



PLANNING AND DEVELOPMENT COMMITTEE

AGENDA

2 APRIL 2024

Notice is hereby given, in accordance with the provisions of the Local Government Act 1993 that a **PLANNING AND DEVELOPMENT COMMITTEE MEETING of ORANGE CITY COUNCIL** will be held in the **COUNCIL CHAMBER, CIVIC CENTRE, BYNG STREET, ORANGE** on **Tuesday, 2 April 2024**.

David Waddell
CHIEF EXECUTIVE OFFICER

For apologies please contact Administration on 6393 8106.

AGENDA

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1 INTRODUCTION

1.1 DECLARATION OF PECUNIARY INTERESTS, SIGNIFICANT NON-PECUNIARY INTERESTS AND LESS THAN SIGNIFICANT NON-PECUNIARY INTERESTS

The provisions of Chapter 14 of the Local Government Act, 1993 (the Act) regulate the way in which Councillors and designated staff of Council conduct themselves to ensure that there is no conflict between their private interests and their public role.

The Act prescribes that where a member of Council (or a Committee of Council) has a direct or indirect financial (pecuniary) interest in a matter to be considered at a meeting of the Council (or Committee), that interest must be disclosed as soon as practicable after the start of the meeting and the reasons given for declaring such interest.

As members are aware, the provisions of the Local Government Act restrict any member who has declared a pecuniary interest in any matter from participating in the discussion or voting on that matter, and requires that member to vacate the Chamber.

Council's Code of Conduct provides that if members have a non-pecuniary conflict of interest, the nature of the conflict must be disclosed. The Code of Conduct also provides for a number of ways in which a member may manage non pecuniary conflicts of interest.

RECOMMENDATION

It is recommended that Committee Members now disclose any conflicts of interest in matters under consideration by the Planning and Development Committee at this meeting.

2 GENERAL REPORTS

2.1 ITEMS APPROVED UNDER THE DELEGATED AUTHORITY OF COUNCIL

RECORD NUMBER: 2024/321

AUTHOR: Paul Johnston, Manager Development Assessments

EXECUTIVE SUMMARY

Following is a list of more significant development applications approved by the Chief Executive Officer under the delegated authority of Council. Not included in this list are residential scale development applications that have also been determined by staff under the delegated authority of Council (see last paragraph of this report for those figures).

LINK TO DELIVERY/OPERATIONAL PLAN

The recommendation in this report relates to the Delivery/Operational Plan Strategy “8.1. Plan for growth and development that balances liveability with valuing the local environment”.

FINANCIAL IMPLICATIONS

Nil

POLICY AND GOVERNANCE IMPLICATIONS

Nil

RECOMMENDATION

That Council resolves to acknowledge the information provided in the report by the Manager Development Assessments on Items Approved Under the Delegated Authority of Council.

FURTHER CONSIDERATIONS

Consideration has been given to the recommendation’s impact on Council’s service delivery; image and reputation; political; environmental; health and safety; employees; stakeholders and project management; and no further implications or risks have been identified.

Reference: DA 131/2021(2)

Determination Date: 10 March 2024

PR Number PR22661

Applicant/s: Orange Golf Club Limited

Owner/s: Orange Golf Club Limited

Location: Lots 161 and 162 DP 1281777 - Woodward Street and 23 Rowan Street, Orange

Proposal: Modification of development consent - recreation facility (outdoor) and registered club (alterations and additions). The modification application sought to increase the water closet (WC) size towards the northern western corner of the golf course and to provide an ambulant toilet.

Value: N/A

2.1 Items Approved Under the Delegated Authority of Council

Reference: DA 31/2023(1) **Determination Date:** 14 March 2024
PR Number PR612
Applicant/s: Orange Uniting Church
Owner/s: Uniting Church In Australia
Location: Lot 1 DP 996128 - 215-221 Anson Street, Orange
Proposal: Place of public worship (alterations - access path, steps and landing)
Value: \$70,000

Reference: DA 37/2023(3) **Determination Date:** 18 March 2024
PR Number PR1358
Applicant/s: Mr P G Williams
Owner/s: Mr JA and Mrs MH Schiller
Location: Lot 20 DP 16787 - 3 Benview Avenue, Orange
Proposal: Modification of development consent - demolition (dwelling, outbuilding and tree removal), new dwelling, attached garage, swimming pool (inground) and pool fencing. The modified proposal involved minor alterations to dwelling detailing (openings and finishes) and perimeter fencing.
Value: N/A

Reference: DA 228/2023(2) **Determination Date:** 1 March 2024
PR Number PR29500
Applicant/s: Mr GC Norton
Owner/s: Mr GM Liza
Location: Lot 42 DP 1289567 - 17 Honeyman Drive, Orange
Proposal: Modification of development consent - subdivision (two lot Torrens title). The modification sought to modify the subdivision layout by relocating the battleaxe driveway to the eastern side of the allotment. In order to meet Council's maximum driveway gradient requirements, it was determined the driveway should run along the eastern side.
Value: N/A

Reference: DA 299/2023(1) **Determination Date:** 15 March 2024
PR Number PR10719
Applicant/s: Kammala Pty Ltd
Owner/s: Kammala Pty Ltd
Location: Lot 9 DP 548368 - 2 Sale Street, Orange
Proposal: Dwellings (semi-detached); carport; tree removal; and Strata title subdivision (15 lot residential)
Value: \$641,750

2.1 Items Approved Under the Delegated Authority of Council

Reference: DA 329/2023(1) **Determination Date:** 19 March 2024
PR Number PR11494
Applicant/s: Mr JA Granger
Owner/s: Mr JA and Mrs JJ Granger
Location: Lot 1 DP 743336 - 161-165 Summer Street, Orange
Proposal: Demolition (existing outbuildings), serviced apartments (change of use), alterations and additions to retail premises, business identification signage
Value: \$750,750

Reference: DA 386/2023(1) **Determination Date:** 14 March 2024
PR Number PR16084
Applicant/s: T Bassmann
Owner/s: E Smith
Location: Lot 22 DP 849087 - 111 Sampson Street, Orange
Proposal: Demolition (dwelling and garage), dwelling and attached garage
Value: \$585,000

TOTAL NET* VALUE OF DEVELOPMENTS APPROVED BY THE CEO UNDER DELEGATED AUTHORITY IN THIS PERIOD:	\$2,047,500.00
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** **Net** value relates to the value of modifications. If modifications are the same value as the original DA, then nil is added. If there is a plus/minus difference, this difference is added or taken out.*

Additionally, since the March 2024 meeting report period (20 February to 18 March 2024), another 12 development applications were determined under delegated authority by other Council staff with a combined value of \$1,972,206.

2.2 DEVELOPMENT APPLICATION DA 266/2023(1) - 5 CADOGAN CRESCENT

RECORD NUMBER: 2024/312

AUTHOR: Summer Commins, Senior Planner

EXECUTIVE SUMMARY

Application lodged	29 August 2023 Amended proposal submitted 9 January 2023
Applicant/s	Mr P G Williams
Owner/s	Mr D G and Mrs E R Nock
Land description	Lot 22 DP 587007 - 5 Cadogan Crescent, Orange
Proposed land use	Demolition (existing dwelling and shed), Dwelling House
Value of proposed development	\$1,200,000.00

Council's consent is sought to demolish an existing dwelling house and outbuildings at 5 Cadogan Crescent, Orange (see locality at Figure 1), and construct a replacement dwelling house.



Figure 1 - locality plan

The following notable planning matters are considered in this assessment report:

- The site is located within the Dalton Heritage Conservation Area (HCA). It is assessed that the existing dwelling is not a contributory item in the HCA. To this end, dwelling demolition will not adversely impact on the significance of the setting.
- The proposed dwelling house will be contemporary in design and detailing. There is contention as to the suitability of the replacement dwelling design in this particular streetscape. However, on balance, the proposed replacement dwelling is considered an acceptable infill dwelling for the streetscape. Contemporary styling will direct a design language and intent for future gentrification in the neighbourhood.

- The proposed replacement dwelling will largely satisfy development controls for residential landuse contained in DCP 2004 Part 7, despite some conflict with Planning Outcomes relating to Neighbourhood Character and Building Appearance.
- The proposed dwelling comprises a two-storey structure in a single-storey streetscape. The proposal will generally satisfy the **Visual Bulk** planning outcomes and guidelines contained in DCP 2004. Whilst not being required in order to achieve compliance with bulk and scale controls within the DCP, in terms of character of the neighbourhood, the building scale could be minimised further by reducing the upper level void space. This is a matter for Council's consideration but is not part of the recommendation from staff.
- Additional privacy measures will be required to the upper level eastern openings and terrace in order to ensure privacy for opposing dwellings. Conditions are included.
- Consent is sought to remove a street tree at the site frontage. Conditional replacement planting of a mature and complementary specimen will be undertaken.
- The rear portion of the proposed dwelling will be constructed over Council's reticulated sewer main, and relocation of a man hole and sewer junction will be required. Council's Sewer Manager raised no objection, subject to Conditional construction in accordance with Councils' Build Over Sewer Policy.
- The proposed development is defined as "notified development" pursuant to Council's Community Participation Plan (CPP) 2019. The DA was notified in the prescribed manner on two occasions. A total of twelve submissions were received during the exhibition periods. Issues raised in the submissions relate to dwelling design, overshadowing, privacy and views.
- A mediation meeting was convened between the applicant and submitters at the proponent's request. Minor amendments to the development were conceded in response to the mediation, including increased side setbacks, window treatments for privacy and reduced building height.
- Essential Energy raised no objection to the proposed works nearby to exposed overhead electricity powerlines at the site frontage on Cadogan Crescent. Conditions are included.

As outlined in this report, the proposed development will reasonably satisfy applicable Local and State planning controls. Impacts of the development will be within acceptable limit, subject to mitigation conditions. There are no aspects of the development site that are unsuitable for the proposal. Approval is recommended.

Delegation to determine the application lies with the Planning and Development Committee as the proposed development is considered to have 'significant public interest.'

DECISION FRAMEWORK

Development in Orange is governed by two key documents Orange Local Environment Plan 2011 and Orange Development Control Plan 2004. In addition, the Infill Guidelines are used to guide development, particularly in the heritage conservation areas and around heritage items.

Orange Local Environment Plan 2011 - The provisions of the LEP must be considered by the Council in determining the application. LEPs govern the types of development that are permissible or prohibited in different parts of the City and also provide some assessment criteria in specific circumstances. Uses are either permissible or not. The objectives of each zoning and indeed the aims of the LEP itself are also to be considered and can be used to guide decision making around appropriateness of development.

Orange Development Control Plan 2004 - the DCP provides guidelines for development. In general it is a performance based document rather than prescriptive in nature. For each planning element there are often guidelines used. These guidelines indicate ways of achieving the planning outcomes. It is thus recognised that there may also be other solutions of merit. All design solutions are considered on merit by planning and building staff. Applications should clearly demonstrate how the planning outcomes are being met where alternative design solutions are proposed. The DCP enables developers and architects to use design to achieve the planning outcomes in alternative ways.

DIRECTOR'S COMMENT

Council's consent is sought to demolish an existing dwelling house and outbuildings at 5 Cadogan Crescent, Orange and construct a replacement dwelling house. Key issues identified in the planning assessment relate to heritage, neighbourhood character, building appearance, bulk and scale and visual privacy.

The proposed dwelling house will be contemporary in design and detailing. There is the proposal has been assessed and is considered to be acceptable infill development given its compliance with the DCP and Council policy.

The DA initial design was notified to neighbours last year upon receipt of the application. 8 submissions were received objecting to the proposal. At the request of the applicant/owner, a mediation meeting was convened this year between the applicant and submitters. The proponent also met with neighbours outside of this meeting.

In response to a number of points raised by neighbours, some amendments to the original design were made including increased side setbacks, window treatments for privacy and reduced building height.

The amended plans were renotified to neighbours and 4 submissions were received. Issues raised in the submissions relate to dwelling design, overshadowing, privacy and views.

It is acknowledged that the proposal is a contemporary design in an established area. Just because the proposal is two storey, is not a reason to withhold support for the development. I also note that the overall height of the proposed new dwelling will only be 900mm higher than the ridge height of the neighbour. This design feature makes this hard to suggest that the building scale is excessive for the area.

The proposal has been designed to achieve overall compliance with the DCP. It is considered that the issues and concerns raised by neighbours have been adequately taken into account and the outcome is a reasonable infill development.

The staff recommendation of Approval is supported.

Delegation to determine the application lies with the Planning and Development Committee as the proposed development is considered to have 'significant public interest.'

LINK TO DELIVERY/OPERATIONAL PLAN

The recommendation in this report relates to the Delivery/Operational Plan Strategy “11.1. Ensure plans for growth and development are respectful of our heritage”.

FINANCIAL IMPLICATIONS

Nil

POLICY AND GOVERNANCE IMPLICATIONS

Nil

RECOMMENDATION

That Council consents to development application DA 266/2023(1) for *Demolition (existing dwelling and shed) and Dwelling House* at Lot 22 DP 587007 - 5 Cadogan Crescent, Orange, pursuant to the conditions of consent in the attached Notice of Approval.

FURTHER CONSIDERATIONS

Consideration has been given to the recommendation’s impact on Council’s service delivery; image and reputation; political; environmental; health and safety; employees; stakeholders and project management; and no further implications or risks have been identified.

SUPPORTING INFORMATION / THE PROPOSAL

The proposal involves demolition of existing improvements and construction of a replacement dwelling house, as follows:

Demolition

Existing improvements will be demolished comprising a single-storey brick and tile dwelling house (circa 1970), detached Colorbond shed, garden shed, hardstand paving and driveway. It is proposed to remove an existing Ash Tree from the footpath at the site frontage, and retain the Liquidambar tree in the front setback.

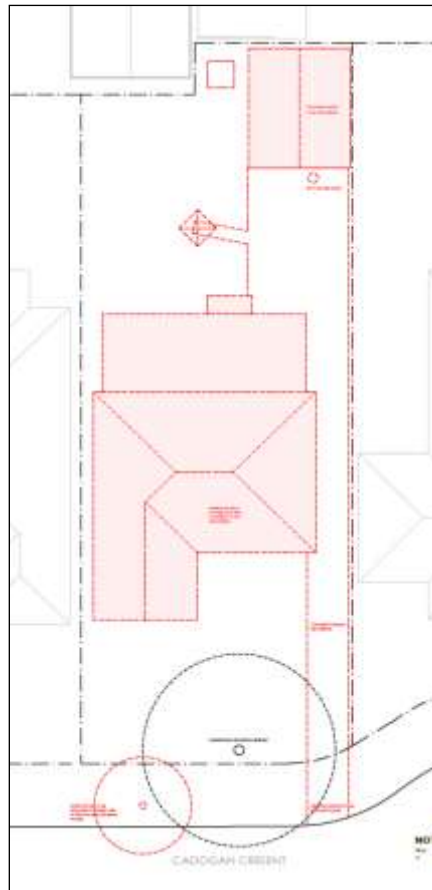


Figure 2 - proposed demolition plan



Figure 3 - existing dwelling house to be demolished



Figure 4 - existing street view

Replacement Dwelling House

A replacement dwelling house will be constructed on the vacant land.

The proposed dwelling will be a one and two-storey structure. Building height at the site frontage will be 3.3m to ground floor parapet and 5.85m to first floor parapet. The ground level will be set back from Cadogan Crescent by 8.6m, with the first floor to be set back 12.4m. The dwelling will have a footprint of 292m² and internal floor area of 374m² (including the garage). Dwelling massing will be generally T-shaped, with internal courtyard spaces.

Accommodation at ground level will include an attached double garage with workshop and store; open-plan kitchen / dining / living area; separate living area; and master suite with office. The upper level will contain three bedrooms, two bathrooms, expansive void and outdoor terrace. External finishes are noted as selected brickwork and roof sheeting.

The dwelling will be contemporary in design and detailing. Design elements will include:

- Rectangular upper and lower building forms, with flat-roof profile.
- Recessed upper level building form.
- Projecting double garage at the site frontage.
- Negligible fenestration to front façade.
- Horizontal parapet banding at first floor eave level, with landscape infill.
- Curved elements: parapet columns, front wall, arched detail to front façade upper level, upper level terrace wall
- Recessed front entrance and first floor opening.
- Recessed openings creating courtyard spaces / balcony.



Figure 5 - artist impression, proposed partial street view to Cadogan Crescent

New driveway access from Cadogan Crescent will be provided adjacent the western boundary, with closure of the existing eastern crossover and reinstatement of kerb and gutter.

The proposed site plan is depicted here (see Figure 6).

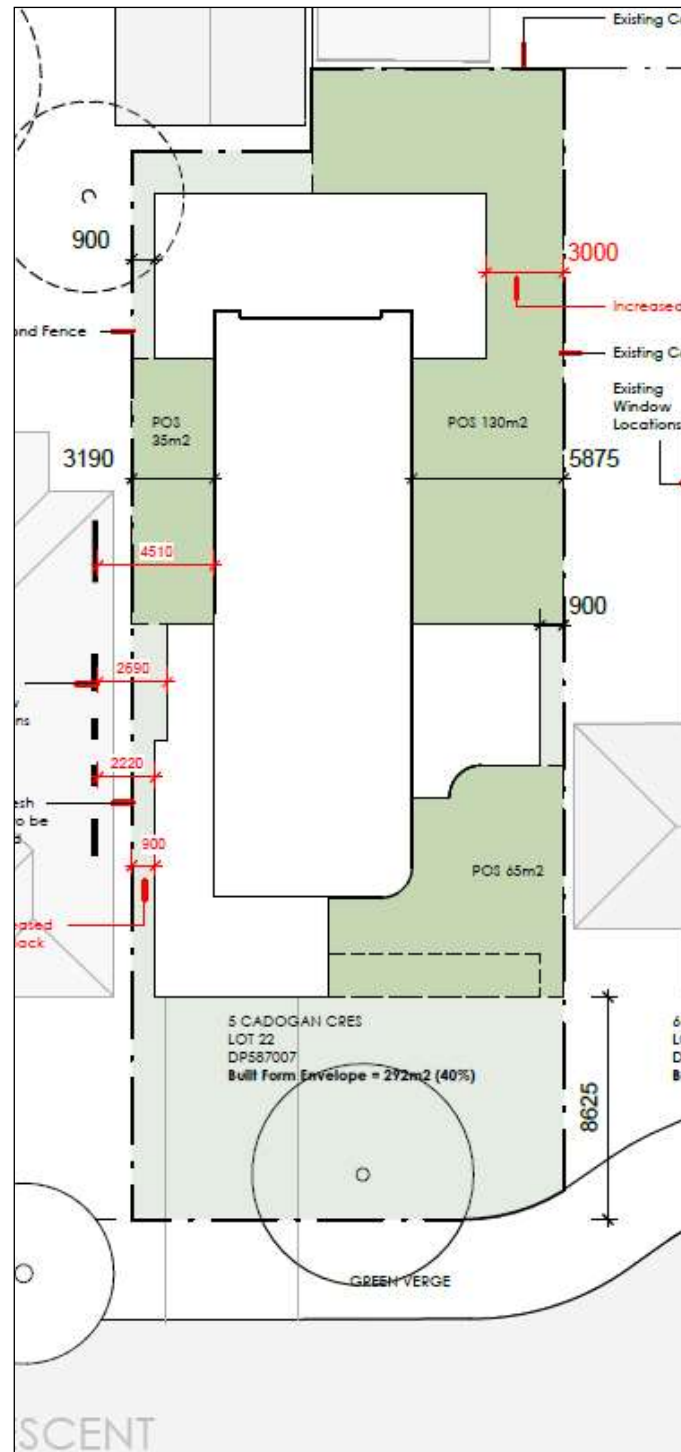


Figure 6 - proposed site plan

MATTERS FOR CONSIDERATION UNDER THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Section 1.7 Application of Part 7 of the *Biodiversity Conservation Act 2016* and Part 7A of the *Fisheries Management Act 1994*

In consideration of Section 1.7, the proposed development is not likely to significantly affect a threatened species:

- The development site is not identified on the Biodiversity Values Map published under the Biodiversity Conservation Regulation 2016. Furthermore, the site does not contain mapped high biodiversity sensitivity pursuant to the Orange LEP 2011 Terrestrial Biodiversity Map.
- The proposal does not involve removal of native vegetation. Clearing thresholds prescribed by regulation are not applicable.
- The site is contained within an established urban residential area and has been highly modified by the urban landuse pattern. The subject land does not contain known threatened species or ecological communities.

Based on the foregoing consideration, the proposal will not trigger the Biodiversity Offset Scheme under the Biodiversity Conservation Act 2016. The proposal will satisfy the relevant matters at Clause 1.7.

Section 4.15 Evaluation

Provisions of any environmental planning instrument S4.15(1)(A)(I)

Orange Local Environmental Plan 2011 (as amended)

Clause 1.2 Aims of Plan

The proposal relevantly relates to and will satisfy Aims (a), (b), (e) and (f), as outlined in this report:

- (a) to encourage development which complements and enhances the unique character of Orange as a major regional centre boasting a diverse economy and offering an attractive regional lifestyle,*
- (b) to provide for a range of development opportunities that contribute to the social, economic and environmental resources of Orange in a way that allows present and future generations to meet their needs by implementing the principles for ecologically sustainable development,*
- (e) to provide a range of housing choices in planned urban and rural locations to meet population growth,*
- (f) to recognise and manage valued environmental heritage, landscape and scenic features of Orange.*

Clause 1.6 Consent Authority

Council is the consent authority pursuant to Clause 1.6.

