

Scale 1 : 50 @ A1

0 500 1000 2000 5000



07

EAST FACADE

Scale 1 : 50 @ A1

ISSUE FOR DA

BARNSON PTY LTD

address. Unit 1, 36 Darling Street
Dubbo NSW 2830
phone. 1300 BARNSON (1300 227 676)
email. generalenquiry@barnson.com.au
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Rev.	Date	Amendment
A	20.08.2024	CONCEPT PLANS FOR REVIEW
B	23.08.2024	ADD RECEPTION DESK + STORE. ADD VEHICLE PATHS
C	28.08.2024	MOVE ACCESS WC, ADD SKILLION ROOF, REMOVE AWNING ROOF, REVISE DOORS
D	10.09.2024	REVISE CARPORT ROOF, ACCESS WC
E	30.09.2024	FURTHER INFO ADDED
F	19.12.2024	REVISE MEETING ROOM AND FRONT FACADE

Project.
CHANGE OF USE

Site Address.
140 MAYNE STREET
GULGONG NSW 2852
Client.
Brodie McGann

Drawing Title.
ELEVATIONS 1

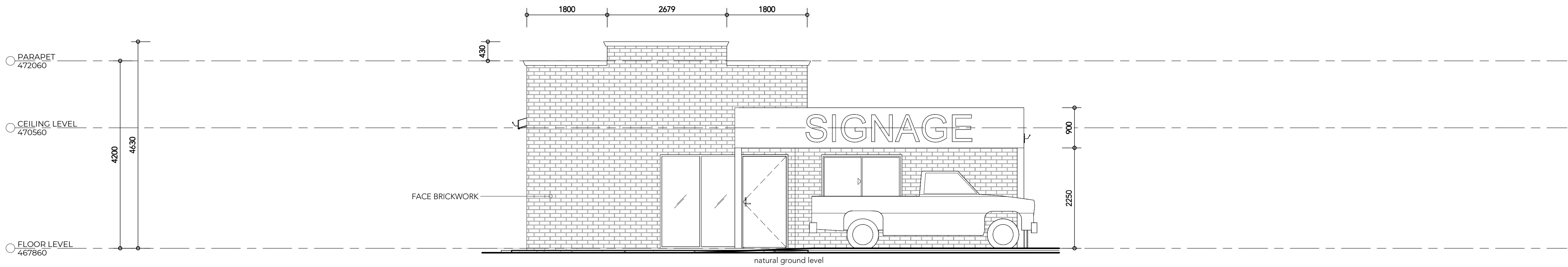
Scale. 1 : 50 @ A1
Sheet. 07 of 08
Project No. 45078

Drawn.
Checked.
Revision.

LO
NS
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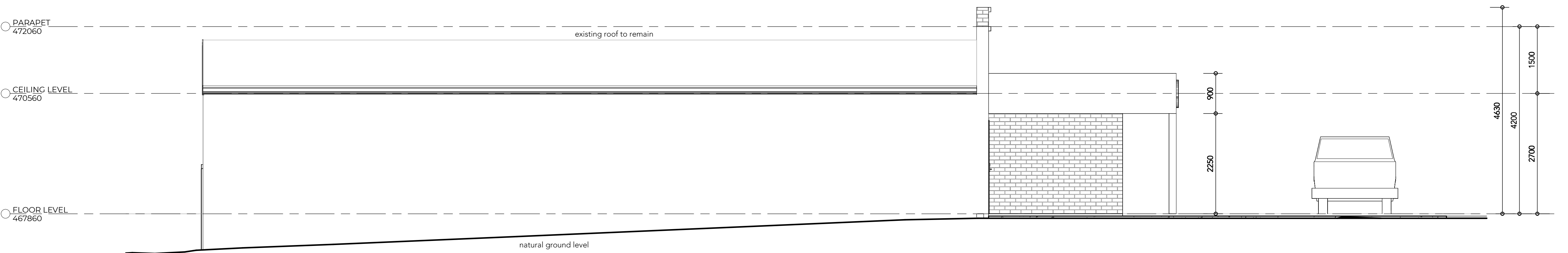
Drawing No.