Clause 1.7 Mapping

The subject site is identified on the LEP maps in the following manner:

Land Zoning Map:	Land zoned R1 General Residential
Lot Size Map:	No minimum lot size
Heritage Map:	Within the Dalton Heritage Conservation Area
Height of Buildings Map:	No building height limit
Floor Space Ratio Map:	No floor space limit
Terrestrial Biodiversity Map:	No biodiversity sensitivity on the site
Groundwater Vulnerability Map:	Groundwater vulnerable

Drinking Water Catchment Map:	Not within the drinking water catchment
Watercourse Map:	Not within or affecting a defined watercourse
Urban Release Area Map:	Not within an urban release area
Obstacle Limitation Surface Map:	No restriction on building siting or construction
Additional Permitted Uses Map:	No additional permitted use applies

Those matters that are of relevance are addressed in detail in the body of this report.

Clause 1.9A Suspension of Covenants, Agreements and Instruments

The development site is not subject to a known covenant, agreement or similar instrument that would restrict the carrying out of the development pursuant to Clause 1.9A.

Clause 2.1 Land Use Zones

Demolition is permitted with consent pursuant to Clause 2.7 (see below).

Dwelling houses are permitted with consent in the R1 General Residential zone.

Clause 2.3 Zone Objectives and Land Use Table

The proposal will satisfy the relevant R1 zone objectives to provide for housing needs and a variety of housing types and densities.

Clause 2.7 Demolition Requires Development Consent

Consent is required and sought for demolition of the existing dwelling house, outbuildings and street tree in accordance with Clause 2.7.

Clause 4.3 Height of Buildings

The development site is not subject to a maximum building height on the Height of Buildings Map.

Clause 4.4 Floor Space Ratio

The development site is not subject to a prescribed floor space ratio on the Floor Space Ratio Map.

Clause 5.10 Heritage Conservation

The development site is located within the Dalton Heritage Conservation Area (HCA) and nearby to a number of heritage items (see Figure 7).

2.2 Development Application DA 266/2023(1) - 5 Cadogan Crescent

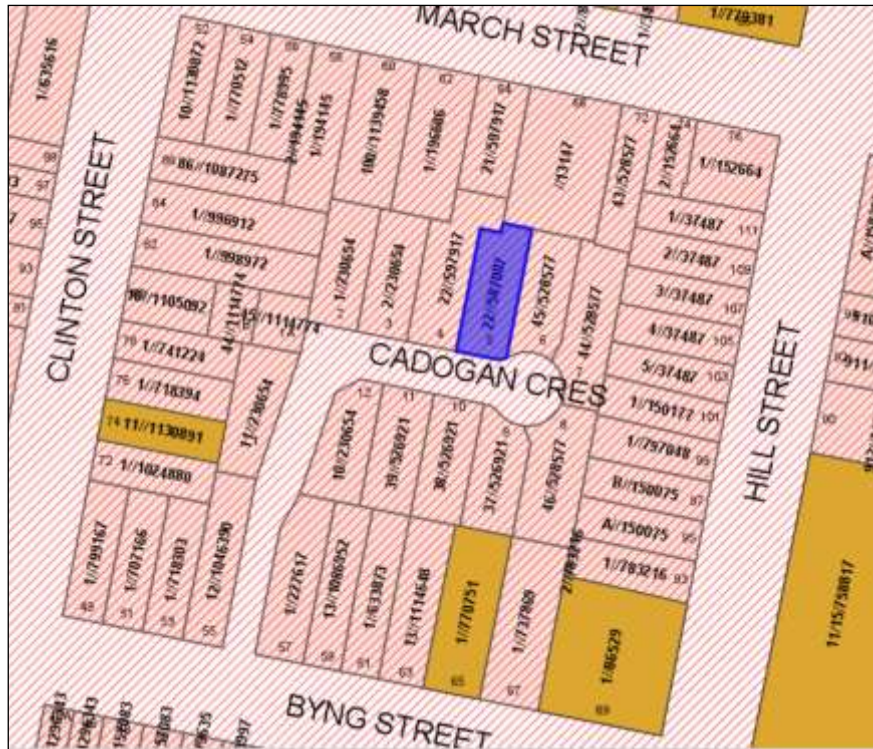


Figure 7 - Dalton HCA (red hatching) and heritage items (tan shading)

The OCC Heritage Conservation Area Review (May 2020) provides the following Statement of Significance for the Dalton HCA:

Statement of Significance

Historic: The Dalton Central HCA is the earliest part of the town with the oldest remaining buildings, some of which date back to the foundation of the town in the 1850s and 1860s. The “square mile” reflects the colonial surveyed town layout from 1846. It reflects the primary colonial government focus on law and order, commerce, education, government services and religious institutions, all of which have a prominent role in the HCA. The phases of development, the earliest streets and how they changed is a physical record of the town's history.

Associative: The Dalton Central HCA is named after one of the most prominent families in the development in Orange, and one that has shaped how the town developed. The Dalton Brothers establishment was the main reason the commercial district moved to Summer Street, and they were instrumental in developing the town into a substantial centre.

Aesthetic: The Dalton Central HCA has some of the most iconic buildings in Orange including the large public buildings like the court house and the post office; the large commercial buildings like the former Dalton Bros stores and the various hotels; the large churches like Holy Trinity and St Joseph's; and the prominent older schools like Orange Public. Beyond that the peculiar history of Orange has developed a town with a remarkable level of unity in the residential character of this central area. With the bulk of the housing from the turn of the century and interwar periods the built fabric of the town centre has a defined character that is noticeable. Add in the cold climate and wide Victorian regional streets lined with European deciduous species and the town has a unique feel to it.

Social: The Dalton Central HCA is the heart of the community and has very strong social significance to the local community and the wider regional areas

Research: The Dalton Central HCA has many layers of development and can provide a high level of research potential

Rarity: The Dalton Central HCA has a unique character unlike any other town centre in many ways. Its relatively narrow band of housing predominantly from the 1900-1930 period is unusual for a regional centre. Its elevation and climate has resulted in unique citywide plantings that were particularly suitable to early European settlers.

Representativeness: The Dalton Central HCA has many characteristics that are representative of planning styles for town layouts in the mid 19th C and can still demonstrate those principles. The building stock include good examples of architectural styles, with a particularly local character in housing styles. Orange shows the characteristics of a town that spent a significant period as a rail head.

Consent is required and sought for demolition works (dwelling house, outbuildings and street tree) and erecting a replacement dwelling in accordance with Clause 5.10(2)(a) and (e).

It is assessed that the proposed development will not have adverse impact on the significance of the heritage setting pursuant to Clause 5.10(4) as outlined in the following assessment.

Demolition

The existing dwelling is a Post-War style dwelling, constructed in the c1970s. A Post-War building is usually defined as a one built after World War II and prior to 1990. The dwelling retains the key design characteristic of Post-War dwellings including red brick walls, painted concrete roof tiles, L-shaped layout and double front. The landscaped curtilage to the dwelling is established and generous.

It is considered suitable to demolish the subject dwelling and ancillary rear outbuildings.

With reference to assessment criteria contained in *NSW Heritage Manual - Assessing Heritage Significance* (NSW Heritage Office, July 2001), the proposed dwelling is not of a level of significance to warrant retention:

- Criterion (a): The dwelling is not important in the course or pattern of Orange's history. The dwelling is not associated with a significant human activity or historical phase.
- Criterion (b): The dwelling is not associated with the life or works of a person/group of persons important to local history.
- Criterion (c): The dwelling does not demonstrate aesthetic characteristics or technical achievement. Dwelling design and detailing are typical of Post-War architecture, without defining features or landmark qualities. The dwelling is not the work of an important designer.
- Criterion (d): The dwelling is not associated with a particular community or cultural group important to local history.
- Criterion (e): The dwelling does not have potential to yield information that will contribute to an understanding of Orange's cultural history. The typical Post-War dwelling is ubiquitous in the HCA and City.
- Criterion (f): The dwelling does not possess uncommon, rare or endangered aspects of the City's history as they relate to customs, process or human activities.
- Criterion (g): The dwelling does not have representative value as a Post-War dwelling. The dwelling is a typical example of its type.

Based on the foregoing, the dwelling is considered to have 'Little' significance and does not fulfil criteria for listing or retention.

Council's Heritage Advisor (HA) supports demolition of the existing dwelling house, as the dwelling design departs traditional housing stock in the Dalton HCA. Residential neighbourhoods in the Dalton HCA are characterised by Federation, Arts & Crafts, Queen Anne and Interwar Bungalow styles. Nonetheless, Cadogan Crescent has an intact and consistent Post-War built character, and infill replacement should reference key aspects of that character.

Street Tree Removal (Demolition)

Council's Manager City Presentation supports removal of the Ash Tree on the footpath at the site frontage, subject to the planting of a replacement street tree on the footpath. Conditional replacement planting and additional site landscaping will be undertaken to reinstate and retain the established landscape character of the site and setting.

Replacement Dwelling

There is contention as to the suitability of the dwelling design in this particular streetscape:

- Council's Heritage Advisor considers that the replacement dwelling does not reasonably reference and interpret the built form in Cadogan Crescent. The projecting garage, flat roof profile, parapet detail, front façade fenestration and landscape design require revision.
- Council's Senior Urban Designer maintains the building design has dominant elements that are unique to this setting, including the projecting garage, 'colonnade' (formed by

parapet and rounded columns) and upper level. Nonetheless, the siting and materiality will provide for reasonable design in context.

- Council's Senior Strategic / Policy Planner supports the dwelling design and detailing. The proposed setbacks, landscape treatment and materiality will interpret the prevailing built form. The infill dwelling will establish a design language to inform future redevelopment in this setting.
- Public submissions received during the exhibition periods (see following sections of this report) maintain the building design and detailing will be contrary to the neighbourhood character.

The applicant was requested to reconsider the building design to reference key aspects of the Post-War streetscape. This request was declined, and design justification submitted in lieu. It is submitted that the proposed dwelling is '*a fine example of modern design*' (PWOA) within a Post-War neighbourhood. Furthermore, the proposed dwelling will be a suitable and interpretative infill in Cadogan Crescent, as paraphrased here and depicted below (see Figures):

- Existing ground levels will be maintained.
- The ground floor parapet will match the eave line for adjoining dwellings.
- The parapet will form a horizontal garden bed at first floor level. Landscaping will provide layering of building elements and reduce the garage prominence.
- The 'colonnade' will form a front setback courtyard and provide a stepped front façade, thereby reducing bulk and scale to the street.
- The ground level front setback will match the streetscape building line.
- The upper level will be set back to remove bulk and scale from the site frontage and allow interpretation as a single-storey structure.
- There are examples of two-storey dwelling nearby.
- External finishes will match adjoining dwellings.
- New plantings will complement the landscape character, and an existing mature tree will be retained.

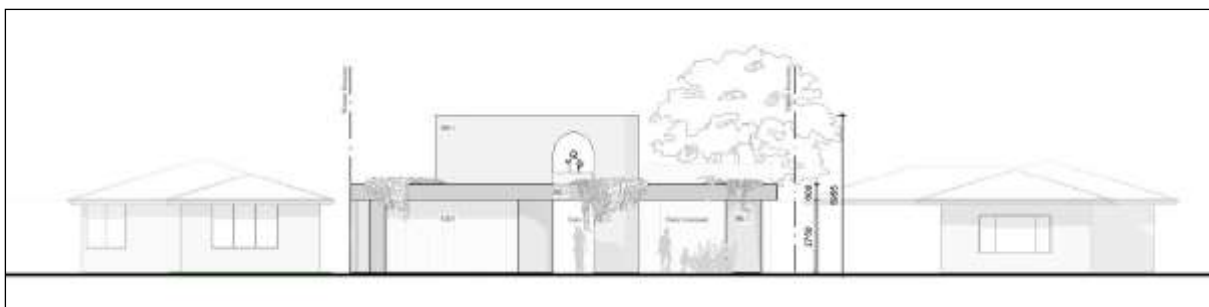


Figure 8 - streetscape context



Figure 9 - existing and proposed street view facing north



Figure 10 - existing and proposed street view facing north-west

Council's DCP 2004 Infill Guidelines and *Design in Context* (NSW Heritage Office, June 2005) contain design guidelines to inform suitable infill residential development, as considered below.

Character

The Cadogan Crescent neighbourhood character is defined by the following:

- Level landform and topography.
- Established and generous public and private landscaping.
- Common age, style and architectural typology of the dwellings.
- Intact and consistent Post-War architecture: brick and tile finishes, hip and gable roof profiles, double-front facades.
- Single-storey dwellings with low density massing and footprint.
- Active dwelling frontages- verandah treatment, entry doors, fenestration.
- Generous front setbacks and open frontages (no fencing)
- Single access points and unobtrusive parking accommodation.

The proposed dwelling will **complement** the established neighbourhood character as follows:

- The proposed dwelling will be constructed to existing natural ground levels.
- The landscape character will be maintained with tree retention, street tree replacement and new plantings at ground level and to the building form.
- An open frontage is proposed (no fencing).
- External finishes are noted as selected brickwork and roof sheeting. Conditions are included requiring submission of an interpretive colours and finishes schedule.
- The proposed front setback will complement the established streetscape building line.
- A new single crossover and driveway will be constructed adjacent the western boundary.

The proposed dwelling will **depart** the neighbourhood character as follows:

- The proposal will take a contemporary building design, albeit with some reference to the prevailing architectural forms in the street.
- The proposed dwelling will be partly two-storey in an entirely single-storey streetscape.
- The building design will incorporate a projecting double garage at the site frontage.
- There will be negligible fenestration to the front façade, and recessed front openings.

Scale

The proposed dwelling will be partly two-storey, and constructed to existing natural ground levels.

The dwelling will have a maximum height to upper level parapet of 5.85m at the site frontage. The top parapet will exceed the ridge height of adjoining dwellings by some 900mm (see Figure 11). This is assessed as a reasonable height variation between adjoining improvements to maintain visual continuity of scale in the streetscape. The upper level of

the proposed dwelling will be recessed from the lower level and site boundaries to minimise encroachment on the frontage and neighbours.

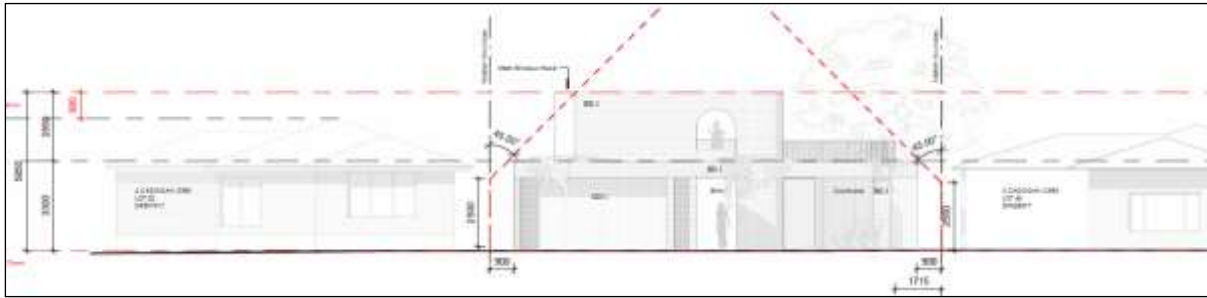


Figure 11 - streetscape dwelling heights

Form

The proposed dwelling will take rectangular upper and lower building forms, with a flat roof profile. The form and shape of the dwelling will differ from the prevailing Post-War architecture.

Siting

The front setback to Cadogan Crescent for the proposed dwelling will complement adjoining dwellings (see Figure 12). The proposed siting will reinforce the established streetscape building line. Proposed side boundary setbacks will not be disparate to the neighbourhood pattern of side setbacks.

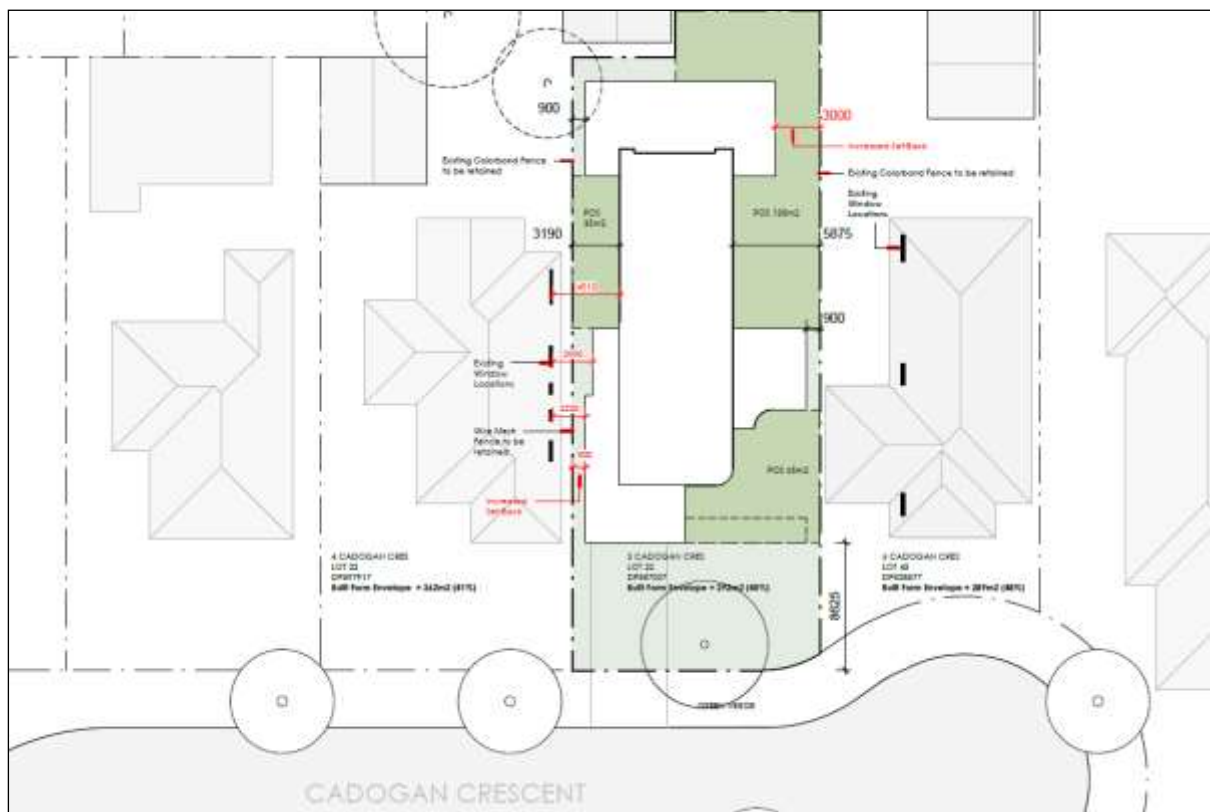


Figure 12 - streetscape setbacks

Materials and Colour

External colours and finishes will be interpretive and complementary, subject to Conditions.

Detailing

The proposed dwelling will incorporate contemporary detailing that is unique to this streetscape, including rectangular form, curved elements and minimal fenestration. Conversely, the absence of a front fence and Conditional landscaping to the front setback will complement adjoining parcels.

BASED ON THE FOREGOING ASSESSMENT, THE FOLLOWING IS CONCLUDED:

- Existing dwellings in Cadogan Crescent depart traditional housing stock in the Dalton HCA. Adjoining dwellings are in the Post-War style, while the HCA is generally characterised by Federation, Arts & Crafts, Queen Anne and Interwar Bungalow styles. To this end, there is opportunity for contemporary replacement infill which will not interrupt the broader HCA character.
- It is assessed that the proposed dwelling will partially comprise an interpretative infill. Street setback, Conditional materiality, parapet height, and landscaping will complement adjoining dwellings.
- Nonetheless, the proposed dwelling will also demonstrate elements that are unique to this setting including building height and shape, garage presentation and the arrangement of openings.
- As outlined above, the proposed dwelling will both complement and depart the neighbourhood character, and the assessment criteria contained in the Infill Guidelines.
- Cadogan Crescent was created in the 1960s with containing dwellings constructed in c.1965-1975. The streetscape has an intact and consistent Post-War character, with minor redevelopment and renovation since original dwelling construction. Streetscape gentrification is anticipated in the medium term. Redevelopment will not be constrained by traditional building forms in the Dalton HCA, as Cadogan Crescent is a separate and removed precinct. The proposed replacement dwelling may establish a design language to inform future development in the setting.
- Streetscape and public domain impacts associated with the building design will be within acceptable limit. Existing and new landscaping will provide integration and screening of the built form. The recessed upper level will be set back 12.4m from the front boundary, and will not visually encroach upon the frontage.
- As outlined in this report, the proposed dwelling will not unreasonably impact on residential amenity for adjoining dwellings.
- On balance, the proposed replacement dwelling is considered an acceptable infill dwelling for the streetscape, despite some discord with the prevailing Post-War built form. Interpretive elements will be suitable to provide reasonable integration. Contemporary styling will direct a design language and intent for future gentrification in the neighbourhood.

Clause 7.1 Earthworks

In consideration of the relevant matters at Clause 7.1:

- Conditional sediment and erosion controls will be installed and maintained during construction works.
- The proposed earthworks will facilitate residential development.
- The subject and adjoining lands are not known to be contaminated.
- The site is not known to have European or Indigenous cultural values. A Condition is included to protect and manage unexpected finds during construction works.
- The subject land is not within a drinking water catchment; nor identified as an environmentally sensitive area.

Clause 7.3 Stormwater Management

The proposal will not alter the existing stormwater drainage arrangements that service the subject land, pursuant to Clause 7.3.

Clause 7.6 Groundwater Vulnerability

There are no aspects of the proposal that will impact groundwater and related ecosystems.