45078-
DA7



08 SOUTH FACADE

Scale 1 : 50 @ A1



09 WEST FACADE

Scale 1 : 50 @ A1



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CHANGE OF USE

Site Address.
140 MAYNE STREET
GULGONG NSW 2852
Client.
Brodie McGann

ELEVATIONS 2

Scale. **1 : 50 @ A1**
Sheet. **08 of 08**
Project No. **45078**

Drawn.
Checked.
Revision.

LO
NS
F

Drawing No.

45078-DA8



APPENDIX D

Structural Letter

to.

Mudgee Builder
Att: Brodie McGann
40 Rouse Street
Gulgong NSW 2852

date.

25.07.2024

reference.

45078-SL01_A

Dear Brodie,

Re: Change of Use to Office Space – 140 Mayne Street, Gulgong NSW 2852
Structural Inspection

A request was made for Barnson to conduct an inspection of the existing structure at 140 Mayne Street, Gulgong. The purpose of this inspection was to assess the existing structure to determine its suitability to be renovated and occupied as a Class 5 building (office space). It was advised by the client that the building has previously been used as a mechanics workshop (Class 8 building). The inspection was carried out by the writer of this letter, Mr. Sam Rochester, an Engineer with Barnson Pty Ltd, on Wednesday 24th of July 2024.

The front section at the buildings South end is constructed using block walls, while the rear section (North) has hardwood timber framed walls that are steel clad. There is timber roof framing (trusses) throughout with steel roof sheeting. An open skillion section is located along the East side of the front section of the building. The timber roof framing of this section is supported over block walls. There is no floor slab within this skillion section.

The original slab of the main section of the building has deep edge beams to accommodate the natural ground slope which falls to the rear of the property. A new 100mm thick topping slab with a damp-proof membrane has been installed throughout the main section of the building. The timber frame tie-down has reportedly been improved with the installation of the topping slab. Bugle screws have reportedly been installed at 450mm centres to tie the bottom plate of the timber framing to the original slab. The studs have also been tied to the topping slab.

The client has advised that the following works will be undertaken as part of the renovations to convert the building into an office space.

- The existing block walls will be demolished and replaced with double-skin brick walls.
- The skillion on the East side of the building will be enclosed with double-skin brick walls on all sides and the timber roof framing is to be replaced.
- A new slab will be poured for the skillion section to be enclosed.
- The existing timber framing within the main section of the building will be retained, however damaged studs, trusses and other members will be repaired or replaced.
- The roof cladding and the battens providing direct support will be replaced.
- The timber framed walls will be externally clad with steel sheeting installed to manufacturer's specifications.
- The internal fit out is proposed to be completed with a raked ceiling.

Subject to the completion of the proposed demolition and renovations that the client has advised will be undertaken, the existing building is considered structurally adequate to be renovated and used as a Class 5 building. This assessment is provided with reference to the below Australian Standards.

1. Design Standards:

- a. AS/NZS 1170.0:2002 – Structural Design Actions, Part 0: General Principles
- b. AS/NZS 1170.1:2002 – Structural Design Actions, Part 1: Permanent, Imposed and Other Actions
- c. AS/NZS 1170.2:2021 – Structural Design Actions, Part 2: Wind Actions
- d. AS/NZS 1720.1:2010 – Timber Structures Part 1: Design Methods
- e. AS 3600:2018 – Concrete Structures
- f. AS 3700:2001 – Masonry Structures

If you have any further enquiries regarding this matter, please contact the undersigned.

Yours faithfully,

BARNSON PTY LTD

Luke Morris
BE ME FIEAust CPEng (Reg)
Director

Encl:

- *Site Photographs*

APPENDIX A

Site Photographs



Figure 1: South elevation, block walls to be replaced with double brick, timber framing to be removed



Figure 2: Skillion to be enclosed with double brick walls, existing wall and rafters to be replaced, new slab to be poured



Figure 3: Existing slab, with deep edge beams due to ground slope



Figure 4: New 100mm topping slab with plastic membrane installed over original slab



Figure 5: Damaged timber stud requiring repair as part of renovations



Figure 6: Hardwood wall framing generally in good condition



Figure 7: Hardwood wall framing generally in good condition



Figure 8: interior of South section, block walls to be replaced, roof framing to be supported on double brick walls