Clause 7.11 Essential Services

The listed utility services at Clause 7.11 are available and suitable for the proposed development.

In relation to (c) *the disposal and management of sewer*, the northern portion of the proposed dwelling will be constructed over Council's reticulated sewer main (see Figure 13). This is acceptable subject to Conditional construction in accordance with Council's Build Over Sewer Policy. Relocation of the existing sewer man hole and sewer junction will also be required.

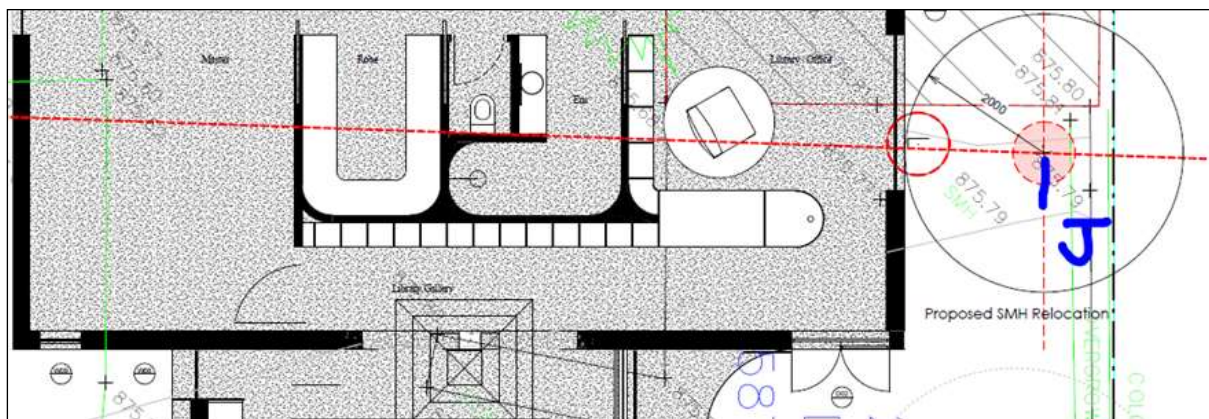


Figure 13 - construction over sewer and relocated manhole

In relation to (e) *suitable road access*, Conditions are included requiring proper closure of the existing eastern access, and Road Opening Permit and Certification for the proposed new western crossover and driveway. Council's Assistant Development Engineer raised no objection to the location of the new driveway.

STATE ENVIRONMENTAL PLANNING POLICIES

State Environmental Planning Policy Resilience and Hazards 2021

In consideration of Section 4.6, the potential for contamination of the site is considered low. The subject and adjoining lands are well-established for residential use. The site is not located within an investigation area, and the land is not known to have been used for a Table 1 contaminating landuse. Further contamination investigation as a precursor to potential site remediation is considered unnecessary for ongoing residential use.

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

The proposal comprises BASIX-affected development pursuant to Section 6. A compliant Single Dwelling BASIX Certificate was submitted in support of the proposal (Certificate No. 1397252S dated 8 June 2023).

State Environmental Planning Policy (Biodiversity and Conservation) 2021

It is proposed to remove an existing Ash Tree from the footpath at the site frontage (see below), in accordance with Section 2.6.



Figure 14 - street tree to be removed

DCP 2004 contains development controls relating to vegetation clearing in accordance with Section 2.9 (refer DCP Part 0 below). Council's Manager City Presentation supports removal of the tree, subject to Conditional replacement planting with a 100L-container sized specimen.

Provisions of any development control plan s4.15(1)(a)(iii)**Development Control Plan 2004****Part 0 Tree Preservation****PO-0.4-2 INTERIM PLANNING OUTCOMES - TREE PRESERVATION**

- 1 Trees prescribed by this DCP must not be ringbarked, cut down, topped, lopped or wilfully destroyed without the Council's approval and landowners consent
- 2 This clause applies to Eucalypts of any size belonging to the White Box, Yellow Box and Blakely's Red Gum Endangered Ecological Communities, including species indicated as affected in the tree preservation table.
- 3 This clause also applies to any tree, native or exotic, with a trunk diameter equal to or greater than 300mm at breast height (refer AS4970-2009 for measurement guidelines).
- 4 Notwithstanding IPO-4(3) this clause does not apply to species indicated as exempt in the tree preservation table.
- 5 An application for the Council's approval must be accompanied by an appropriately qualified specialist (i.e. Arborist) report outlining the following information
 - The location, size, species and condition (i.e. diseased, healthy, etc)
 - A statement that details any anticipated impacts on vegetation that may have derived from endangered ecological communities and/or that may be habitat for threatened species
 - The purpose of removal and whether the pruning of the tree would be a more practical and desirable alternative
 - Whether a replacement tree or trees should be planted
 - The location, size and species of any trees proposed to replace those intended for removal
 - The owners consent to the application being lodged
 - Any other relevant information regarding the tree to be removed (i.e. photographs)

The proposal involves removal of an Ash Tree from the footpath at the site frontage (refer Figure 15 above). The tree is covered by Tree Preservation Order under Part 0. Council's Manager City Presentation supports removal of the tree, subject to replacement planting.

Conditions are included requiring replacement planting of a mature and consistent specimen on the footpath; and protection of the Liquidambar tree in the front setback in accordance with *AS4970-2009 Protection of trees on development sites*.

Part 7 Development in Residential Zones**Neighbourhood Character****PO 7.7-1 PLANNING OUTCOMES - NEIGHBOURHOOD CHARACTER**

- 1 Site layout and building design enables the:
 - creation of attractive residential environments with clear character and identity;
 - use of site features such as views, aspect, existing vegetation and landmarks.
- 2 Buildings are designed to complement the relevant features and built form that are identified as part of the desired neighbourhood character.
- 3 The streetscape is designed to encourage pedestrian access and use.

The neighbourhood character of Cadogan Crescent is considered in a foregoing section of this report (refer *Orange LEP 2011 Clause 5.10*). As assessed, the proposed replacement dwelling is considered an acceptable infill dwelling for the streetscape, despite some discord with the prevailing Post-War built form. Interpretive elements will be suitable to provide reasonable integration.

Building Appearance

PO 7.7-2 PLANNING OUTCOMES – BUILDING APPEARANCE	
1	The building design, detailing and finishes relate to the desired neighbourhood character, complement the residential scale of the area and add visual interest to the street.
2	The frontage of buildings and their entries address the street.
3	Garages and car parks are sited and designed so that they do not dominate the street frontage.

The suitability of the design and detailing of the replacement dwelling is considered in a foregoing section of this report (refer *Orange LEP 2011 Clause 5.10*).

The proposed dwelling will have frontage to Cadogan Crescent, albeit a largely closed frontage. There will be negligible fenestration to the front façade, and recessed front openings at ground and upper levels. The site layout and building design will incorporate a “street-facing garden room or courtyard (PWAO)” (see Figures below). When utilised by residents, this will provide an active outdoor space connecting to the public domain; however, landscaping for privacy will further close the frontage. Façade-closing design mechanisms are not contemplated in DCP 2004.



Figure 15 - front façade and courtyard

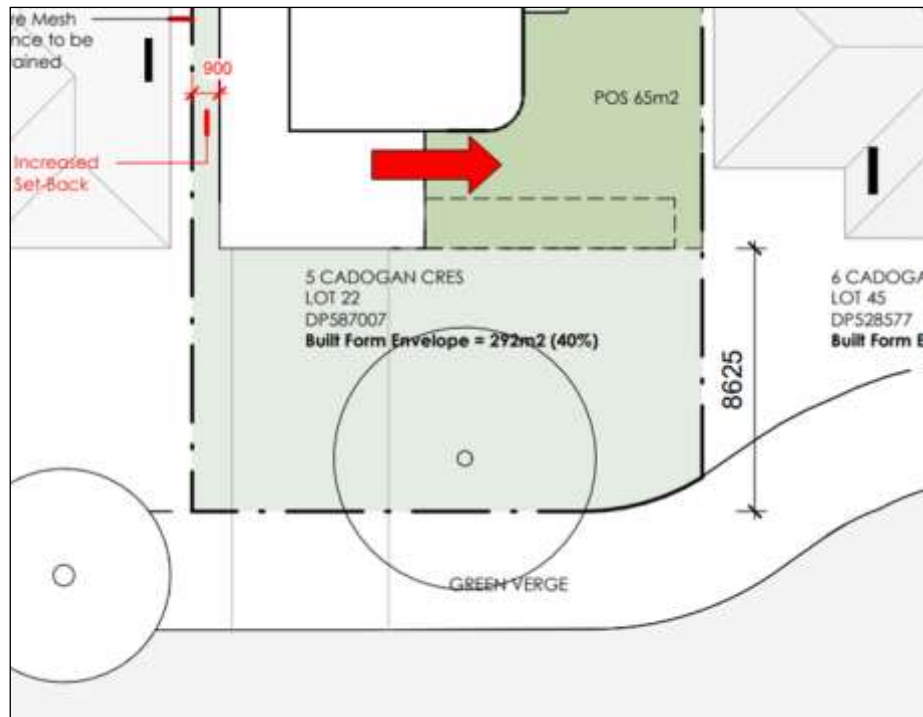


Figure 16 - courtyard

The proposed dwelling will incorporate a projecting double garage which presents as a leading element in the building design (refer Figure above). The proponent submits that the garage will have acceptable visual impacts as follows:

The horizontal garden bed, along with the garden room sits forward of the garage, softening its expression. The garage door will be clad in natural timber to be read as a simple timber façade rather than any typical Colorbond alternative... The garage is integrated as a façade element rather than a standalone or tacked on form.

The garage presentation will differ to unobtrusive parking accommodation for nearby dwellings. Nonetheless, the garage will be incorporated into the building design, and well-setback from the site frontage.

Setbacks

PO 7.7-4 PLANNING OUTCOMES – SETBACKS	
1	Street setbacks contribute to the desired neighbourhood character, assist with integration of new development and make efficient use of the site.
2	Street setbacks create an appropriate scale for the street considering all other streetscape components.

The proposed dwelling will have a front setback to Cadogan Crescent of 8.6m (lower level). The proposed front setback will complement and reinforce the prevailing residential street setback (see Figure 17). The dwelling siting will not disrupt the streetscape view corridor. The front setback will be landscaped and unfenced, consistent with frontages for adjoining dwellings.

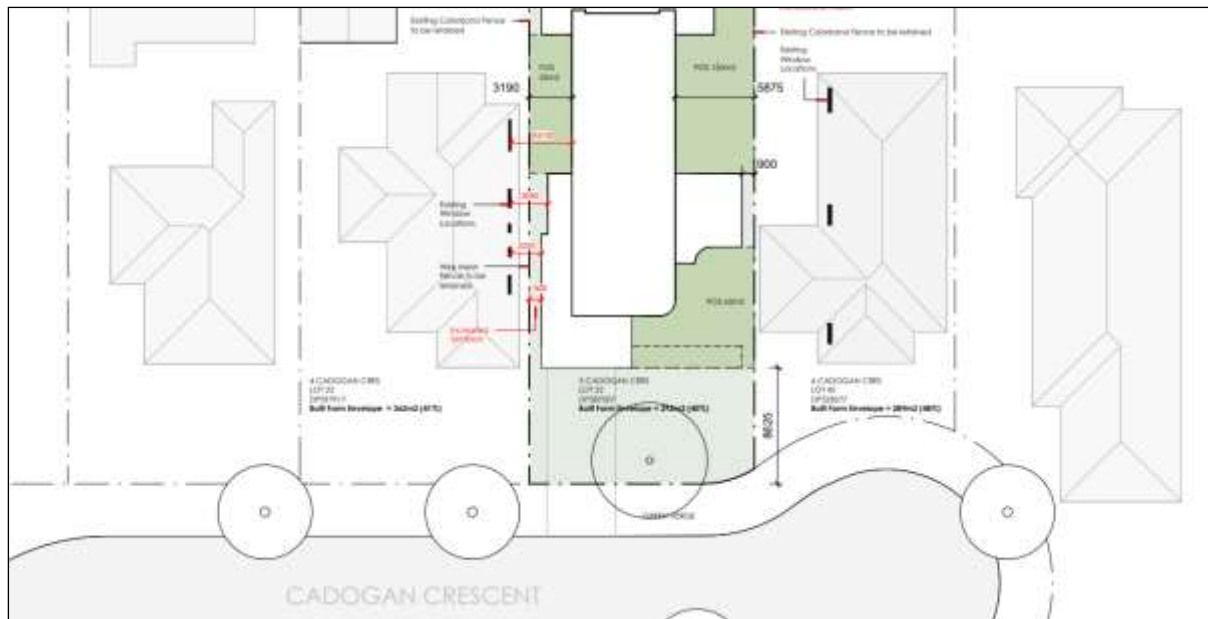


Figure 17 - front setback building line to Cadogan Crescent

Proposed side boundary setbacks will not be disparate to the neighbourhood pattern of side setbacks as demonstrated in the Figure above. A minimum setback of 900mm will apply to the garage on the western boundary opposing 4 Cadogan Crescent, and garden pavilion on the eastern boundary opposing 6 Cadogan Crescent. A minimum 900mm setback is typical for a dwelling house in an urban setting. The side dwelling facades will be stepped with varying setbacks.

Fences and Walls

PO 7.7-5 PLANNING OUTCOMES – FENCES AND WALLS	
1	Front fences and walls: <ul style="list-style-type: none"> - assist in highlighting entrances and creating a sense of identity within the streetscape. - are constructed of materials compatible with associated housing and with fences visible from the site that positively contribute to the streetscape - provide for facilities in the street frontage area such as mail boxes.

The proposal does not involve a front fence to Cadogan Crescent, consistent with open frontages in this setting. Existing Colorbond fencing to the side and rear boundaries will be retained.

Energy Efficiency

Council's *Energy Smart Homes Code* is deemed to form part of this DCP. The *Energy Smart Homes Code* endeavours to optimise naturally comfortable housing with reduced energy consumption. This approach maximises environmental benefits and minimises energy costs for residents.

A compliant Single Dwelling BASIX Certificate was submitted in support of the proposal. The proposed dwelling will satisfy Council's Energy Smart Homes Code.

Visual Bulk

PO 7.7-6 PLANNING OUTCOMES – VISUAL BULK

- 1 Built form accords with the desired neighbourhood character of the area with:
- side and rear setbacks progressively increased to reduce bulk and overshadowing;
 - site coverage that retains the relatively low-density, landscaped character of residential areas;
 - building form and siting that relates to land form, with minimal land shaping (cut and fill);
 - building height at the street frontage that maintains a comparable scale with the predominant adjacent development form;
 - building to the boundary where appropriate.

In consideration of the Planning Outcomes:

- Cross-fall over the development site is in the order of 0.5m (RL 876.15 - RL 875.630). A finished ground floor level of RL 876 is proposed. Finished levels are depicted below (see Figure 18). Negligible earthworks will be required.

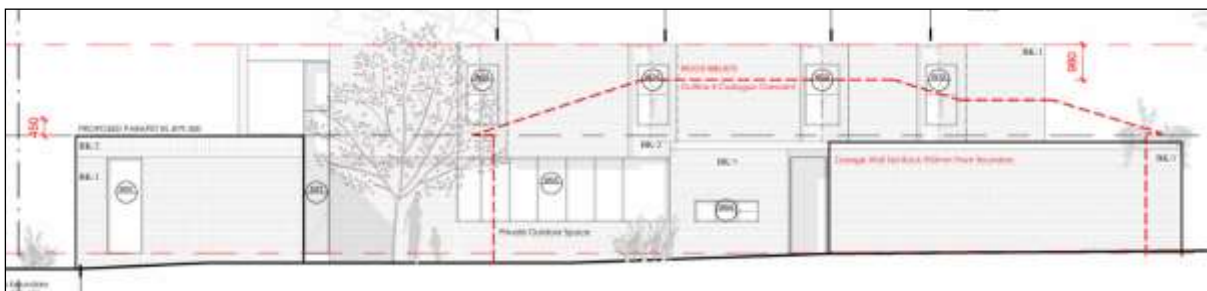


Figure 18 - existing ground levels (black line) and proposed finished floor level (red line)

- The proposed dwelling will be a one and two-storey structure. Maximum building height at the site frontage will be 3.3m to ground floor parapet and 5.85m to first floor parapet. When viewed from the public domain, the upper level will exceed the ridge height at 4 Cadogan Crescent by 1.2m and at 6 Cadogan Crescent by 900mm (see Figure 19). This is a reasonable height variation between adjoining improvements to maintain visual continuity of scale in the streetscape. The upper level of the proposed dwelling will be recessed from the lower level and site boundaries to minimise encroachment on the frontage.



Figure 19 - dwelling heights

- The proposed dwelling will be contained within the DCP-prescribed visual bulk envelope plane, expecting very minor departures on the north elevation in the upper and lower parapets (as depicted by red dots in Figure 20). It is noted that the window hoods to openings on the west façade *will* encroach within the VBE, as demonstrated below by the green arrow (see Figure 20). The hoods will not visually encroach upon the adjoining western dwelling at 4 Cadogan Crescent. The hoods will be intermittent structures along

the western façade, and reasonably removed from opposing windows and the private open space area next door.

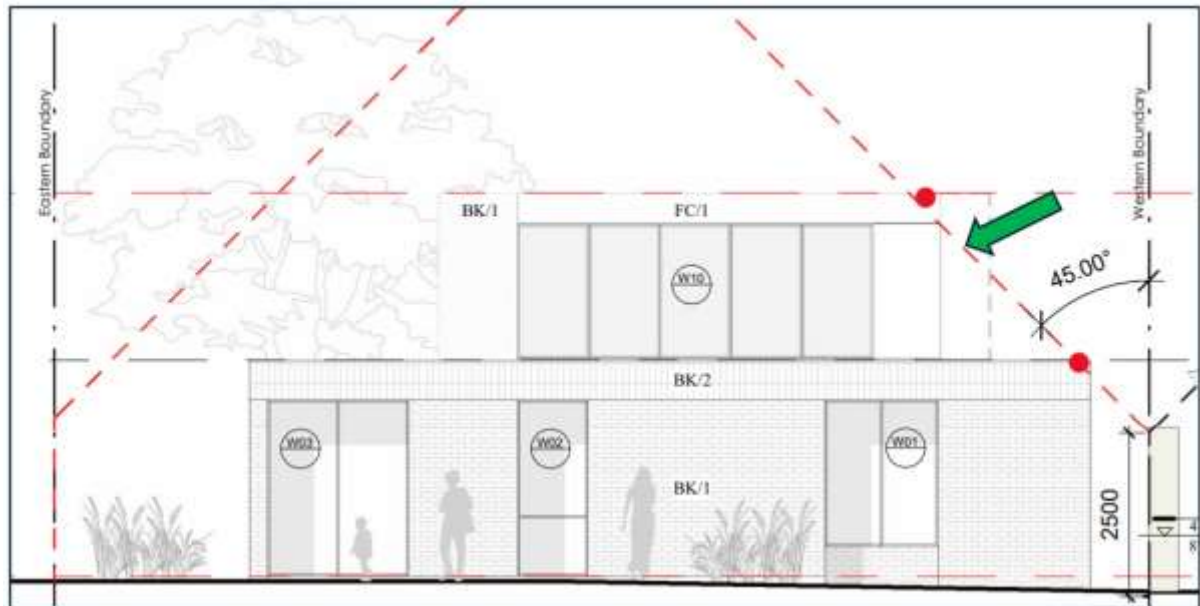


Figure 20 - VBE encroachments (circled in red), north elevation

- Visual bulk impacts to the east at 6 Cadogan Crescent will be within acceptable limit. As depicted in Figure 20 above, the proposed dwelling will be contained within the VBE on the north elevation when projected from the eastern boundary. The proposed dwelling will have a generous setback from the eastern boundary of 3m to lower level and 5.8m to upper level. The dwelling at No. 6 is similarly well set back from the common boundary by some 4.5m. Separation between the dwellings will avoid visual encroachment. Overshadowing to the eastern parcel will satisfy the DCP (as outlined below).
- Based on site area of 726m² and total building footprint of 292m², site coverage for the development will be 40% (in compliance with the maximum 60%). The proposed site coverage will complement adjoining dwellings.
- Setbacks from side and rear boundaries will be typical of the neighbourhood patterns as assessed above (see **Setbacks**). The building footprint will be generally T-shaped and utilise much of the parcel. The land is not subject to a prescribed rear building setback.
- In order to assess the visual bulk impacts on the nearest adjoining dwelling, reference is made to the Land and Environment Court planning principles for height, bulk and scale (pursuant to *Veloshin v Randwick Council* [2007] NSWLEC 428).

The following questions should be considered to assess the appropriateness of development:

Are the impacts consistent with impacts that may be reasonably expected under the controls?

As outlined in this report, the proposal will not adversely impact on privacy or solar access to the adjoining dwelling.

How does the proposal's height and bulk relate to the height and bulk desired under the relevant controls?

The development site is not subject to a maximum building height on the OLEP 2011 Height of Buildings Map. The proposal will satisfy the **Visual Bulk** planning outcomes and guidelines contained in DCP 2004.

Does the area have a predominant existing character and are the planning controls likely to maintain it?

Cadogan Crescent has a well-defined and intact built character, defined by single-storey dwellings of low density massing and footprint.

Does the proposal fit into the existing character of the area?

As variously assessed, there will be some discord between the proposed replacement dwelling and prevailing Post-War built form in Cadogan Crescent. The proposed dwelling will depart dwelling typologies in this street, in relation to dwelling height (two-storey), roof profile (flat), and footprint / massing (T-shaped for the length of the parcel).

Is the proposal consistent with the bulk and character intended by the planning controls?

As considered, the bulk impacts on the streetscape will be within reasonable limit, largely due to the generous front setback.

It is assessed however, that the **height, shape and length** of the proposed dwelling will markedly alter the existing interface between 4 and 5 Cadogan Crescent. Consequently, there is potential for visual encroachment by the development on 4 Cadogan Crescent.

The design response has considered offsite visual bulk impacts as follows:

- The proposed upper level will have a generous recess from the western boundary by 3.19m.
- The proposed upper ridge height of 6.260m will exceed the ridge height at 4 Cadogan Crescent by a reasonable 980mm.
- The proposed flat roof will reduce the building height compared with a traditional hip.
- The site is not subject to a prescribed rear building setback.

Nonetheless, it is considered that there is additional opportunity to minimise the building bulk and associated visual impacts by reducing the upper level void space. A Conditional reduction in the upper level void would reduce building length and mass and improve views / outlooks for adjoining dwellings- while still maintaining internal floor area and a void space (see Figure 21). This is a matter for Council's consideration.

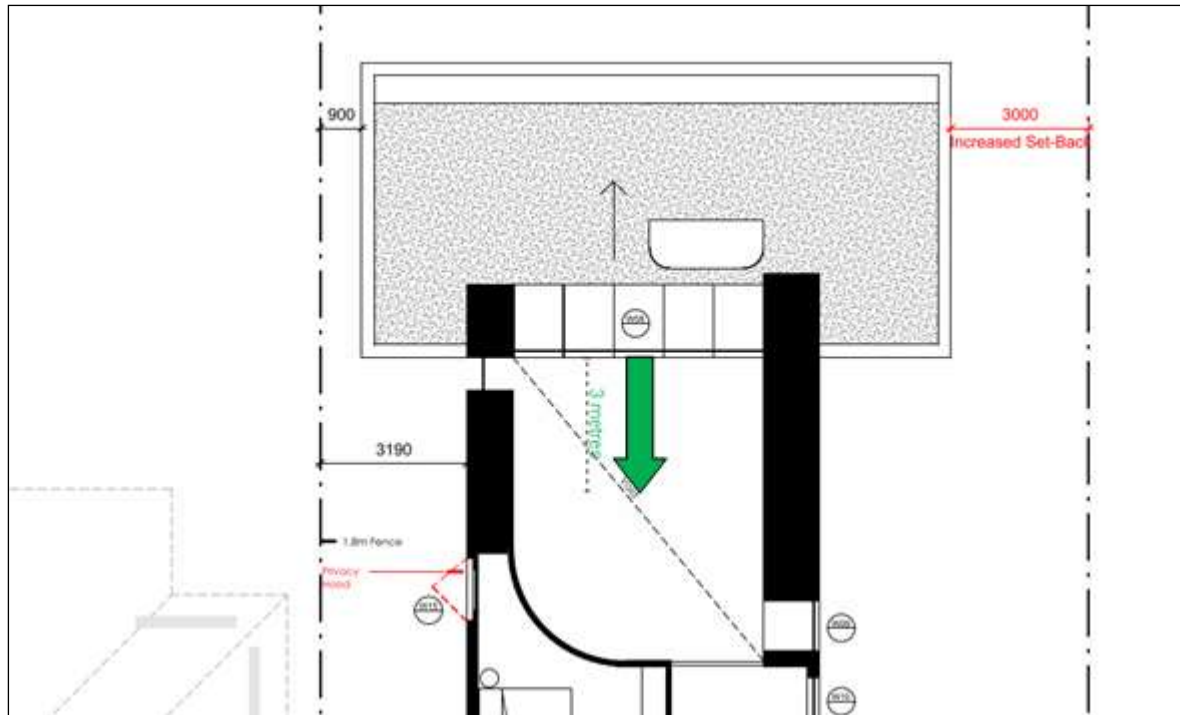


Figure 21 - conditional reduction of the upper level void

The single storey element of the proposed dwelling will have a wall height of 3.6-2.8m opposing 4 Cadogan Crescent (see below). Again, the longstanding interface between the properties will be altered. However, the height of the lower-level parapet will relate to the eave height and rear shed at 4 Cadogan Crescent, and is considered reasonable. Existing perimeter planting and fencing will provide screening.

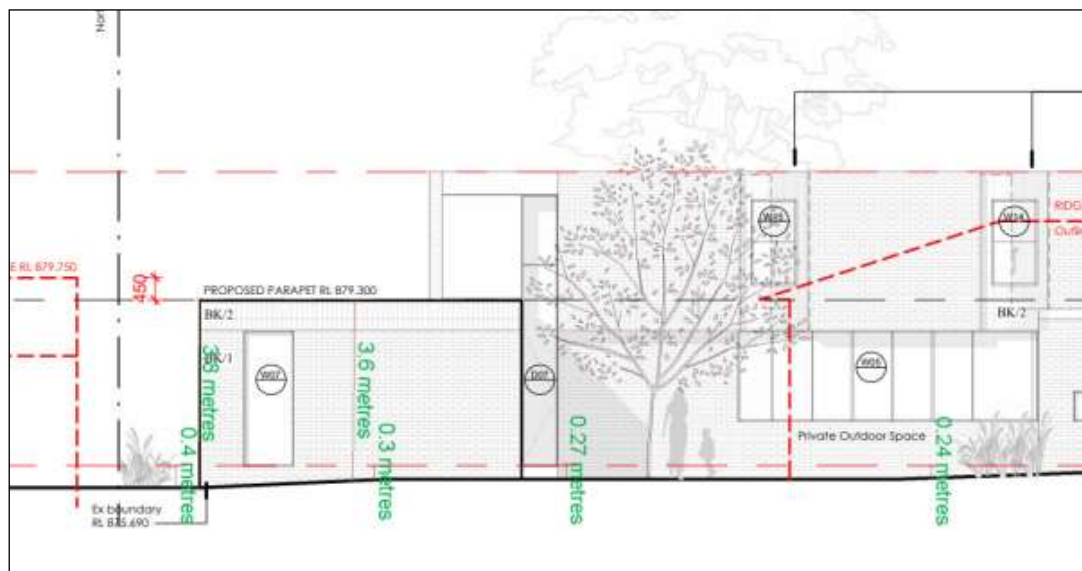


Figure 22 - wall height opposing 4 Cadogan Crescent

Does the proposal look appropriate in its context?

As considered, the bulk impacts on the streetscape will be within reasonable limit, largely due to the generous front setback. It is assessed however, that the **height, shape and length** of the proposed dwelling will markedly alter the existing interface between 4 and 5 Cadogan Crescent, with altered visual impacts.

Walls and Boundaries

PO 7.7-7 PLANNING OUTCOMES - WALLS AND BOUNDARIES	
1	Building to the boundary is undertaken to provide for efficient use of the site taking, into account: <ul style="list-style-type: none">- the privacy of neighbouring dwellings and private open space;- the access to daylight reaching adjoining properties;- the impact of boundary walls on neighbours.

The proposal does not involve dwelling construction to any boundary. A minimum side setback of 900mm will apply to the east and west boundaries. As outlined in the following sections of this report, privacy and solar access impacts will be within reasonable limit, subject to mitigation conditions. The impact of boundary walls was considered above (see **Visual Bulk**).

Daylight and Sunlight

PO 7.7-8 PLANNING OUTCOMES - DAYLIGHT AND SUNLIGHT	
1	Buildings are sited and designed to ensure: <ul style="list-style-type: none">- daylight to habitable rooms in adjacent dwellings is not significantly reduced;- overshadowing of neighbouring secluded open spaces or main living-area windows is not significantly increased;- consideration of Council's Energy Efficiency Code.

Internal and external solar access will be provided to the proposed dwelling in accordance with the DCP guidelines. The dwelling will have north facing living room windows at lower and upper levels, and private outdoor spaces will have access to northern sun.

Shadow diagrams were submitted in support of the proposal (see Figure 23 below and attached Drawing DA910). Assessment staff concur with the accuracy of the submitted diagrams. The shadow diagrams demonstrate that the proposed dwelling will overshadow the adjoining west and east dwellings at 4 and 6 Cadogan Crescent, respectively. However, based on the north-south orientation of the land, sunlight to northern openings and north/rear private open spaces on the neighbouring parcels will be maintained in accordance with the DCP Guidelines.

Morning overshadowing to the west at 4 Cadogan Crescent will be limited until approximately 11am, with existing solar access thereon in. The parcel at 6 Cadogan Crescent will be overshadowed in the afternoon from approximately 1pm, with unimpeded solar access in the morning period.



Figure 23 - 9am, 11am and 3pm shadow diagrams (refer also drawing No. DA910)

Views

PO 7.7-9 PLANNING OUTCOMES - VIEWS	
1	Building form and design allow for residents from adjacent properties to share prominent views where possible.
2	Views including vistas of heritage items or landmarks, are not substantially affected by the bulk and scale of new development.

The proposed dwelling will have acceptable visual impacts within the Cadogan Crescent view corridor, due to the proposed front setback and Conditional front landscaping. The dwelling siting will not disrupt the established streetscape building line, and the existing landscaped setting will be maintained and reinforced.

The proposed replacement dwelling will alter the presentation of the site- indeed, the proposal comprises a new structure of a shape and form that departs dwelling typologies in this street. Views of the site from adjoining parcels will therefore be altered. Nonetheless, the proposed dwelling will comprise a residential form in a residential setting. There are no prominent views or vistas that will be impacted by the proposal.

Visual Privacy

PO 7.7-10 PLANNING OUTCOMES – VISUAL PRIVACY	
1	Direct overlooking of principal living areas and private open spaces of other dwellings is minimised firstly by: <ul style="list-style-type: none"> - building siting and layout; - location of windows and balconies; and secondly by: <ul style="list-style-type: none"> - design of windows or use of screening devices and landscaping.

Privacy will be achieved for the proposed dwelling as follows:

- Existing perimeter fencing will be maintained.
- The upper level terrace and ground level garden room with public domain views will be provided with perimeter plantings for privacy.

Privacy will be maintained for opposing neighbours as follows:

- Existing perimeter fencing will be maintained.
- Privacy hoods will be installed to upper level openings on the western façade to minimise overlooking of eastern openings and the rear yard at 4 Cadogan Crescent.
- There is potential for overlooking openings and private open space at 6 Cadogan Crescent from the upper level lounge window on the eastern façade. The window will be set back 5.8m from the boundary and oppose a window and the rear yard next door. The DCP requires screening measures for *habitable room windows on upper floors within 9m from windows of living areas of adjacent dwellings*. Separation between the opposing openings will be within this order. A Condition is included that a privacy hood be installed to the upper level lounge window on the eastern façade.
- Similarly, there will be potential for overlooking 6 Cadogan Crescent from the upper level terrace on the east façade (see Figure 24). Conversely, this outdoor space may also be overlooked by neighbours. The DCP requires *balconies of an upper-floor within 9m of habitable room or private open space are permanently screened to reasonably obscure direct views to adjacent rooms and private open space*. Conditions are included requiring amendments at Construction Certificate stage demonstrating measures to screen direct views to the east and north-east.

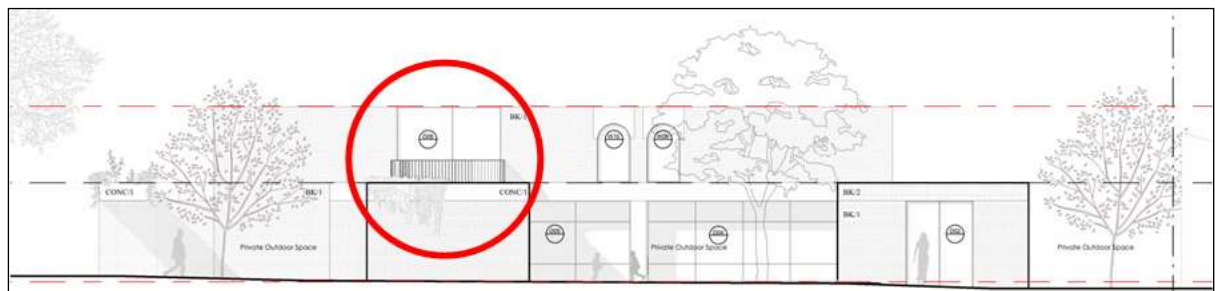


Figure 24 - terrace on the east façade overlooking 6 Cadogan Crescent

- Ground level habitable room openings on the east elevation will address a courtyard and be well-setback from the eastern boundary.
- Overlooking from habitable openings on the western façade (kitchen and living room) will be nil-negligible based on existing perimeter fencing and landscaping.
- Glazing to the upper level void space will have nil impact on privacy for adjoining dwellings.
- Floor levels will be commensurate with existing natural ground levels.

Acoustic Privacy

PO 7.7-11 PLANNING OUTCOMES - ACOUSTIC PRIVACY	
1	<p>Site layout and building design:</p> <ul style="list-style-type: none"> - protect habitable rooms from excessively high levels of external noise; - minimise the entry of external noise to private open space for dwellings close to major noise sources; - minimise transmission of sound through a building to affect other dwellings.

Residential landuse is not noise-generating. The proposed development will not generate noise emissions.

Circulation Design

PO 7.7-14 PLANNING OUTCOMES – CIRCULATION DESIGN	
1	Accessways and parking areas are designed to manage stormwater.
2	Accessways, driveways and open parking areas are suitably landscaped to enhance amenity while providing security and accessibility to residents and visitors.
3	The site layout allows people with a disability to travel to and within the site between car parks, buildings and communal open space.

The proposal involves deletion of the existing site access in the eastern extent, and new driveway access adjacent the western boundary. Conditions are included requiring proper closure of the existing eastern access, and Road Opening Permit and Certification for the proposed new western crossover and driveway. Council's Assistant Development Engineer raised no objection to the location of the new driveway. The proposal will not generate additional traffic volumes above the existing situation.

Car Parking

PO 7.7-15 PLANNING OUTCOMES - CAR PARKING	
1	Parking facilities are provided, designed and located to: <ul style="list-style-type: none"> - enable the efficient and convenient use of car spaces and accessways within the site; - reduce the visual dominance of car-parking areas and accessways.
2	Car parking is provided with regard to the: <ul style="list-style-type: none"> - number and size of proposed dwellings; - requirements of people with limited mobility or disabilities.

Pursuant to DCP 2004, onsite parking is required for 3+ bedroom dwellings at a rate of 1.5 spaces per dwelling. A double garage and stacked spaces will be provided for the proposed dwelling in compliance with the DCP.

Private Open Space

PO 7.7-16 PLANNING OUTCOMES – PRIVATE OPEN SPACE	
1	Private open space is clearly defined for private use.
2	Private open space areas are of a size, shape and slope to suit the reasonable requirements of residents, including some outdoor recreational needs and service functions.
3	Private open space is: <ul style="list-style-type: none"> - capable of being an extension of the dwelling for outdoor living, entertainment and recreation; - accessible from a living area of the dwelling; - located to take advantage of outlooks and to reduce adverse impacts of overshadowing or privacy from adjoining buildings; - orientated to optimise year-round use.

Private open space for the proposed dwelling house will comply with the DCP Guidelines in relation to minimum area, dimension, orientation, solar access and connectivity.

Open Space and Landscaping

PO 7.7-17 PLANNING OUTCOMES – OPEN SPACE AND LANDSCAPING	
1	The site layout provides open space and landscaped areas which : <ul style="list-style-type: none"> - contribute to the character of the development by providing buildings in a landscaped setting; - provide for a range of uses and activities including stormwater management; - allow cost-effective management.
2	The landscape design specifies landscape themes consistent with the desired neighbourhood character and vegetation types and location, paving and lighting are provided for access and security.
3	Major existing trees are retained and protected in a viable condition whenever practicable through appropriate siting of buildings, accessways and parking areas.
4	Paving is applied sparingly and integrated in the landscape design.

Conditions are included requiring preparation and implementation of a landscape plan.

Stormwater

PO 7.7-18 PLANNING OUTCOMES - STORMWATER	
1	On-site drainage systems are designed to consider: <ul style="list-style-type: none"> - downstream capacity and the need for on-site stormwater retention, detention and re-use; - scope for on-site infiltration of water; - safety and convenience of pedestrians and vehicles; - overland-flow paths.
2	Provision is made for on-site drainage which does not cause damage or nuisance flows to adjoining properties.

Existing arrangements for stormwater drainage will be maintained.

Erosion and Sedimentation

PO 7.7-19 PLANNING OUTCOMES - EROSION AND SEDIMENT CONTROL	
1	Measures implemented during construction to ensure that the landform is stabilised and erosion is controlled.

Conditional sediment and erosion controls will be installed and maintained during construction works.

Provisions prescribed by the Regulations s4.15(1)(a)(iv)

The proposed development will not be contrary to any matter prescribed by Regulation:

BASIX development (Section 27)

A complaint Single Dwelling BASIX Certificate was submitted in support of the proposal.

Demolition of a Building (Section 61)

Conditions are included requiring demolition and waste management in accordance with applicable standards and guidelines.

Fire Safety Considerations (clause 62)

The proposal does not involve a change of building use for an existing building.

Buildings to be Upgraded (clause 63)

The proposal does not involve the rebuilding, alteration, enlargement or extension of an existing building.

The likely impacts of the development s4.15(1)(b)

The impacts of the proposed development have been considered in the foregoing sections of this report and include:

- Setting and context.
- Neighbourhood character.
- Conservation values.
- Landscape character.
- Visual impacts (presentation, design, bulk and massing, views).
- Traffic matters (site access, car parking and manoeuvring, traffic generation).
- Onsite and adjoining residential amenity (bulk and massing, solar access, visual privacy, acoustic privacy).
- Environmental impacts (biodiversity, groundwater, stormwater management, sediment control).

The impacts of the development are considered to be within reasonable limit. Conditions are included on the attached Notice of approval to mitigate and manage arising impacts.

The suitability of the site s4.15(1)(c)

The subject land is suitable for the development due to the following:

- The proposal is a permitted landuse in the R1 General Residential zone.
- The site has direct frontage and access Cadogan Crescent.
- The local road network is of sufficient capacity.
- The site is not subject to natural hazards.
- There is no known contamination on the land.
- All utility services are available and adequate.
- The site has no particular environmental value.
- The conservation values are atypical of the broader Dalton HCA.

Any submissions made in accordance with the Act s4.15(1)(d)

The public participation process associated with the proposed development is outlined below.

1. The proposed development is defined as "notified development" pursuant to Council's Community Participation Plan (CPP) 2019. The DA was notified in the prescribed manner (12-26 September 2023). At the completion of the notification period, eight submissions were received. The issues raised are considered below, and/or in the foregoing sections of this report.

SUBMISSION 1-

The proposed dwelling will 'significantly overshadow both single-storey neighbours.'

Comment: The development will result in overshadowing of 4 and 6 Cadogan Crescent. However, overshadowing will be within acceptable limit as defined in DCP 2004-7.7-8.

The landowner has breached conditions of DA consent relating to other developments. Council should ensure compliance with conditions for this development.

Comment: Failure to comply with conditions of consent is a breach of the EPAA 1979 and subject to enforcement.

SUBMISSION 2-

The proposed replacement dwelling will be an unsuitable infill dwelling in Cadogan Crescent.

Comment: On balance, the proposed replacement dwelling is considered an acceptable infill dwelling for the streetscape, despite some discord with the prevailing Post-War built form. Interpretive elements will be suitable to provide reasonable integration. Contemporary styling will direct a design language and intent for future gentrification in the neighbourhood.

Demolition and construction works will cause on street congestion and nuisance for residents.

Comment: Conditions are included requiring preparation and implementation of a Construction Management Plan to minimise construction nuisance for adjoining residents.

SUBMISSION 3-

The submitted DA drawings do not show VBEs, solar access calculations, detailed measurements, floor plans.

Comment: The original submitted drawings have been superseded.

It is unsuitable to remove the Ash Tree street tree at the site frontage, which contributes to a planned streetscape landscape design.

Comment: Conditions are included requiring a replacement Ash Tree, of minimum 100L container size, to be planted on the footpath at the site frontage.

The proposed dwelling will overshadow the north-east facing living room at 4 Cadogan Crescent, and adversely impact on residential amenity

Comment: The main living room at 4 Cadogan Crescent is located at the rear of the dwelling and contains both north and east-facing windows. The submitted shadow diagrams demonstrate the proposed dwelling will overshadow the eastern windows, and as such morning sunlight from the east will not be available to the living room. By 9.45am on the winter solstice, the shadow will be removed from the east and north-facing windows in the living room. This arrangement will be consistent with Daylight and Sunlight Guidelines in DCP 2004, which requires solar access to the northern living room windows for more than 4 hours between 9am and 3pm.