Figure 9: Existing timber roof framing, some damage noted with repairs to be provided as part of renovations



Figure 10: Wall to be enclosed with double brick



Figure 11: Block wall to be replaced with double brick



Figure 12: Existing timber roof framing generally in good condition, some repairs required



Figure 13: Existing timber roof framing generally in good condition, some repairs required, raked ceiling proposed



Figure 14: North elevation, cladding to be replaced

APPENDIX E

Statement of Heritage Impact

Proposed alterations and renovations

Change Of Use

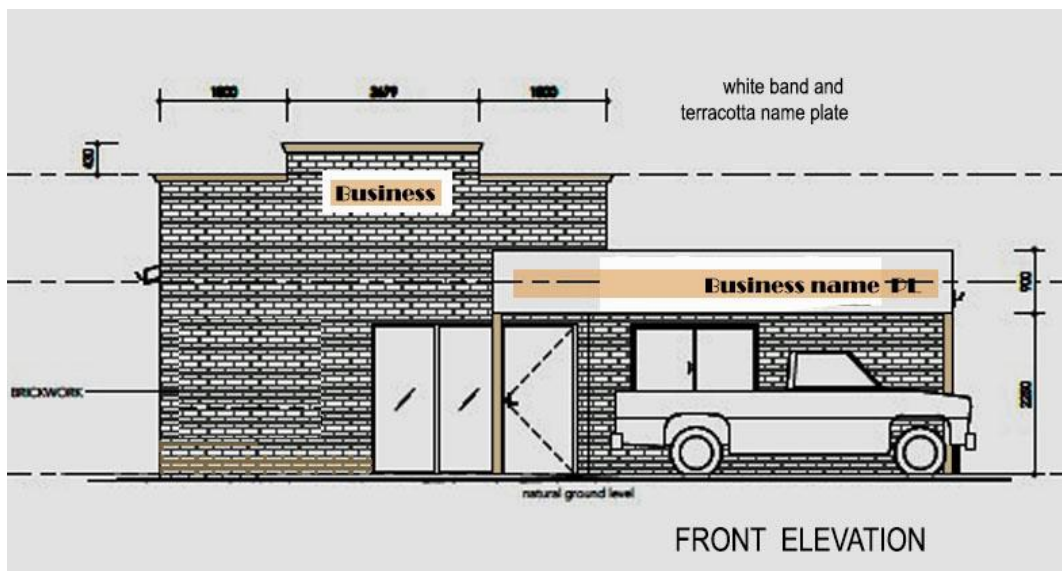
140 Mayne Street Gulgong

Statement of Heritage Impact



Figure 1 Front Elevation 19 November 2024

Figure 2 Proposed front elevation below. BH 19 December 2024



CLIENT: Brodie McGann

DATE: 19 December 2024

FINAL ISSUE

SUMMARY

- **THE PROPOSAL** is for alterations and repairs to a former commercial building located in the Gulgong Heritage Conservation area. The building is to be slightly extended towards the passing street, Mayne Street.
- **THE ADDRESS:** 140 Mayne Street Gulgong 2852
- **STATEMENT OF HERITAGE SIGNIFICANCE**
This is an unlisted building with no existing Statement of Significance. However, the commercial building was probably built circa late 1940-50 when, after the war, commercial activity was improving.
- **PREPARED BY:** Barbara Hickson architect and Heritage Adviser.
Bach. of Architecture (1st class hon.) Sydney University 1973
Architects Board Registration exam. 1974
Masters of Materials Conservation with Honours: (UWS) 1999
Postal: PO Box 610 Mudgee NSW 2850
Phone: 0409368133. Email: Barbara@hicksonarchitect.com.au
All recent photos by Barbara Hickson unless otherwise noted.
- **PREPARED FOR:** BUILDER Brodie McGann
- **DATE:** 12 December 2024
- **THE VISUAL** appearance has taken some of the characteristics of commercial buildings common in the vicinity and of a similar age with stepped parapet front wall, and a flat roof extension to the south of that. The design was assisted by local heritage adviser Barbara Hickson to provide suitable infill to the streetscape and to contribute positively to the continuity of the conservation area streetscape.
- **LOCATION PLAN**

Figure 3 Site plan. Site highlighted.