Figure 25 - shadows to living room [denoted by star] at 4 Cadogan Crescent

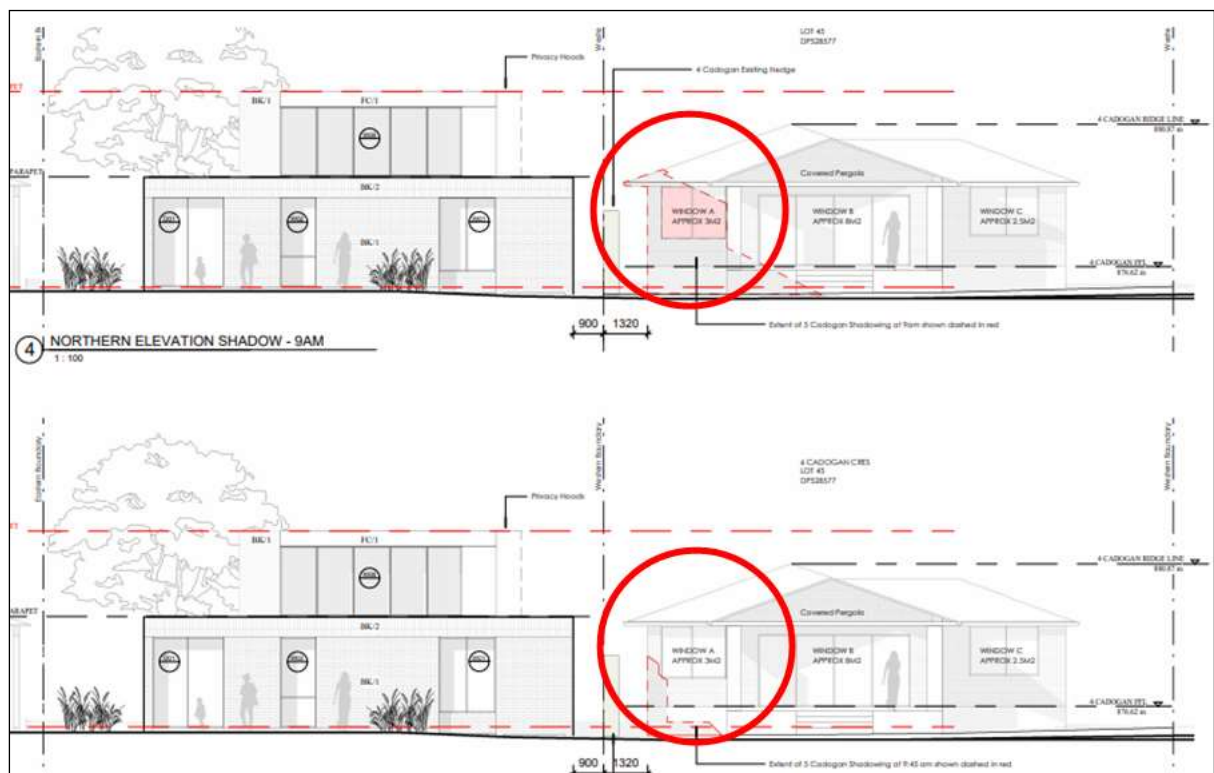


Figure 26 - shadows elevations to living room window (circled) at 4 Cadogan Crescent

The submission maintains that overshadowing will depart the following DCP **Planning Outcomes** in relation to Daylight and Sunlight:

- | | |
|---|--|
| 1 | Buildings are sited and designed to ensure: <ul style="list-style-type: none">- daylight to habitable rooms in adjacent dwellings is not significantly reduced;- overshadowing of neighbouring secluded open spaces or main living-area windows is not significantly increased; |
|---|--|

It is assessed that daylight to the impacted living room will not be 'significantly reduced;' and overshadowing to the main living area window will not be 'significantly increased.' The impacted living room contains north-facing openings also, and does not rely wholly on the eastern openings for sunlight. While the eastern morning sun may be valued by the submitter, generous sunlight will otherwise be available throughout the day to the impacted living room.

The proposed dwelling will overshadow the rear private open space area at 4 Cadogan Crescent, and adversely impact on residential amenity

Comment: As demonstrated in the shadow diagrams, the proposed dwelling will not result in overshadowing of the rear yard at 4 Cadogan Crescent from approximately 11.00am (refer Figure 25 above). The proposal will not reduce on-ground sunlight to less than 3 hours at 4 Cadogan Crescent, as required in the DCP.

Council should reassess the shadows to be cast by the proposed dwelling.

Comment: Assessment staff concur with the accuracy of the submitted shadow diagrams. Separate analysis has been undertaken. The diagrams are derived from existing surveyed ground levels and proposed building RLs.

The landform with 550mm fall to the from front to rear will affect the building height, shadow calculations and VBE.

Cross-fall over the development site is in the order of 0.5m (RL 876.15 - RL 875.630). A finished ground floor level of RL 876 is proposed. In order to achieve this, the rear portion of the dwelling in the north-west extent will be constructed 400mm above existing natural ground level. This is a minor increase above existing ground level, noting that DCP refers to a maximum 1.5m. Site filling will not be required. The proposed finished floor level will not alter the proposed parapet heights, nor the calculated VBEs or shadows.

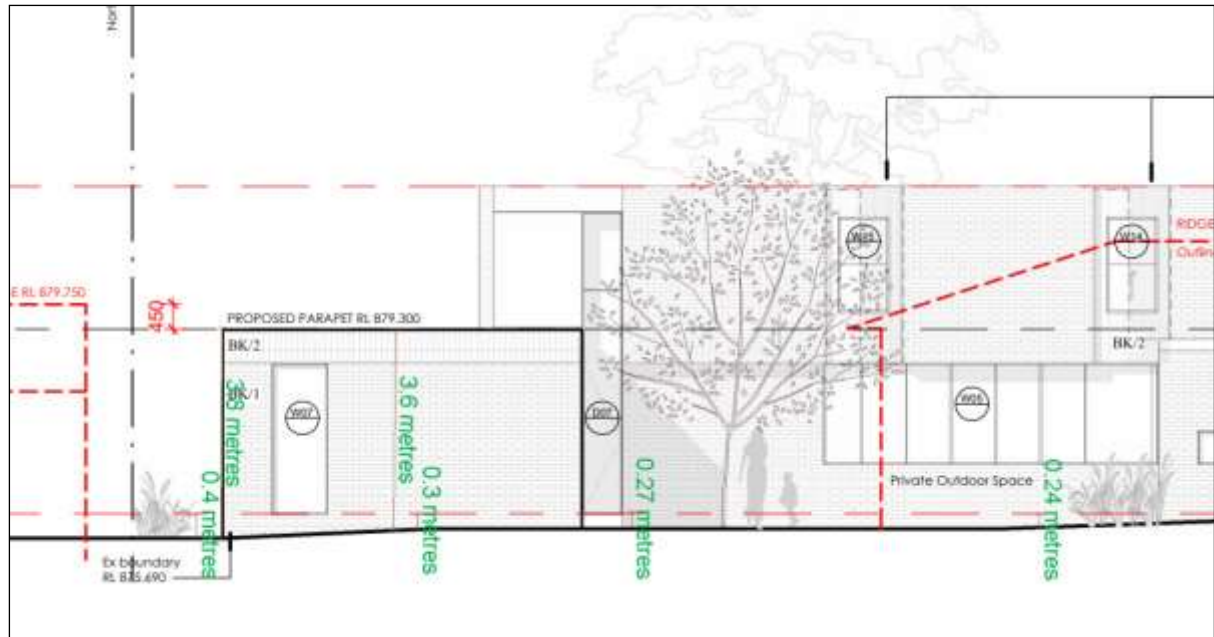


Figure 27 - natural ground level (black line) and proposed finished floor level (red line)

First floor openings will overlook 4 Cadogan Crescent.

Comment: Window hoods are now proposed to first floor openings on the western façade.

The proposed replacement dwelling will be contrary to the neighbourhood character (footprint, height, design)

Comment: As considered in the foregoing sections of this report, the proposed replacement dwelling is considered an acceptable infill dwelling for the streetscape.

The proposal will devalue adjoining properties.

Comment: The impact of a development on property values is a not matter for consideration in DA assessment (Section 4.15(1) EPAA 1979).

The upper level will have visual bulk encroachment impacts and alter the outlook/neighbourhood views.

Comment: It is concurred that the replacement dwelling will alter outlooks and views for adjoining dwellings. Indeed, the proposal comprises a new structure of a shape and form that will depart dwelling typologies in this street. Nonetheless, the proposed dwelling will comprise a residential form in a residential setting. There are no prominent views or vistas that will be impacted by the proposal.

Council could consider conditional reduction of the upper level to temper localised bulk/visual impacts on outlook, however this modification is not supported by the recommendation.

The garage will be constructed on the boundary with 4 Cadogan Crescent and impact solar access and ventilation.

Comment: The site layout has been amended to provide a 900mm setback from the common boundary with 4 Cadogan Crescent.

The proposed garage will adjoin bedrooms at 4 Cadogan Crescent and adversely impact on acoustic privacy.

Comment: This arrangement is consistent throughout Cadogan Crescent and residential areas generally. Front elevation garages are a typical residential design element. Vehicle movements associated with residential use are unlikely to impact on acoustic amenity for adjoining dwellings.

SUBMISSION 4-

The proposal will be contrary to the established neighbourhood character.

Comment: As outlined in this report, the proposed replacement dwelling is considered an acceptable infill dwelling for the streetscape, despite some discord with the prevailing Post-War built form. Interpretive elements will be suitable to provide reasonable integration. Contemporary styling will direct a design language and intent for future gentrification in the neighbourhood.

Development over 6m is not allowed in this area.

Comment: The site is not subject to a maximum building height pursuant to the Orange LEP 2011 Height of Buildings Map. Height controls for the site are described in DCP 2004-7.7-6 (Visual Bulk) and the Infill Guidelines. As outlined in this report, the building height will have reasonable continuity of scale in the streetscape.

Extensive earthworks will be required based on the fall of the land.

Comment: As stated above, cross-fall over the development site is in the order of 0.5m (RL 876.15 - RL 875.630). A finished ground floor level of RL 876 is proposed. In order to achieve this, the rear portion of the dwelling in the north-west extent will be constructed 400mm above existing natural ground level. This is a minor increase above existing ground level, noting that DCP refers to a maximum 1.5m. Site filling will not be required.

It is unsuitable to remove the Ash Tree street tree at the site frontage; access should be retained in its current location.

Comment: A Conditional replacement Ash Tree will be constructed at the site frontage. Council's Assistant Development Engineer raised no objection to the proposed driveway location adjacent the western boundary, noting the greater clearance to be provided from the cul-de-sac turning circle.

The proposed dwelling footprint will extend almost over the entire parcel. Open spaces will be internal and not at the rear. Site layout will be contrary to adjoining dwellings with private rear gardens.

Comment: The proposed dwelling will satisfy DCP controls in relation to site coverage, private open space and setbacks. The arrangement of spaces is decided by the designer. It is assessed that impact on the public domain and adjoining parcels will be acceptable, subject to mitigation conditions.

The proposed dwelling will overshadow adjoining dwellings at 4 and 6 Cadogan Crescent.

Comment: The development will result in overshadowing of 4 and 6 Cadogan Crescent. However, overshadowing will be within acceptable limit as defined in DCP 2004-7.7-8.

Views of the skyline and trees from adjoining backyards will be interrupted.

Comment: It is concurred that the replacement dwelling will alter outlooks and views for adjoining dwellings. Indeed, the proposal comprises a new structure of a shape and form that will depart dwelling typologies in this street. Views of the skyline and trees from adjoining backyards are already interrupted by existing dwellings in Cadogan Crescent and March Street, detached outbuildings and vegetation (see below).



Figure 28 - outlook to nearby backyards in March Street and Cadogan Crescent

The proposal will comprise a residential form in a residential setting. The impact on views and outlooks will be within acceptable limit. The proposal is not considered contrary to Case Law Planning Principles relating to views.

A floor plan was not supplied for consideration by neighbours.

Comment: Plans are redacted under legislation for privacy reasons.

Openings on the east façade upper level will overlook adjoining eastern dwellings.

Comment: As outlined in this report, a condition is included requiring a window hood be provided to the upper level lounge room on the east façade; and privacy screening be provided to the upper level eastern terrace. Window hoods were nominated in the current planset, as shown here:

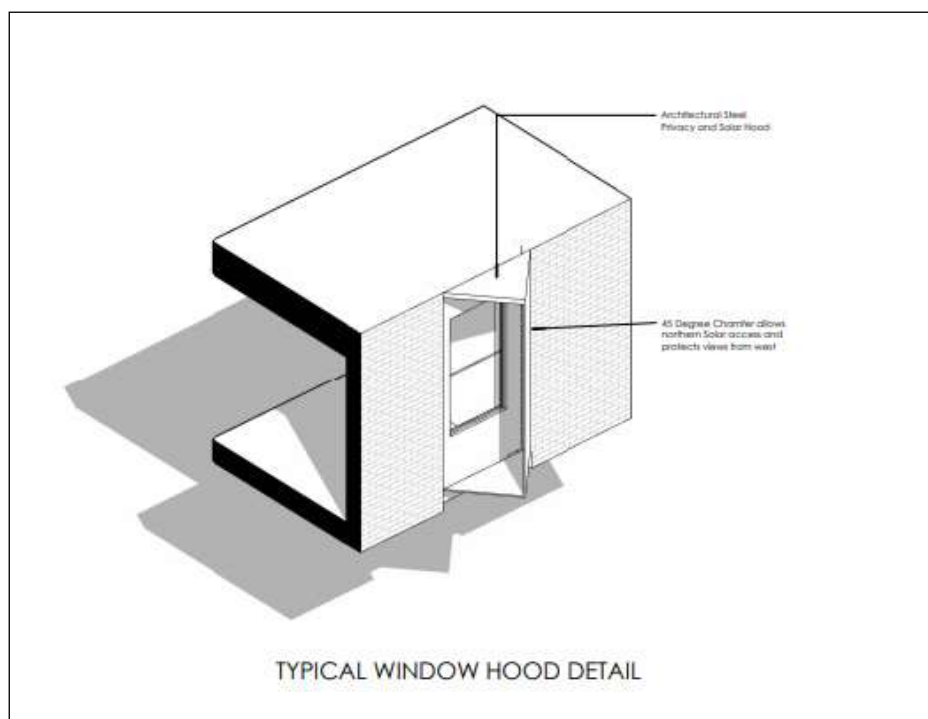


Figure 29 - window hoods for privacy to side dwelling facades on upper levels

Please clarify fencing material to the site perimeters.

Comment: Existing Colorbond perimeter fencing will be retained.

SUBMISSION 5-

Two-storey building height is unsuitable in the single-storey street.

Comment: As outlined in this report, the building height will have reasonable continuity of scale in the streetscape, based on generous street setback and recessed upper level.

Contemporary dwelling design will be contrary to the neighbourhood character.

Comment: As outlined in this report, the proposed replacement dwelling is considered an acceptable infill dwelling for the streetscape.

SUBMISSION 6-

Modern architecture is not in keeping with the style of Cadogan Crescent. "Our street is a time capsule of the 1970s and worthy of preserving as such."

Comment: It is concurred that Cadogan Crescent has a consistent and intact Post-War character. A detailed assessment of neighbourhood character and building appearance has been provided in the body of this report.

The proposed dwelling will overshadow 6 Cadogan Crescent.

Comment: The proposed dwelling will overshadow the adjoining eastern dwelling in the afternoon. Overshadowing will be within acceptable limit as defined in DCP 2004-7.7-8.

The proposal will devalue adjoining properties.

Comment: The impact of a development on property values is a not matter for consideration in DA assessment (Section 4.15(1) EPAA 1979).

SUBMISSIONS 7 AND 8-

The proposed dwelling will not be consistent with the immediate neighbourhood.

Comment: As outlined in this report, the proposed replacement dwelling is considered an acceptable infill dwelling for the streetscape.

The proposed development will increase traffic.

Comment: Construction traffic is anticipated for limited duration. The proposed dwelling will not generate additional traffic above existing levels.

The privacy of neighbours will be impacted.

Comment: As outlined in this report, reasonable privacy will be provided to the proposed and adjoining dwellings, subject to mitigation Conditions.

2. At the applicant's request, a mediation meeting was convened between Council staff, neighbours/submitters, applicant and landowner. The meeting was held at the Civic Centre on 22 November 2023. The applicant / architect explained the design intent and sought to demonstrate the suitability of the design in the Cadogan Crescent streetscape. The owner sought to justify his preference for contemporary design. The neighbours raised concerns in relation to zero boundary setback to the west, overshadowing, overlooking, view loss and construction impacts.

The applicant was invited to submit amended plans to address the issues raised in the public submissions and mediation. Amended plans were subsequently submitted. The amendments involved:

- increased setbacks to the western boundary (minimum 900mm) and eastern boundary (minimum 900mm and 3,000mm);
- privacy hoods to first floor windows on the western façade; and
- reduced floor height (270mm) and roof height (105mm).

3. The amended proposal was renotified in the prescribed manner (16-31 January 2024). At the completion of the notification period, 4 submissions were received. The issues raised are listed below and considered above, excepting additional matters.

SUBMISSION 1-

- Modern architecture is not in keeping with the style of Cadogan Crescent.
- The proposed dwelling will overshadow 6 Cadogan Crescent.
- The proposed dwelling will invade privacy at 6 Cadogan Crescent.

SUBMISSION 2-

- The submitted DA drawings are unclear.
- The proposed dwelling will overshadow the living room windows at 4 Cadogan Crescent and the rear private open space area.
- The landform with 550mm fall to the from front to rear will affect the building height, shadow calculations and VBE.
- First floor openings will overlook 4 Cadogan Crescent.
- The proposed replacement dwelling will be contrary to the neighbourhood character (footprint, height, design)
- The proposal will devalue adjoining properties.
- The upper level will have visual bulk encroachment impacts and alter the outlook/neighbourhood views.
- Please advise *'Council's responsibilities for rectification of any issues that do not comply with the stated effects.'*

Comment: Dwelling construction in accordance with the approved plans will be the responsibility of the building contractor and appointed building certifier.

SUBMISSION 3-

- The proposal will be contrary to the established neighbourhood character.
- Development over 6m is not allowed in this area.
- Extensive earthworks will be required based on the fall of the land.
- The proposed dwelling footprint will extend almost over the entire parcel. Open spaces will be internal and not at the rear. Site layout will be contrary to adjoining dwellings with private rear gardens.
- The proposed dwelling will overshadow adjoining dwellings at 4 and 6 Cadogan Crescent.
- Views of the skyline and trees from adjoining backyards will be interrupted.
- A floor plan was not supplied for consideration by neighbours.
- Openings on the east façade upper level will overlook adjoining eastern dwellings.
- Please clarify fencing material to the site perimeters.

SUBMISSION 4-

- The proposed replacement dwelling will be an unsuitable infill dwelling in Cadogan Crescent.
- Demolition and construction works will limit access for residents and cause on street congestion and nuisance.
- The proposed dwelling will create a precedent for contemporary infill dwellings in Cadogan Crescent.

Comment: It is concurred that the proposed dwelling may establish a design language and intent for future gentrification in the neighbourhood.

Public interest Act s4.15(1)(e)

The proposal is not inconsistent with any relevant policy statements, planning studies and guidelines etc. that have not been considered in this assessment.

Comments

This report and the attached Notice of Approval have been informed by:

- Assistant Development Engineer
- Building Certifier
- Manager City Presentation
- Heritage Advisor
- Senior Urban Designer
- Senior Strategic / Policy Planner
- Essential Energy

ATTACHMENTS

- 1 Draft Notice of Approval, D24/30107 [↓](#)
- 2 Plans, D24/21033 [↓](#)
- 3 Submissions (redacted), D24/21172 [↓](#)



NOTICE OF DETERMINATION OF A DEVELOPMENT APPLICATION

Application number	DA 266/2023(1) PAN-356373
Applicant	Paddy Williams 4 HAWKINS LANE ORANGE 2800
Description of development	Demolition (existing dwelling house and shed) and Dwelling House
Property	5 CADOGAN CRESCENT ORANGE 2800 22/-/DP587007
Determination	Approved Consent Authority - Council
Date of determination	2/04/24
Date from which the consent operates	2/04/24
Date on which the consent lapses	2/04/29

Under section 4.18(1) of the EP&A Act, notice is given that the above development application has been determined by the granting of consent using the power in section 4.16(1)(a) of the EP&A Act, subject to the conditions specified in this notice.

Reasons for approval

To ensure compliance with relevant statutory requirements.

To ensure the utility services are available to the site and adequate for the development.

To provide adequate public health and safety measures.

To prevent the proposed development having a detrimental effect on adjoining land uses.

To comply with the Environmental Planning and Assessment Act 1979.

The proposal will reasonably satisfy local and state planning controls.

The proposal development will be consistent with the zone objectives and principal development standards.

The proposal development will complement the existing or desired future character of the area.

To ensure a quality urban design for the development which complements the surrounding environment.

The proposal was neighbour notified development. The application was advertised for the prescribed period on two occasions and a total of 12 submissions were received.

Right of appeal / review of determination

If you are dissatisfied with this determination:

Request a review

You may request a review of the consent authority's decision under section 8.3(1) of the EP&A Act. The application must be made to the consent authority within 6 months from the date that you received the original determination notice provided that an appeal under section 8.7 of the EP&A Act has not been disposed of by the Court.

Rights to appeal

You have a right under section 8.7 of the EP&A Act to appeal to the Court within 6 months after the date on which the determination appealed against is notified or registered on the NSW planning portal.

The Dictionary at the end of this consent defines words and expressions for the purposes of this determination.

Paul Johnston
Manager Development Assessment
Person on behalf of the consent authority

For further information, please contact Summer Commins / Senior Planner

DRAFT

Terms and Reasons for Conditions

Under section 88(1)(c) of the EP&A Regulation, the consent authority must provide the terms of all conditions and reasons for imposing the conditions other than the conditions prescribed under section 4.17(11) of the EP&A Act. The terms of the conditions and reasons are set out below.

General Conditions

1	<p>Erection of signs</p> <ol style="list-style-type: none"> 1. This section applies to a development consent for development involving building work, subdivision work or demolition work. 2. It is a condition of the development consent that a sign must be erected in a prominent position on a site on which building work, subdivision work or demolition work is being carried out— <ol style="list-style-type: none"> a. showing the name, address and telephone number of the principal certifier for the work, and b. showing the name of the principal contractor, if any, for the building work and a telephone number on which the principal contractor may be contacted outside working hours, and c. stating that unauthorised entry to the work site is prohibited. 3. The sign must be— <ol style="list-style-type: none"> a. maintained while the building work, subdivision work or demolition work is being carried out, and b. removed when the work has been completed. 4. This section does not apply in relation to— <ol style="list-style-type: none"> a. building work, subdivision work or demolition work carried out inside an existing building, if the work does not affect the external walls of the building, or b. Crown building work certified to comply with the <i>Building Code of Australia</i> under the Act, Part 6. <p>Condition reason: Prescribed condition under section 70 of the Environmental Planning and Assessment Regulation 2021.</p>
2	<p>Compliance with Building Code of Australia and insurance requirements under Home Building Act 1989</p> <ol style="list-style-type: none"> 1. It is a condition of a development consent for development that involves building work that the work must be carried out in accordance with the requirements of the Building Code of Australia. 2. It is a condition of a development consent for development that involves residential building work for which a contract of insurance is required under the Home Building Act 1989, Part 6 that a contract of insurance is in force before building work authorised to be carried out by the consent commences.

	<ol style="list-style-type: none"> 3. It is a condition of a development consent for a temporary structure used as an entertainment venue that the temporary structure must comply with Part B1 and NSW Part H102 in Volume 1 of the Building Code of Australia. 4. In subsection (1), a reference to the Building Code of Australia is a reference to the Building Code of Australia as in force on the day on which the application for the construction certificate was made. 5. In subsection (3), a reference to the Building Code of Australia is a reference to the Building Code of Australia as in force on the day on which the application for development consent was made. 6. This section does not apply— <ol style="list-style-type: none"> a. to the extent to which an exemption from a provision of the Building Code of Australia or a fire safety standard is in force under the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, or b. to the erection of a temporary building, other than a temporary structure to which subsection (3) applies. <p>Condition reason: Prescribed condition under section 69 of the Environmental Planning and Assessment Regulation 2021.</p>
4	<p>Fulfilment of BASIX commitments</p> <p>It is a condition of a development consent for the following that each commitment listed in a relevant BASIX certificate is fulfilled—</p> <ol style="list-style-type: none"> 1. BASIX development, 2. BASIX optional development, if the development application was accompanied by a BASIX certificate. <p>Condition reason: Prescribed condition under section 75 of the Environmental Planning and Assessment Regulation 2021.</p>
5	<p>Notification of Home Building Act 1989 requirements</p> <ol style="list-style-type: none"> 1. This section applies to a development consent for development involving residential building work if the principal certifier is not the council. 2. It is a condition of the development consent that residential building work must not be carried out unless the principal certifier for the development to which the work relates has given the council written notice of the following— <ol style="list-style-type: none"> a. for work that requires a principal contractor to be appointed— <ol style="list-style-type: none"> i. the name and licence number of the principal contractor, and ii. the name of the insurer of the work under the Home Building Act 1989, Part 6, b. for work to be carried out by an owner-builder— <ol style="list-style-type: none"> i. the name of the owner-builder, and ii. if the owner-builder is required to hold an owner-builder permit under the Home Building Act 1989—the number of the owner-builder permit.

	<p>3. If the information notified under subsection (2) is no longer correct, it is a condition of the development consent that further work must not be carried out unless the principal certifier has given the council written notice of the updated information.</p> <p>4. This section does not apply in relation to Crown building work certified to comply with the Building Code of Australia under the Act, Part 6.</p>
	<p>Condition reason: Prescribed condition under section 71 of the Environmental Planning and Assessment Regulation 2021.</p>
6	<p>Shoring and adequacy of adjoining property</p> <p>1. This section applies to a development consent for development that involves excavation that extends below the level of the base of the footings of a building, structure or work on adjoining land, including a structure or work in a road or rail corridor.</p> <p>2. It is a condition of the development consent that the person having the benefit of the development consent must, at the person's own expense—</p> <ol style="list-style-type: none"> protect and support the building, structure or work on adjoining land from possible damage from the excavation, and if necessary, underpin the building, structure or work on adjoining land to prevent damage from the excavation. <p>3. This section does not apply if—</p> <ol style="list-style-type: none"> the person having the benefit of the development consent owns the adjoining land, or the owner of the adjoining land gives written consent to the condition not applying.
	<p>Condition reason: Prescribed condition under section 74 of the Environmental Planning and Assessment Regulation 2021.</p>
7	<p>Approved plans and supporting documentation</p> <p>Development must be carried out in accordance with the following approved plans and documents, except where the conditions of this consent expressly require otherwise.</p> <p>Drawings by PWA0, Drawing Nos. D000, DA100, DA101, DA200, DA201, DA300, DA301 dated 21.03.2024 (7 sheets)</p> <p>In the event of any inconsistency between the approved plans and documents, the approved plans prevail.</p> <p>In the event of any inconsistency with the approved plans and a condition of this consent, the condition prevails.</p>
	<p>Condition reason: To ensure all parties are aware of the approved plans and supporting documentation that applies to the development.</p>
8	<p>National Construction Code</p>

	All building work must be carried out in accordance with the provisions of the National Construction Code.
	Condition reason: To ensure compliance with relevant statutory requirements.

Demolition Work

Before demolition work commences

9	Asbestos removal signage
	Before demolition work commences involving the removal of asbestos, a standard commercially manufactured sign containing the words 'DANGER: Asbestos removal in progress' (measuring not less than 400mm x 300mm) must be erected in a prominent position at the entry point/s of the site and maintained for the entire duration of the removal of the asbestos.
	Condition reason: To alert the public to any danger arising from the removal of asbestos
10	Erosion and sediment controls in place
	Before any site work commences, <Insert the principal certifier or Council (where a principal certifier is not required)>, must be satisfied the erosion and sediment controls in the erosion and sediment control plan are in place. These controls must remain in place until any bare earth has been restabilised in accordance with 'Managing Urban Stormwater: Soils and Construction' prepared by Landcom (the Blue Book) (as amended from time to time).
	Condition reason: To ensure sediment laden runoff and site debris do not impact local stormwater systems and waterways.
11	Waste Management Plan – an approved document of this consent
	Before site work commences, a waste management plan for the development must be provided to Orange City Council.
	Condition reason: To ensure resource recovery is promoted and local amenity protected during construction.

During demolition work

12	Handling of asbestos during demolition
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	<p>While demolition work is being carried out, any work involving the removal of asbestos must comply with the following requirements:</p> <ol style="list-style-type: none"> 1. Only an asbestos removal contractor who holds the required class of Asbestos Licence issued by SafeWork NSW must carry out the removal, handling and disposal of any asbestos material; 2. Asbestos waste in any form must be disposed of at a waste facility licensed by the NSW Environment Protection Authority to accept asbestos waste; and 3. Any asbestos waste load over 100kg (including asbestos contaminated soil) or 10m² or more of asbestos sheeting must be registered with the EPA on-line reporting tool WasteLocate. <p>Condition reason: To ensure that the removal of asbestos is undertaken safely and professionally</p>
13	<p>Demolition - in accordance with AS 2601:2001</p> <p>Building demolition is to be carried out in accordance with Australian Standard 2601:2001 - The Demolition of Structures and the requirements of SafeWork NSW.</p> <p>Condition reason: To ensure compliance with relevant statutory requirements.</p>
14	<p>Hours of work - demolition</p> <p>All demolition work on the site is to be carried out between the hours of 7am and 6pm Monday to Friday inclusive, 7am to 5pm Saturdays, and 8am to 5pm Sundays and Public Holidays. Written approval must be obtained from the Chief Executive Officer of Orange City Council to vary these hours.</p> <p>Condition reason: To ensure compliance with relevant statutory requirements.</p>
15	<p>Road opening permit required</p> <p>A Road Opening Permit in accordance with Section 138 of the <i>Roads Act 1993</i> must be approved by Council prior to a Construction Certificate being issued or any intrusive works being carried out within the public road or footpath reserve.</p> <p>Condition reason: To ensure compliance with relevant statutory requirements.</p>

On completion of demolition work

16	<p>Waste disposal verification statement</p> <p>On completion of demolition work:</p> <p>a) a signed statement must be submitted to Orange City Council verifying that demolition work, and any recycling of materials, was undertaken in accordance with the waste</p>
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	management plan approved under this consent, and b) if the demolition work involved the removal of asbestos, an asbestos clearance certificate issued by a suitably qualified person, must be submitted to Orange City Council within 14 days of completion of the demolition work.
	Condition reason: To provide for the submission of a statement verifying that demolition waste management and recycling has been undertaken in accordance with the approved waste management plan

Building Work

Before issue of a construction certificate

17	Construction Site Management Plan
	<p>Before the issue of a Construction Certificate, a construction site management plan must be prepared, and provided to Orange City Council for approval. The plan must include the following matters:</p> <ul style="list-style-type: none"> a. The location and materials for protective fencing and hoardings on the perimeter of the site; b. Provisions for public safety; c. Pedestrian and vehicular site access points and construction activity zones; d. Details of construction traffic management including: <ul style="list-style-type: none"> i. Proposed truck movements to and from the site; ii. Estimated frequency of truck movements; and iii. Measures to ensure pedestrian safety near the site; e. The location of site storage areas and sheds; f. The equipment used to carry out works; g. The location of a garbage container with a tight-fitting lid; h. Dust, noise and vibration control measures; i. The location of temporary toilets; j. Neighbour notification of work stages. k. The protective measures for the preservation of trees on-site and in adjoining public areas including measures in accordance with: <ul style="list-style-type: none"> i. AS 4970 – Protection of trees on development sites; ii. An applicable Development Control Plan; iii. An arborist's report approved as part of this consent <p>A copy of the construction site management plan must be kept on-site at all times while work is being carried out.</p>
	Condition reason: To require details of measures that will protect the public, and the surrounding environment, during site works and construction.

18	<p>Section 68 application - water and sewer</p> <p>An approval under Section 68 of the <i>Local Government Act</i> is to be sought from Orange City Council, as the Water and Sewer Authority, for water, sewer and stormwater connection. Details concerning the proposed backflow prevention between the nominated water tank supply and the potable system are to be provided. No plumbing and drainage is to commence until approval is granted.</p> <p>Condition reason: To ensure the utility services are available to the site and adequate for the development.</p>
19	<p>Road opening permit required</p> <p>A Road Opening Permit in Accordance with Section 138 of the Roads Act 1993 must be approved by Council prior to a Construction Certificate being issued or any intrusive works being carried out within the public road or footpath reserve.</p> <p>Condition reason: To ensure compliance with relevant statutory requirements.</p>
20	<p>Comply with Council's sewer infrastructure services policy</p> <p>Prior to the issue of a Construction Certificate structural engineers' details shall be provided for piers/footings of any building located adjacent to the sewer main. Piers shall extend below the invert of the main and the outside edge of the pier shall be located a minimum of 1.0m clear of the centreline of the main.</p> <p>Condition reason: To comply with Council's Sewer Infrastructure Services policy.</p>
21	<p>Sewer main to be relined and manhole relocated.</p> <p>Prior to the issue of a Construction Certificate the applicant shall pay Orange City Council to undertake the following works:</p> <ul style="list-style-type: none"> • Reline the existing 150mm diameter sewer line located under the proposed dwelling from boundary to boundary; and • Remove / oversee the removal of the existing sewer manhole and capping of the existing sewer junction; and • Install / oversee the installation of a new sewer manhole and junction on the eastern side of the proposed dwelling. The new sewer manhole shall be located a minimum of 2.0m from the proposed dwelling and 1.0m clear of the eastern boundary. The sewer junction shall connect directly into the new sewer manhole. <p>Evidence of payment for the above works will be required to be submitted to the Principal Certifier prior to the issue of a Construction Certificate.</p>

	Condition reason: To comply with Orange City Council Sewer Infrastructure Services Policy
22	Landscape Plan
	A landscape plan prepared by a suitably qualified landscape architect must be submitted for the approval of Council's Manager City Presentation. Plantings are required to the front setback, upper level horizontal garden bed, and upper level perimeter garden bed to eastern terrace.
	Condition reason: To maintain neighbourhood amenity and landscape character.
23	Finishes Schedule
	An interpretive colour and finishes schedule must be submitted for the approval of Council's Heritage Advisor.
	Condition reason: To complement the neighbourhood character.
24	Amended Plans
	Amended plans must be submitted for the approval of Council's Manager Development Assessment, denoting/depicting the following details:
	(1) Window hood to the upper level lounge window on the east façade
	(2) Screening treatment to the east and north perimeter of the upper level terrace on the east facade
	Condition reason: To maintain neighbourhood amenity.

Before building work commences

25	Erosion and sediment controls in place
	Before any site work commences, <Insert the principal certifier or Council (where a principal certifier is not required)>, must be satisfied the erosion and sediment controls in the erosion and sediment control plan are in place. These controls must remain in place until any bare earth has been restabilised in accordance with 'Managing Urban Stormwater: Soils and Construction' prepared by Landcom (the Blue Book) (as amended from time to time).
	Condition reason: To ensure sediment laden runoff and site debris do not impact local stormwater systems and waterways.
26	Appoint PC

	<p>Appoint Principal Certifier. The person having the benefit of the development consent and a construction certificate shall:</p> <p>(a) Appoint a Principal Certifier and notify Council of the appointment (if Council is not appointed) and,</p> <p>(b) Notify Council of their intension to commence the erection of the building (at least two (2) day's notice is required)</p> <p>The Principal Certifier shall determine when inspections and compliance certificates are required.</p> <p>Condition reason: To ensure compliance with relevant statutory requirements.</p>
27	<p>Construction certificate required</p> <p>A construction certificate must be obtained from Council or an accredited certifier at least two (2) days prior to any building or ancillary work commencing. Where the construction certificate is obtained from an accredited certifier, the determination and all appropriate documents must be notified to Council within seven (7) days of the date of determination.</p> <p>Condition reason: Required by Section 6.6 (formerly 81A) of the Environmental Planning and Assessment Act, 1979 and Part 8, Division 2 of the Environmental Planning and Assessment Regulation, 2000.</p>
28	<p>Sediment control</p> <p>Sediment and erosion control measures shall be implemented on the site.</p> <p>Condition reason: To protect waterways from pollution by sediment-laden runoff.</p>
29	<p>Locate sewer main</p> <p>Prior to the commencement of works the existing sewer main that crosses the site is to be accurately located by a registered surveyor and reference marks / pegs shall also be established on site to enable the location of the main during construction works.</p> <p>Condition reason: To comply with Council's Development and Subdivision Code.</p>
30	<p>Tree Protection</p> <p>Tree protection zones (TPZ) (protective fencing) shall be installed in accordance with AS 4373-2009 - Protection of Trees on Development Sites, for the retained Liquidambar tree in the front setback.</p>

	<p>Protective fencing shall be installed prior to site works commencing and must remain intact until completion of all works. Fencing must not be altered or removed without approval of a project arborist.</p> <p>If access is required or minor activities are to be undertaken within the TPZ, it must be approved by the project arborist. No routing of services, parking of vehicles, stacking of builder's materials / equipment, is to occur within the TPZ.</p> <p>The protective fence is to be constructed from ridged chain wire mesh panels (or similar), 1.8m in height, and securely anchored without penetrating the ground. Signs identifying the TPZ should be placed on the fencing and be visible from within the development site on all angles.</p> <p>Condition reason: To retain the landscape character.</p>
31	<p>Essential Energy</p> <p>If the proposed development changes, there may be potential safety risks and it is recommended that Essential Energy is consulted for further comment.</p> <p>Any existing encumbrances in favour of Essential Energy (or its predecessors) noted on the title of the above property should be complied with.</p> <p>In addition, Essential Energy's records indicate there is electricity infrastructure located within close proximity of the property. Any activities within this location must be undertaken in accordance with the latest industry guideline currently known as ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure. Approval may be required from Essential Energy should activities within the property encroach on the electricity infrastructure.</p> <p>Prior to carrying out any works, a "Dial Before You Dig" enquiry should be undertaken in accordance with the requirements of Part 5E (Protection of Underground Electricity Power Lines) of the Electricity Supply Act 1995 (NSW).</p> <p>Given there is electricity infrastructure in the area, it is the responsibility of the person/s completing any works around powerlines to understand their safety responsibilities. SafeWork NSW (www.safework.nsw.gov.au) has publications that provide guidance when working close to electricity infrastructure. These include the Code of Practice – Work near Overhead Power Lines and Code of Practice – Work near Underground Assets.</p> <p>Condition reason: The proposed development is proximate to electricity infrastructure.</p>

During building work

32	Surveys by a registered surveyor
	While building work is being carried out, the positions of the following must be measured and marked by a registered surveyor and provided to the principal certifier: <ul style="list-style-type: none"> a. All footings / foundations in relation to the site boundaries and any registered and proposed easements b. At other stages of construction – any marks that are required by the principal certifier.
	Condition reason: To ensure buildings are sited and positioned in the approved location.
33	Hours of work - construction
	All construction work on the site is to be carried out between the hours of 7am and 6pm Monday to Friday inclusive, 7am to 5pm Saturdays, and 8am to 5pm Sundays and Public Holidays. Written approval must be obtained from the Chief Executive Officer of Orange City Council to vary these hours.
	Condition reason: To ensure compliance with relevant statutory requirements.
34	Protection of the Environment Operations Act - material delivery
	All materials onsite or being delivered to the site are to be contained within the site. The requirements of the <i>Protection of the Environment Operations Act 1997</i> are to be complied with when placing/stockpiling loose material, or when disposing of waste products, or during any other activities likely to pollute drains or watercourses.
	Condition reason: To protect waterways from pollution by stockpiled or placed construction materials.
35	Adjustments to utility services
	Any adjustments to existing utility services that are made necessary by this development proceeding are to be at the full cost of the developer.
	Condition reason: To comply with Council's Development and Subdivision Code.
36	Kerb and gutter layback and footpath crossing
	A concrete kerb and gutter layback and footpath crossing is to be constructed in the position shown on the plan submitted with the Construction Certificate application. The works are to be carried out to the requirements of the Orange City Council Development and Subdivision Code and Road Opening Permit.
	Condition reason: To comply with Council's Development and Subdivision Code.
37	Reinstate kerb and gutter

	<p>The existing kerb and gutter layback that is not proposed to be used is to be replaced with standard concrete kerb and gutter and the adjacent footpath area re-graded to the shape and level requirements of footpaths in the Orange City Council Development and Subdivision Code and Road Opening Permit.</p> <p>Condition reason: To comply with Council's Development and Subdivision Code.</p>
38	<p>Unexpected Finds</p> <p>In the event of an unexpected find during works such as (but not limited to) the presence of undocumented waste, odorous or stained soil, asbestos, structures such as underground storage tanks, slabs, or any contaminated or suspect material, all work on site must cease immediately. The beneficiary of the consent must discuss with Council the appropriate process that should be followed therein. Works onsite must not resume unless the express permission of the Director Development Services is obtained in writing.</p> <p>Condition reason: To maintain public health and safety.</p>
39	<p>Relics</p> <p>If Aboriginal objects, relics, or other historical items or the like are located during development works, all works in the area of the identified object, relic or item shall cease, and the NSW Office of Environment and Heritage (OEH), and representatives from the Orange Local Aboriginal Land Council shall be notified. Where required, further archaeological investigation shall be undertaken. Development works in the area of the find(s) may recommence if and when outlined by the management strategy, developed in consultation with and approved by the OEH.</p> <p>Condition reason: To preserve conservation values.</p>
40	<p>Construction Management Plan</p> <p>The approved Construction Management Plan must be implemented during construction works.</p> <p>Condition reason: To minimise construction impacts on residents.</p>

Before issue of an occupation certificate

41	<p>No use or occupation without occupation certificate</p> <p>No person is to use or occupy the building or alteration that is the subject of this approval with the prior issuing of an occupation certificate.</p> <p>Condition reason: To ensure compliance with the Building Code of Australia.</p>
42	<p>Section 68 final - water and sewer</p> <p>Where Orange City Council is not the Principal Certifier, a final inspection of water connection, sewer and stormwater drainage shall be undertaken by Orange City Council and a compliance certificate issued, prior to the issue of an occupation certificate.</p>

	Condition reason: To ensure the utility services are available to the site and adequate for the development.
43	Completion of works on public land and services
	Certification from Orange City Council is required to be submitted to the Principal Certifying Authority prior to the issue of an Occupation Certificate stating that all works relating to connection of the development to Council assets, works on public land, works on sewer mains and footpaths have been carried out in accordance with the Orange City Council Development and Subdivision Code and the foregoing conditions, and that Council will take ownership of the infrastructure assets.
	Condition reason: To comply with Council's Development and Subdivision Code.
44	Completion of works relating to road opening permit
	A Road Opening Permit Certificate of Compliance is to be issued for the works by Council prior to any Occupation Certificate being issued for the development.
	Condition reason: To ensure compliance with relevant statutory requirements.
45	Landscaping
	Site landscaping must be installed in accordance with the approved landscaping plan and permanently maintained to the satisfaction of Council's Manager Development Assessments.
	Condition reason: To maintain landscape character.
46	Street Tree
	A replacement Ash Tree with a minimum 100L container size at planting must be planted on the footpath at the site frontage, in a location determined by Council's Manager City Presentation.
	Condition reason: To retain landscape character in the streetscape.
47	Window Hoods
	Window hoods must be installed to the upper level east and west façade openings (exclusive of the void openings).
	Condition reason: To maintain privacy for adjoining dwellings.

Occupation and ongoing use

No additional conditions have been applied to this stage of development.