Contents

Statement of Heritage Impact	1
Location and Listings	4
Review existing information.....	4
Brief History	4
Physical description and evidence.....	5
Statement of significance	5
Items in the vicinity	6
The setting	6
Questions to be asked.	7
Summary	8



Figure 4 Typical Mayne Street parapets in Gulgong.

This statement of heritage impact is required because the development application applies to a building located within the Gulgong Heritage Conservation Area.

This 'Impact' report covers any effect that may alter the historic significance of the Gulgong Heritage Conservation Area or affect any heritage listed building in the vicinity. It can be a visual or physical effect. It can be a small effect or large. Having an 'impact' on a heritage place does not mean that such a proposal cannot proceed. The description of the impact will enable council staff to determine whether to approve such a development, and if the impact is acceptable.

This **Statement of Heritage Impact** (SOHI) is based on the revised Guidelines for preparing a Statement of Heritage Impact (SoHI) as updated by the NSW Dept of Planning and Environment on 19 June 2023.

Location and Listings

The residence at 159 Mayne Street is not a heritage listed item. It is located within the Gulgong Heritage Conservation Area. The closest heritage items in the vicinity are:

- Centennial Hotel on the north side corner of Medley and Mayne Streets
- Ten Dollar Town Motel on the south side corner of Medley and Mayne Streets

Review existing information.

The commercial building at 140 Mayne Street is not a listed heritage item and there is no information previously collated within heritage records. The present item was neutral to the streetscape because of its deep setback and medium scale. A step out is proposed to add interest and more positive connection to the streetscape.

Brief History

The first owner of the land was A Rodgers. He was in residence in Gulgong with his wife in the 1870s, where they had a son in 1872. He may have had a dwelling on the land but nothing further is known of him.

The site was taken up by Max Cross in the early 1900s.



Figure 5 Parish map showing original owners

Mr. Max Cross was a motor mechanic and later an aircraft mechanic. He was on this site from around the mid-1930s. His home was next door at 142 where he had a large rabbit fridge. He would take in rabbits caught by others to supply the local population. Max's father AJ Cross had the nickname of 'bunny' so presumably he had the original rabbit business. In 1915 about 30 rabbit trappers in Gulgong approached the government for a freezing wok as there were such quantities available.

Max also served as a mechanic in the Air force in WWII and was known as a leading Aircraftsman. His son Barry went into business with him and later opened his own garage and workshop in Medley Street near Fisher Street. Barry married Enid Baskerville in 1954.

Physical description and evidence

The existing building is a simple timber framed structure with gable ends and side skillion. It was clad in fibro.

Statement of significance

Apart from the association with Mr. Max Cross the building has no significance. It was neutral in the streetscape and unused for many of the past years.

Items in the vicinity

Two commercial buildings in the vicinity are heritage listed items. They are the Ten Dollar Town Motel and the Centennial Hotel. Their statements of significance are as follows:

Ten Dollar Town Motel Item I 308. 130 Mayne Street Gulgong.

Statement of Significance

A fine brick single storey hotel building constructed in 1902-4 for Joshua J Davis, with the main elevation addressing Mayne and Medley Streets. Designed by architect Harold Hardwick and constructed in local red bricks the building was later to become famous as the Ten Dollar Motel with its appearance on the \$10 note when currency became decimal in the 1960s.

The building addresses the corner of Medley and Mayne with a fine tall embellished pediment that includes the initials of the owner, JJD and date 1904, in relief. This dominates the corner. A low parapet continues along the elevation which has a full width bull nosed iron verandah supported on timber posts. Posts are decorated with stopped chamfers and incised grooves. The main corner doors are panelled and glazed with pseudo ashlar block columns each side. Other doors are similarly panelled below with glazing above and fanlight over. Windows are usually in pairs, slender double hung timber windows with ornate sills.

Centennial Hotel Item I 295 145 Mayne Street Gulgong

Statement of Significance

The Centennial hotel building is a significant landmark building on a prominent street corner in the conservation area of Gulgong and is believed to date the c. 1890s. Formerly Rossiter's Gulgong Hotel it became the Centennial Hotel by 1898 under Mr John Naughton. Other operators and licensees included Jacob Parkins, J McManus, Joe Langtry and EJA Gibbons in the 1950s. In 1954 was sold to Eric Taylor.

At some period, c. 1960s the verandah was removed and replaced with a metal framed awning. In c. 2015-16 the verandah was reinstated improving its streetscape appeal and recovering aesthetic significance.

The original section of the hotel is a single storied face brick building with elaborate rendered window surrounds and sills. Windows are generally timber framed and double hung. An extension to the hotel along Mayne Street appears to date from the 1930s and is Art Deco in appearance having sloping 'Egyptian style' window and door frames, and double hung timber windows. The external walls of the addition are rendered and painted, and the parapet is low and generally plain. The Centennial makes an outstanding visual main street contribution.

AFFECT ON THE SIGNIFICANCE OF ITEMS IN THE VICINITY.

The proposed new work will have no affect on the significance of either of the above heritage items in the vicinity. It will not affect views to or from the items. The effect on the Conservation Area and Streetscape will be an improved one as the previous building was derelict. The new proposal will assisting in giving the streetscape continuity with an appropriate scaled infill building.

SOHI Questions to be asked.

1. Is the location of the proposed works area clearly identified?	Yes. A location map and address are included.
2. Is the significance of the affected item well understood?	Yes.
3. Is there enough information available about the proposed works to determine how they may impact the Conservation Area or any heritage item in the vicinity?	Yes. The proposed works will promote the ongoing use and maintenance of the place. The work on the building, which is not a listed heritage item, will not affect the heritage items in its vicinity. As an infill it will be an improvement to the streetscape.
4. Do the proposed works affect the setting of the adjacent heritage items, including views and vistas to and from the heritage item and/or a cultural landscape in which it is sited?	Vistas to and from the heritage items in the vicinity will not be affected.
5. Do the proposed works include removal of unsympathetic alterations and additions	N/A

Works adjacent to a listed heritage item, within the Conservation Area

6. Will the proposed works affect the heritage significance of the adjacent heritage items or the heritage conservation area?	No
7. Will the proposed works affect views to, and from, the adjacent heritage items?	No
8. Will the proposed works impact on the integrity or the streetscape of the heritage conservation area?	No

Change of use

9. Does the former use contribute to the significance of the heritage item? Why is the change of use proposed	The former use is of historic interest. The building has been out of use for many years and a new use is needed.
--	---

10. Will the change of use have an impact on the significance.	No
11. Will the change of use require changes to the fabric.	The walls must be replaced as the old lining was deteriorated 'fibro'.

Alterations and addition to the unlisted building

12. Are the proposed alterations/additions sympathetic to the heritage item?	Yes. The works proposed are to restore and extend the existing building with the additions to allow for a more contributory building in the heritage Streetscape.
13. New external finishes will replace the former.	The cladding was fibro sheet. The proposal is to replace this cladding a brick external lining typical of many small commercial buildings in Gulgong. Small detailed signage to enhance the façade. Additional windows added to increase visual interest.
14. Will re-cladding affect conservation of the heritage item	No. However the face brickwork and signage will be more appropriate. Face brick, mid tones, is a common material on Mayne Street.
15 Has specialist advice from a heritage consultant, architect been sought	Yes. A heritage adviser has been involved in all aspects of the work.

Summary

The building at 140 Mayne Street is not a listed heritage item. The owners are preparing to renovate the building to improve its contribution to the streetscape and enable the building to be suitable now and for many years into the future.

The commercial building is set back deeply on the block of land, making it quite neutral to the streetscape. The proposed work will have only a minimal effect on the streetscape but will enable the building to contribute to the streetscape and provide more continuity in the building form, which will be a much-improved view. The views to and from the neighbouring heritage listed items in Mayne Street, Gulgong, will not be affected.

The building will be extended slightly towards Mayne Street with new cladding externally. The intention being to return the building to an earlier style suitable aesthetic. Modern services will also be added. Signage will be suited to the façade and enhance the detail. See proposed elevation page 1.