General advisory notes

This consent contains the conditions imposed by the consent authority which are to be complied with when carrying out the approved development. However, this consent is not an exhaustive list of all obligations which may relate to the carrying out of the development under the EP&A Act, EP&A Regulation and other legislation. Some of these additional obligations are set out in the [Conditions of development consent: advisory notes](#). The consent should be read together with the *Conditions of development consent: advisory notes* to ensure the development is carried out lawfully.

The approved development must be carried out in accordance with the conditions of this consent. It is an offence under the EP&A Act to carry out development that is not in accordance with this consent.

Building work or subdivision work must not be carried out until a construction certificate or subdivision works certificate, respectively, has been issued and a principal certifier has been appointed.

A document referred to in this consent is taken to be a reference to the version of that document which applies at the date the consent is issued, unless otherwise stated in the conditions of this consent.

Dictionary

The following terms have the following meanings for the purpose of this determination (except where the context clearly indicates otherwise):

Approved plans and documents means the plans and documents endorsed by the consent authority, a copy of which is included in this notice of determination.

AS means Australian Standard published by Standards Australia International Limited and means the current standard which applies at the time the consent is issued.

Building work means any physical activity involved in the erection of a building.

Certifier means a council or a person that is registered to carry out certification work under the *Building and Development Certifiers Act 2018*.

Construction certificate means a certificate to the effect that building work completed in accordance with specified plans and specifications or standards will comply with the requirements of the EP&A Regulation and *Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021*.

Council means ORANGE CITY COUNCIL.

Court means the Land and Environment Court of NSW.

EPA means the NSW Environment Protection Authority.

EP&A Act means the *Environmental Planning and Assessment Act 1979*.

EP&A Regulation means the *Environmental Planning and Assessment Regulation 2021*.

Independent Planning Commission means Independent Planning Commission of New South Wales constituted by section 2.7 of the EP&A Act.

Occupation certificate means a certificate that authorises the occupation and use of a new building or a change of building use for an existing building in accordance with this consent.

Principal certifier means the certifier appointed as the principal certifier for building work or subdivision work under section 6.6(1) or 6.12(1) of the EP&A Act respectively.

Site work means any work that is physically carried out on the land to which the development the subject of this development consent is to be carried out, including but not limited to building work, subdivision work, demolition work, clearing of vegetation or remediation work.

Stormwater drainage system means all works and facilities relating to:

- the collection of stormwater,
- the reuse of stormwater,
- the detention of stormwater,
- the controlled release of stormwater, and
- connections to easements and public stormwater systems.

Strata certificate means a certificate in the approved form issued under Part 4 of the *Strata Schemes Development Act 2015* that authorises the registration of a strata plan, strata plan of subdivision or notice of conversion.

Sydney district or regional planning panel means Western Regional Planning Panel.



DRAWING LIST

SHEET NUMBER	SHEET NAME	CURRENT REVISION
DA000	COVER PAGE	1
DA001	SECTION	1
DA002	GROUND FLOOR PLAN	1
DA003	FIRST FLOOR PLAN	1
DA004	ELEVATIONS	1
DA005	SECTION THROUGH PORCH	1

NOT FOR CONSTRUCTION
N.O.
1

Nock Residence
5 Cadogan Cres
DA000 COVER PAGE

Date
21.03.24

This is not a professional architectural drawing. It is a conceptual drawing only. It is not intended to be used for any purpose other than to illustrate the design of the project. It is not intended to be used for any purpose other than to illustrate the design of the project.

INDICATIVE EXTERIOR MATERIAL LEGEND

- BRICK - SELECTED BRICKWORK
- CONC - CONCRETE THICKING & DETAILS
- CONC - CONCRETE THICKING & DETAILS
- CONC - CONCRETE THICKING & DETAILS
- CONC - CONCRETE THICKING & DETAILS

INDICATIVE EXTERIOR MATERIAL SCHEDULE

CONC - CONCRETE THICKING & DETAILS	
BRICK - SELECTED BRICKWORK	
MSH - ROOF SHEETING - STEEL PANS & STEEL DETAILING	

AREAS	
TOTAL SITE	774M ²
GROUND FLOOR	253M ²
FIRST FLOOR	253M ²
GARAGE	40M ²
TOTAL DWELLING FLOOR SPACE	374M ²
PRIVATE OPEN SPACE	230M ² (62%)

BASIC COMMITMENTS

WATER COMMITMENTS

PLANNING

The applicant must provide a landscape plan with a minimum rating of 4.0 for all of the site's development.

The applicant must provide a landscape plan with a minimum rating of 4.0 for all of the site's development.

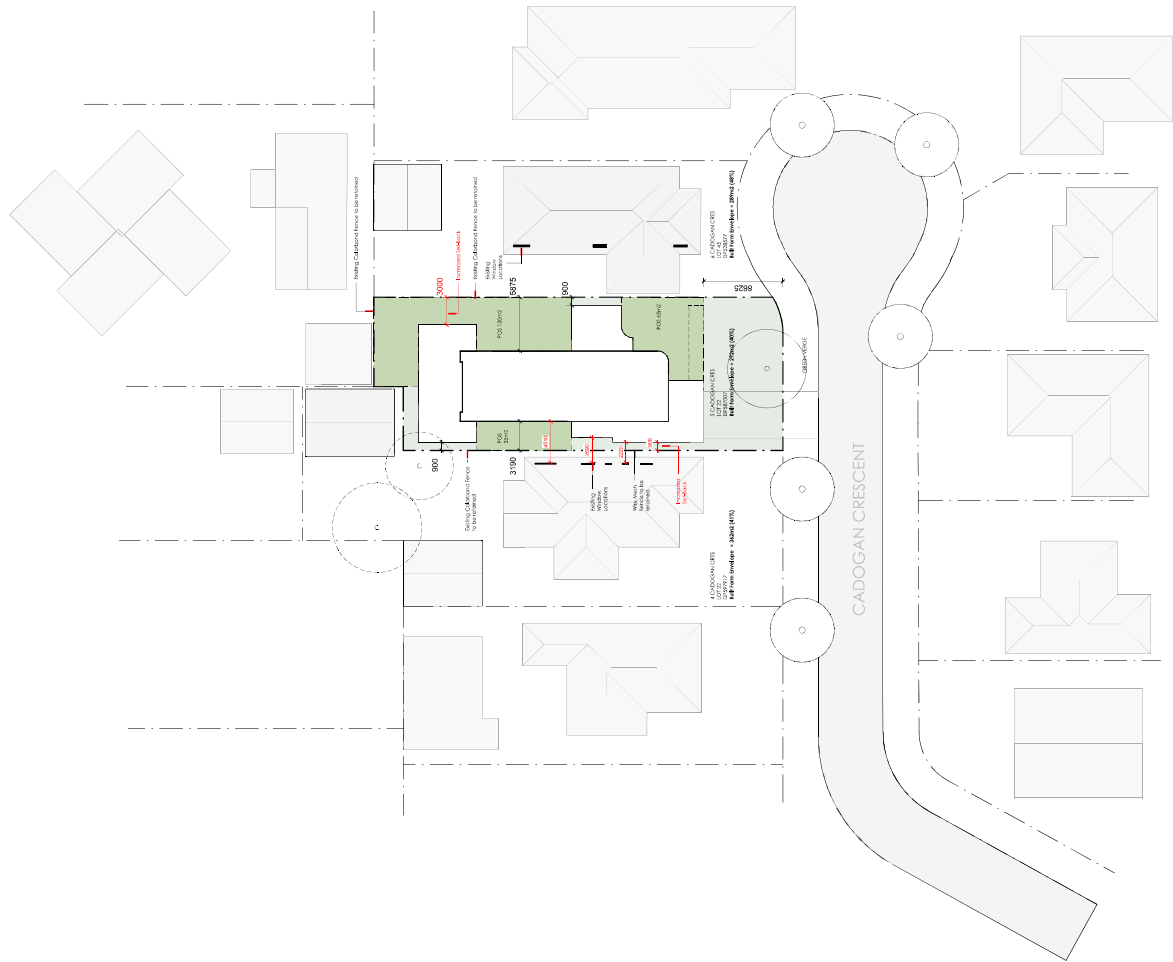
The applicant must provide a landscape plan with a minimum rating of 4.0 for all of the site's development.

ENERGY COMMITMENTS

The applicant must provide a landscape plan with a minimum rating of 4.0 for all of the site's development.

The applicant must provide a landscape plan with a minimum rating of 4.0 for all of the site's development.

The applicant must provide a landscape plan with a minimum rating of 4.0 for all of the site's development.



NOT FOR CONSTRUCTION
N.O.
1

Nock Residence
5 Cadogan Cres
DA100 SITE PLAN

Date
21/03/24

1 : 250

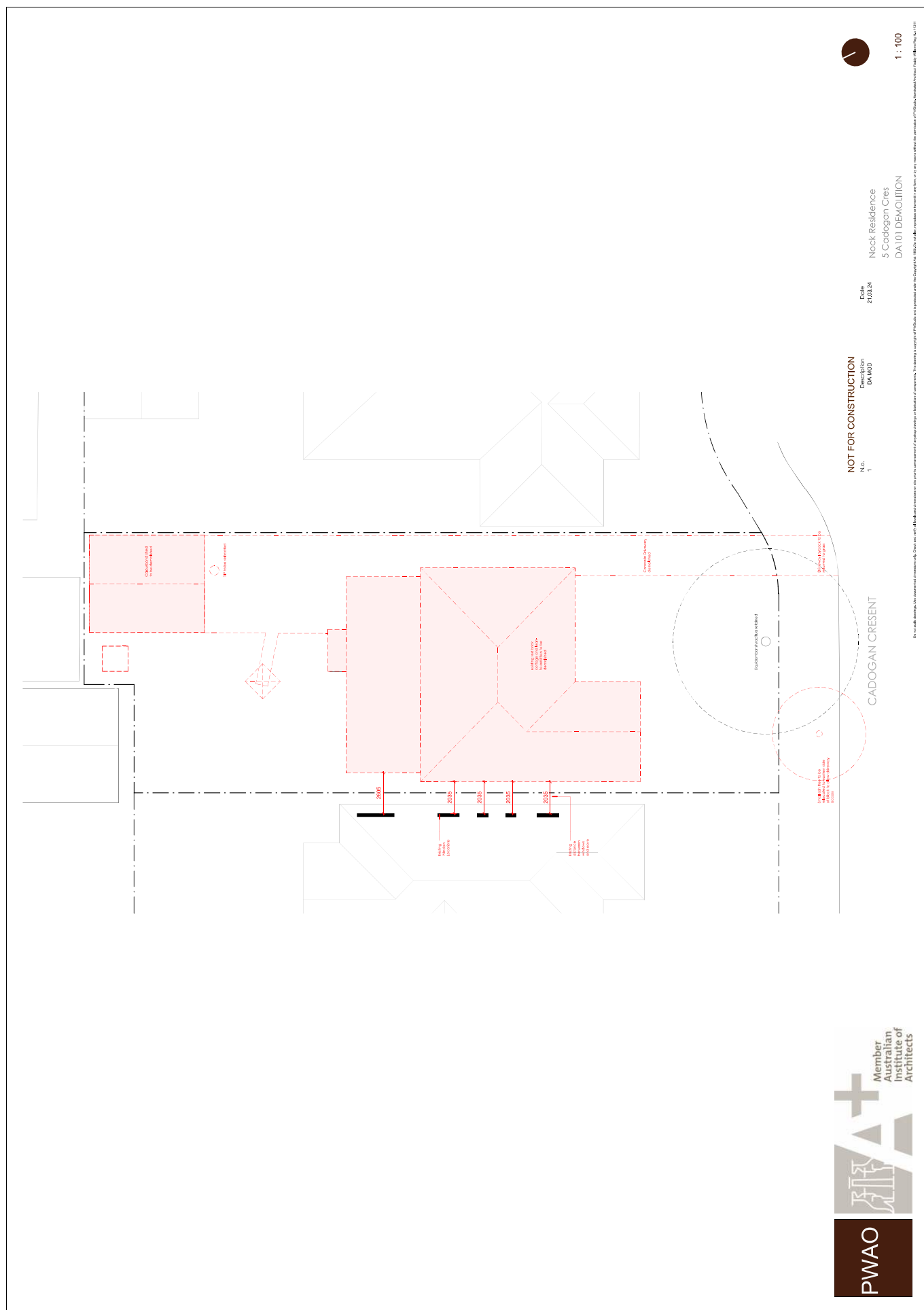


PWAO



Member
Australian
Institute of
Architects

This is a preliminary plan and is not intended for construction. It is provided for information only and is not intended to be used for any other purpose. The applicant must provide a landscape plan with a minimum rating of 4.0 for all of the site's development.



7.7.6 VISUAL BULK & SCALE

As per Orange DCP 2004 single dwellings may cover up to 60% of the site area.

The proposed dwelling covers 40% of the site area.

5 Cadogan Crescent (COMPLIANT)

Total Site Area = 726m²

Built Form = 292m² (40%)

Open Space | Courtyards = 394m² (60%)

3 Cadogan Crescent

Total Site Area = 714m²

Built Form = 299m² (42%)

Open Space | Courtyards = 415m² (58%)

4 Cadogan Crescent

Total Site Area = 891m²

Built Form = 362m² (41%)

Open Space | Courtyards = 529m² (59%)

6 Cadogan Crescent

Total Site Area = 605m²

Built Form = 289m² (48%)

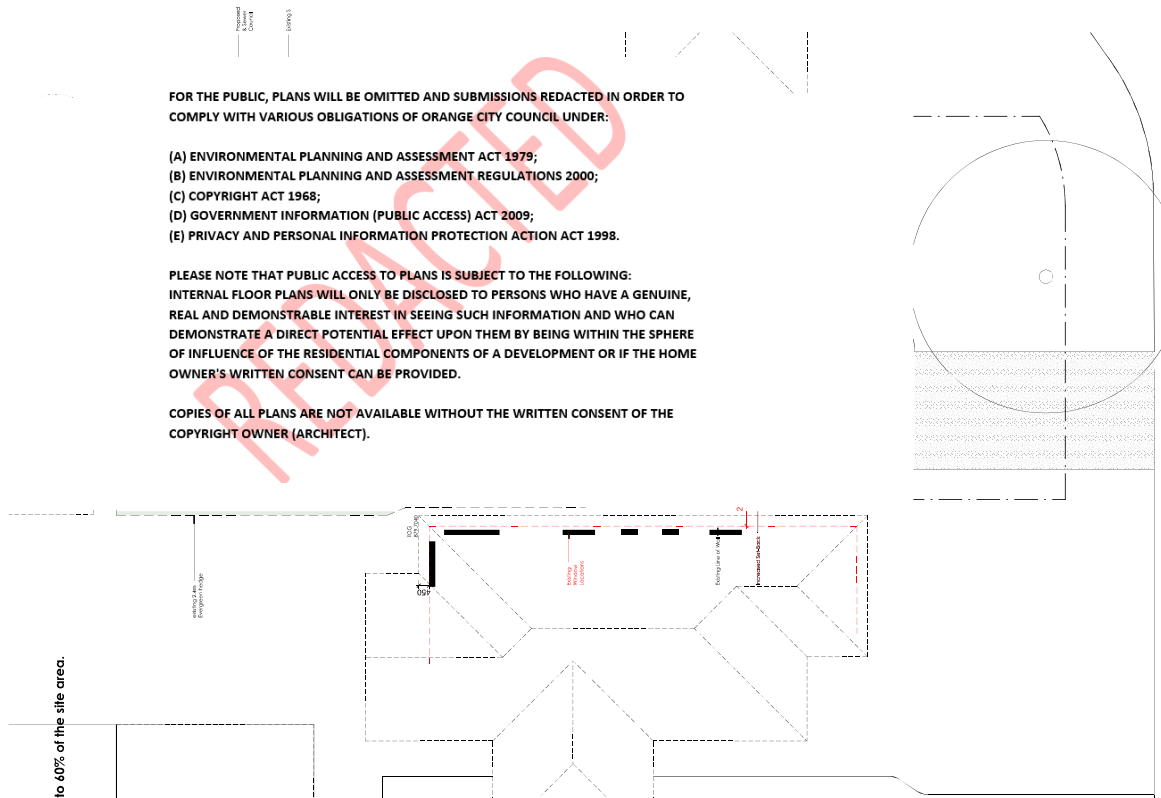
Open Space | Courtyards = 316m² (52%)

FOR THE PUBLIC, PLANS WILL BE OMITTED AND SUBMISSIONS REDACTED IN ORDER TO COMPLY WITH VARIOUS OBLIGATIONS OF ORANGE CITY COUNCIL UNDER:

- (A) ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979;
- (B) ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATIONS 2000;
- (C) COPYRIGHT ACT 1968;
- (D) GOVERNMENT INFORMATION (PUBLIC ACCESS) ACT 2009;
- (E) PRIVACY AND PERSONAL INFORMATION PROTECTION ACT 1998.

PLEASE NOTE THAT PUBLIC ACCESS TO PLANS IS SUBJECT TO THE FOLLOWING:
INTERNAL FLOOR PLANS WILL ONLY BE DISCLOSED TO PERSONS WHO HAVE A GENUINE, REAL AND DEMONSTRABLE INTEREST IN SEEING SUCH INFORMATION AND WHO CAN DEMONSTRATE A DIRECT POTENTIAL EFFECT UPON THEM BY BEING WITHIN THE SPHERE OF INFLUENCE OF THE RESIDENTIAL COMPONENTS OF A DEVELOPMENT OR IF THE HOME OWNER'S WRITTEN CONSENT CAN BE PROVIDED.

COPIES OF ALL PLANS ARE NOT AVAILABLE WITHOUT THE WRITTEN CONSENT OF THE COPYRIGHT OWNER (ARCHITECT).



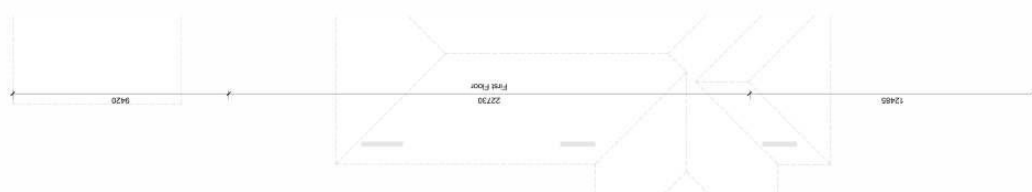
BA (DECI)
386

NOT FOR CONSTRUCTION
Description
DA200
N.O.
1

Nock Residence
5 Cadogan Cres
DA200 GROUND FLOOR PLAN

Date
21.03.24

1 : 100

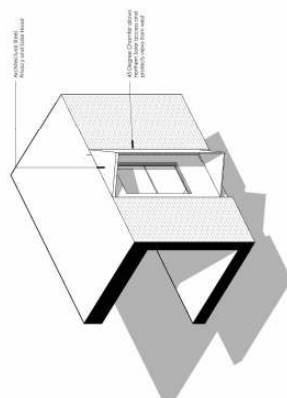


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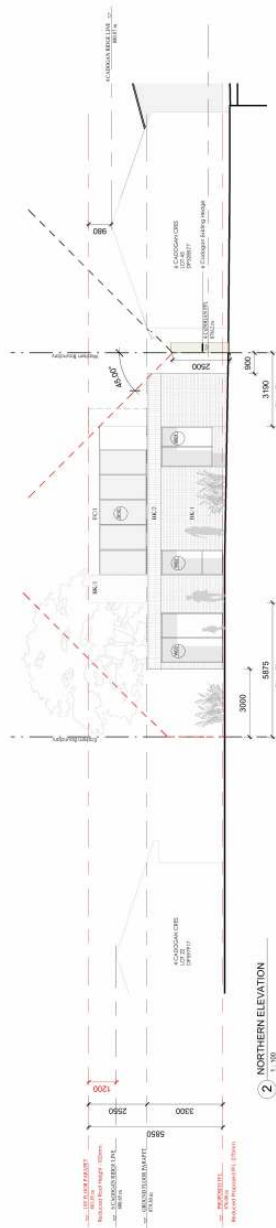
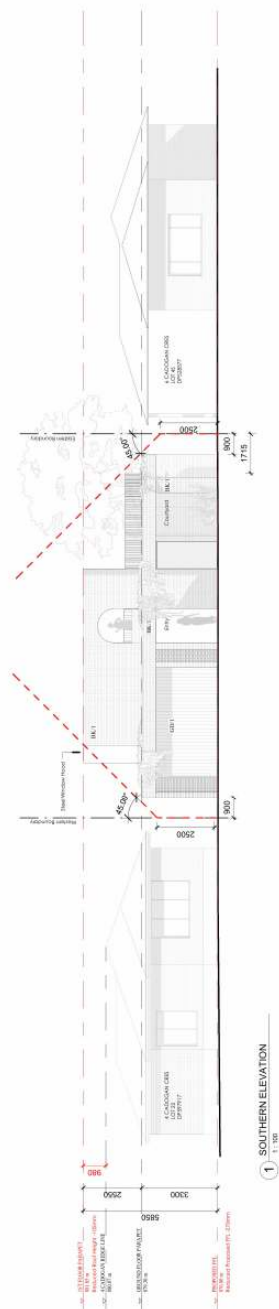


TYPICAL WINDOW HOOD DETAIL



NOT FOR CONSTRUCTION
N.O.
1
Description
DA 1000
Date
21.03.24
Nock Residence
5 Cadogan Cres
DA201 FIRST FLOOR PLAN
1 : 100

This is a preliminary drawing. It is not to be used for construction or for any other purpose without the written consent of the architect. The architect is not responsible for any errors or omissions in this drawing. The architect is not responsible for any errors or omissions in this drawing. The architect is not responsible for any errors or omissions in this drawing.



NOT FOR CONSTRUCTION
N.O.
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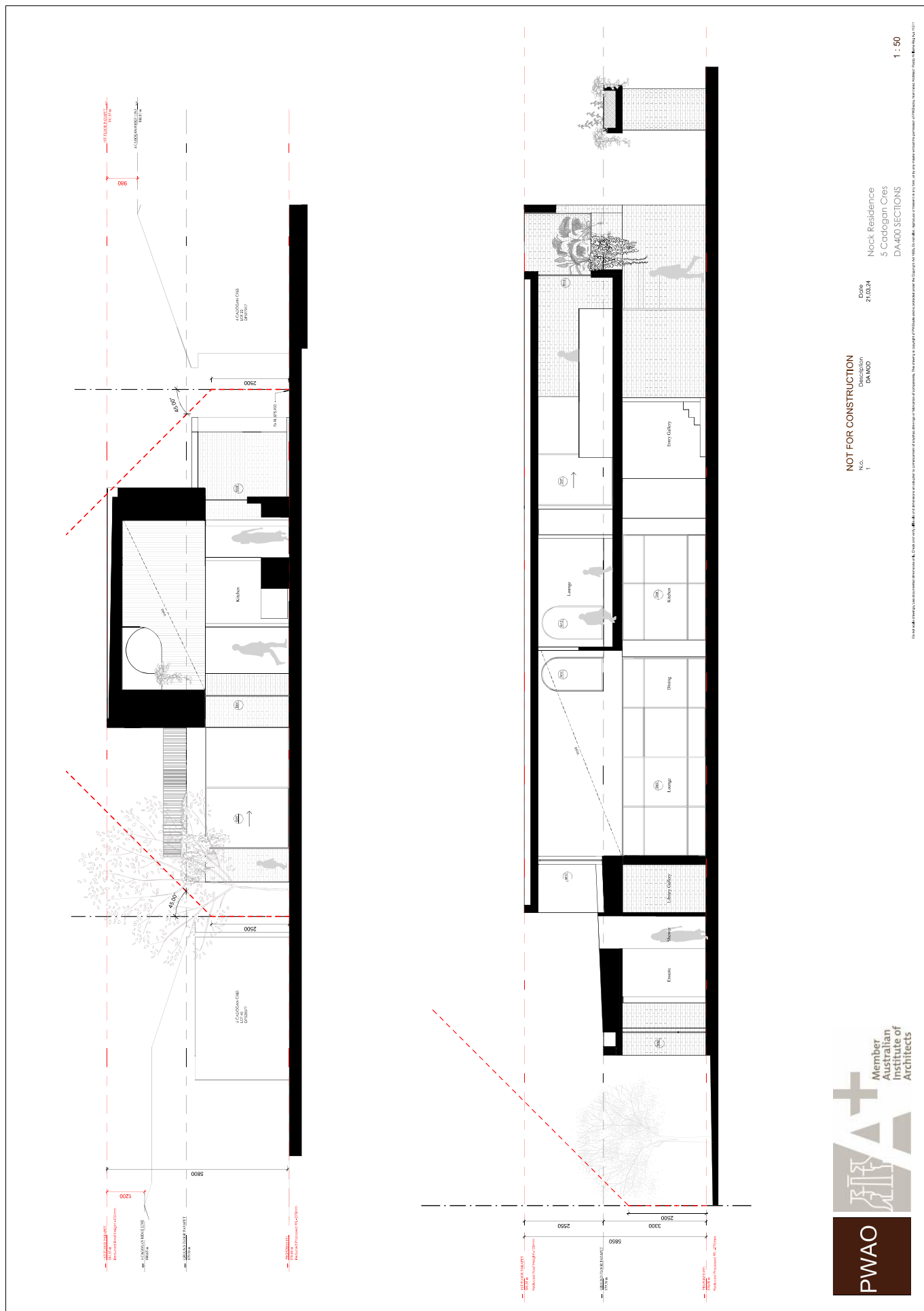
Date
21.03.24

Decision
DA1000

Nock Residence
5 Codogan Cres
DA300 ELEVATIONS
1:100



1 : 100



- 85% OF MAIN PRIVATE OPEN SPACE IS UNAFFECTED
- FOR 6 HRS
- MAX 14.31% IS AFFECTED FOR 2.5HRS



• 100% OF NORTHERN FACING WINDOWS RECEIVE MINIMUM 5 HRS OF SUNLIGHT ON 21ST JUNE



NOT FOR CONSTRUCTION

As indicated

Submissions received during the first exhibition period

Submission 1

28th September 2019

Orange NSW 2800

ORANGE CITY COUNCIL
Orange City Council
Byng Street
Orange NSW 2800

council@orange.nsw.gov.au

To whom it may concern,

**RE: Objections regarding 5 CADOGAN CRES, ORANGE
DA 266/2023(1) - PAN-356373**

We are residents near to the proposed development of 5 Cadogan Cres, and have reviewed the DA Application DA 266/2023(1) - PAN-356373. We have objections with this development application, which we urge you to consider.

Overshadowing to immediate neighbours

The development has a significant footprint on the property area, extending the full length and width of the property. As a two story structure, it is creating significant overshadowing on both single story neighbours on each side, in particular during winter periods when the need for sunshine is paramount. The documents provided by the owner has even demonstrated that overshadowing. See below.



Concerns regarding the owner keeping to guidelines and restrictions

The owner of this development, David Nock, has previously developed in our area, and not shown to be collaborative or sensitive towards his immediate neighbours. As the owner and developer of the

Byng Street Hotel, he installed a treated pine fence on the boundary of his development and the home of his neighbour of 60 Byng Street, Orange. The consent conditions instructed Mr Nock to install a hardwood fence.

I have attached a copy of the Central Western Daily which outlined that difficult period in the development of the hotel. As neighbours, we recall the absolute distress and anxiety this caused, completely unnecessarily.

We ask that Orange City Council closely monitor this development so the owner complies with all requirements.

Yours sincerely,

☰

Q


NEWS

>

COUNCIL






Central
Western
Daily


Council firm on consent conditions for Byng Street hotel



By Danielle Cetinski
Updated September 7 2018 - 11:25am, first published August 18 2018 - 1:58pm

0 Comments





SOON TO BE REPLACED: The fence on the boundary of 60 and 62 Byng Street was certified as being made of hardwood despite being treated pine. Orange City Council has ordered that it be replaced. Photo: JUDE KEOGH 0817kfence2

A COMPLAINT will be lodged against a private certifier after giving a treated pine fence the green light when it was supposed to be built of hardwood.

On Tuesday night, Orange City Council considered changes to the boutique hotel under construction at 62 Byng Street, including the removal of eight balconies.

ADVERTISEMENT

Ad

However, most of the attention was focused on a fence on the boundary of 60 Byng Street, which the NSW Land and Environment Court specified should be hardwood.


The plans submitted with the construction certificate were instead for treated pine.

VIDEO: The fence in question ...

NockFence

Watch later

Share



Watch on YouTube

Development services director David Waddell told councillors the certifier's role was to ensure projects were built in line with conditions.

"The private certifier has decided this [treated pine] was acceptable until raised – in this case, he must have satisfied himself that such a change was okay," he said.

Orange Cit

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Orange City
26 Septemb

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Despite successful negotiations between Denoc Holdings director David Nock and neighbour Ernest Shave, councillors decided to keep the hardwood requirement, meaning Mr Nock would have to remove the treated pine fence.

READ MORE: [Byng Street hotel seeks to remove balconies](#)

Deputy mayor Joanne McRae said it was important to uphold consent conditions, especially when they were ordered by the court.

"If we allow this sort of change and make it alright later on, we're going to make a rod for our own back," she said.

Councillor Kevin Duffy asked to lodge a complaint with the Building Professionals Board about the way the construction certificate was issued.

Mr Nock said the switch was a mistake and he first became aware after a complaint from his neighbour.

READ MORE: [Court gives hotel the green light](#)

He said he would speak to the council again with the hope of reversing the decision on hardwood, "before we destroy a \$20,000 fence".

"It's surprising that councillors want to do that, it wasn't deliberate," he said.

"We don't have control over [the private certifier] at all."

The heritage-listed Yallungah mansion will soon provide 22 rooms.

Submission 2

28/9/2023

ORANGE NSW 2800

Development Services
Orange City Council
Civic Centre
135 Byng Street
ORANGE NSW 2800

Dear Sir/Madam

Re: DA 266/2023(1) – PAN-356373
5 Cadogan Crescent, Orange
7th September 2023

We write regarding the Development Application for 5 Cadogan Crescent, Orange.

It is hard to envisage how the proposed development we have seen on the Application fits in and respects the existing streetscape from the pictures we have been given.

The Development Application does not refer to consideration of access to the Crescent during the demolition and construction periods including any plans to mitigate difficulties during these phases. Difficulties identified relate to both foot access and vehicle access, and for both residents and their visitors, and include parking.

Factors include:

- There are no footpaths within the cul-de-sac. The uneven nature of the grass is not suitable for the elderly or for prams. We take daily walks for exercise, including the use of a walker. We are also visited by grandchildren, who use prams. Access is currently via the roadway.
- Footpath access is not possible, even on the grass, on either side of the entrance for the length of the houses with frontage to Byng Street due to vegetation.
- The cul-de-sac has limited street parking.
- The narrow nature of the cul-de-sac does not allow for parking on both sides of the street, especially large vehicles with wide trailers, which are the vehicle of choice for tradespeople. If two large vehicles were parked across from each other it would not be possible to pass between these vehicles.
- It has been noted on many occasions the difficulties already encountered by the garbage trucks.

- Access for emergency vehicles.
- The difficulty in backing out of our driveway when a large vehicle is parked opposite. We have, in the past, spoken with neighbours regarding this difficulty. We note that this will be resolved by the new positioning of the driveway following completion of this build.

Possible resolution could include:

- Tradespeople to park on Byng Street
- Residents notified in advance when access will be limited such as truck access during the demolition phase, delivery days and concrete pouring days. It is noted that access may still be necessary for any appointments (such as medical appointments which are often made well in advance and not able to be changed to suit a construction timetable).

We anticipate that demolition and construction will be a lengthy time period.

We would be grateful if Council and the developer could provide clarification on how access will be addressed and managed including days on which access will be limited.

Kind regards

Submission 3**DA 266/2023(1)-PAN356373** 5 Cadogan Crescent

Orange NSW 2800

27 September 2023

Chief Executive Officer

Orange City Council

PO Box 35

Orange NSW 2800

Dear Sir,

Regarding the demolition and rebuilding of a dwelling at 5 Cadogan Crescent, there are several issues in relation to the lodged Development Application and Statement of Environmental Effects that we do have serious and genuine concerns about.

The Development Application does not show-

- A Visual Bulk Envelope (VBE)
- Calculations on solar aspect (missing and not addressed)
- Insufficient measurements on the plans to accurately assess where the building and windows lie in relation to our property.
- Elevation plans do not show proximity to adjoining buildings. The garage wall on boundary line is higher than and approximately 600mm away from adjoining eave.
- Lack of detail of general plan of house, room layout, doors etc.
- May breach existing caveats.
- Working times on site.

Trees and Vegetation

The ash tree to be removed to allow for the driveway to be relocated appears to be on the verge, outside the boundary of 5 Cadogan Crescent. There are several ash trees in the street, quite evenly spaced that appear to be part of a planned streetscape and add to the general appeal of the street.

Statement of Environmental Effects

Part 2 Clause 6

4.5 Height of Buildings (b) *to protect the amenity of neighbouring properties and public places, with particular regard to visual bulk, scale, overshadowing, privacy and views.*

1. No VBE has been provided

2. We will be significantly affected by overshadowing in our main living area and backyard. One of the reasons for purchasing this property was because of the abundance of sunlight in the main northeast facing living room and north facing back yard and the winter warmth that this provides to the whole house. The addition of a second storey that extends to the north well beyond the northern walls of our dwelling appears to be the main problem, however without proper plans it is difficult to assess the impact of the ground floor design.

3. We ask the council to reassess the prospective shadowing to our property including existing shadowing and allowing for height of fill.

4 There is a fall of approximately 550mm from the front to the rear of the proposed construction. This will affect the height of the building, shading calculations and VBE.

5. There are four second storey windows that face our property and will overlook a bedroom, bathrooms, toilet and main living room and primary outdoor area.

6.The eastern boundary of our property is a narrow area that already receives little sunlight. The second storey addition and the garage being against the boundary will exacerbate this issue with potential for a damp mouldy area that will affect both properties. The proposed gap between buildings is only around 600mm. and there is a lack of acknowledgement in the submitted plans of the windows alongside the proposed garage wall built on the boundary line.

7. Without adequate dimensions provided it appears that the ground floor parapet alignment will be above that of the neighbouring properties.

4.5 Floor Space Ratio (a) *to ensure the scale and bulk of development does not have an unacceptable or adverse impact on streetscape and the character of the area in which the development is located.*

1. The footprint and scale of the development is much larger than other properties in Cadogan Crescent and completely out of character for the area.

2. It will have an impact on sunlight and will adversely overshadow neighbouring properties as outlined previously.

7.1Earthworks (a) & (e)

Apparent lack of site inspection before drawing up plans and submission of development application. i.e., section 7.1 pp. 11/12 (a) & (e). There is a fall of approximately 550mm from front to back of proposed development that will require fill and will affect the shade calculations and VBE and impact drainage patterns.

Part 7

7.7 Design Elements for Residential Development

Streetscape 1. *To ensure that the development fits into its setting and environmental features of the locality*

It is not considerate of neighbouring properties, it has a much larger footprint, height and scale and does not fit with character of other properties in the street.

7. to provide consistent design elements that protect private investment

This development will significantly devalue our property due to the overshadowing effects, loss of privacy, loss of views and severely decreased morning sunlight to our living areas.

7.7-1 Neighbourhood Character

The ambience of the area does not allow for a flat roof.

Unsympathetic to the existing character of the street.

There are no other two storey houses in Cadogan Crescent.

May breach existing caveats.

7.7-2 Building Appearance 1. *The building design, detailing and finishes relate to the desired neighborhood character, complement the residential scale of the area and add visual interest to the street.*

The addition of a second storey does not complement the bulk and scale of the area. There are no other two-storey buildings in Cadogan Crescent, and it is out of step with the general ambience of the street and the desires of most residents.

7.7 Bulk and Scale 2. *To allow adequate daylight, sunlight and ventilation to living areas and private open spaces of new and neighbouring developments*

As previously outlined, the second storey will adversely impact our property in all these areas. Although the second storey is set back, it extends well past the rear of our house and will have a significant impact on our outlook.

The views from our main living room windows to the north and east will be completely blocked.

Elevation plans do not show proximity to adjoining buildings. The garage wall on boundary line is higher than and approximately 600mm away from adjoining house.

7.7-7 Walls and Boundaries *1. Building to the boundary is undertaken to provide for efficient use of the site, taking into account the access to daylight reaching adjoining properties.*

The location of the garage on the boundary will block the sunlight to the immediately adjacent bedroom and bathroom windows and exacerbate the shade along the eastern aspect of our property, as previously outlined. The application incorrectly states that there are no windows against this wall and is alongside two bedrooms, likely to cause disturbance to residents.

Garage will completely overshadow adjoining bedroom and bathroom windows and be approximately 600mm from 4 Cadogan Crescent eave and will severely limit ventilation between properties.

7.7-8 Daylight and Sunlight

Daylight to habitable rooms in our dwelling will be significantly reduced.

Overshadowing of our back yard and main living area will be significantly increased.

7.7-10 Visual Privacy

The second storey windows on the western boundary will overlook windows onto our bedrooms, both bathrooms, toilet and main living area and main outdoor area. We do not believe that the proposed window hoods will mitigate this issue.

7.7-11 Acoustic Privacy

The proposed garage will be adjacent to our main and second bedrooms, we have noise concerns regarding this.

No room layout is provided in this DA, therefore there is no indication as to where the living areas are in relation to our property.

Conclusion

We would suggest the solution is to limit this development to a single storey with reasonable scale in relation to the street, with eave height comparable to adjacent dwellings.

Yours faithfully,

Submission 4

Orange

NSW 2800

2 October 2023

Mr David Waddell

Chief Executive Officer

Orange City Council

135 Byng Street

Orange NSW 2800

Dear Sir,

Development Application DA 266/2023(1)**Lot 22 DP 587007- 5 Cadogan Crescent Orange****Demolition of Existing House & Shed; Erection of a New Dwelling**

I am writing in response to your letter D23/67223 (PAN- 356373) dated 7 September 2023. The property is owned by me and lived in by my . Located two properties to the east of the proposed development at 5 Cadogan Crescent. We are not opposed to sympathetic development in the street, such as the development previously undertaken at 4 Cadogan Crescent which enhances the street, however the current proposal will diminish the streetscape and the general amenity of the Crescent.

Neighbourhood Character and Appearance

The current ambience of the street is single storey houses of brick and brick veneer constructed in the 1960s and 70s and in accordance with the Deeds issued by Hedley and Jeanette Taylor when they undertook the subdivision of this street. The proposal is not in keeping with the other buildings in the Crescent and the general ambience of the Crescent. The proposed construction is of a curved design (maybe modern art deco in concept) that is not replicated in this Crescent or in the immediate vicinity so it is out of character within this Conservation Area. We do not believe the Proposal complements and enhances the neighbourhood character as required by Section 7.7-1 of the Orange DCP or the Appearance under 7.7-2. The internal Courtyards do not in any way add to the neighbourhood character and appearance and do not add to open space generally.

Height

This area is not designated under Orange Councils LEP as being suitable for development over 6 metres . Although the Plans indicate a height of under 6 metres there is a fall on this side of Cadogan from the front of the block to the rear of about 0.6m to 0.75m so if that is added to the 5.955m that would exceed the 6 metres which without consent is only permitted in the more central areas of

Orange. The proponent has specifically stated on page 8 of the Heritage Impact statement that the floor levels of the existing building will be preserved. Hence under the LEP Section 7.1 Earthworks due to this fall some extensive earthworks may be required to level the site. It is suggested that the 5.955 m has not been measured using the existing floor level as a reference.

Tree Removal

The removal of the ash tree on the Council nature strip could be avoided by constructing the garage on the eastern side of the proposed Development and utilising part of the existing driveway. In some circumstances the removal of trees is necessary. However Orange Council and its residents have made Orange the City it is by judicious tree planting along its streets and in implementing the Spackman Mossop Master Tree plan of July 2012. In this instance the removal of this tree can be avoided.

Visual Bulk and Shadowing

The proposed new house will extend over approximately 36 metres of the blocks length of 44.635 metres. The set back from the street is 8.6 metres at the front which is just about all of the open space garden. Although there are interposed walled courtyards these only extend less than a third of the way across the block and the rear terrace is interposed at the rear. One of the great benefits of living in Cadogan Crescent and other streets in Orange is access and use of backyards that allow mostly uninterrupted views of the skyline and trees in neighbouring backyards which in Oranges winters is appreciated by residents on both sunny and overcast days. These allow children and residents to relax, garden and play at the rear of their houses.

The concern is the bulk of this development and, although it is broken up with walled courtyards, it extends over almost the entire block. The only open garden area is fronting Cadogan Crescent with a set back of 8.6 metres. The Northern Terrace is also of masonry construction and is on the top floor. Using the scale on the plans the top storey plus terrace extends to within 4 metres of the northern boundary on the eastern side and within 1.8 metres of the back(northern) boundary on the western side. This is not in keeping with the other properties in Cadogan Crescent with medium to large backyards. Hence In accordance with Section 4.5 (Floor space) of the LEP this building will have an adverse impact on the street and character of the area in which it is being constructed principally due to its bulk. This is also dealt with in 7.7-6 of the DCP and the buildings visual bulk.

Although the proponent claims 50% of the site is open space this is only achievable by three walled courtyards: entrance courtyard, Eastern Courtyard and Western Courtyard. The eastern and western courtyards are bounded on the non-walled side by a fence with the material not specified. In itself the character of the other properties in the street is open space at the rear of the properties not internally walled within the building envelope.

The Proponent states in response to 7.7 of the DCP "has no adverse effects on overshadowing" when clearly the proponents own architectural plans indicate the property does impact on at least Nos 4 and 6 Cadogan Crescent. The shadow plans do not include the effect of the terrace screening referred to in response to 7.7-10 Privacy.

Views

From the perspective of Cadogan when looking west from our rear room and from our northern garden area we will see the bulk of this development which will obscure the trees and sky to the west. Although the proponents shadow diagrams only indicate the property bulk will impose shadows over numbers 4 and 6 Cadogan Crescent we would be interested to see the Council's Visual

Bulk Envelope (VBE) diagrams/displays to understand the more substantive effect of this development on surrounding properties. The proponent's response to Section 7.7-9 of the DCP states there will be no impact on views. The views of the sky and surrounding trees will be significantly impacted due to the bulk of this property and the extent that it extends into the backyard area of the existing house at 5 Cadogan Crescent.

Layout

The proponent has stated this will be a 4 bedroom, 3 bathroom house and in various places states the sleeping areas have been separated from living spaces such as in Section 7.7-11 of the DCP. It is further stated that "All habitable rooms are provided with windows that face private open space, courtyard, verandah, patio or the like".

However no layout plan identifying the size and use of each room of the house ground floor and top storey has been provided so the veracity of these statements and similar statements cannot be verified.

Visual Privacy

Section 7.7-10 of the DCP deals with Visual Privacy. There appears to be at least one window on the second floor facing east that would allow line of sight to numbers 6 & 7 of Cadogan Crescent and views into their back yards and possibly into the back room and sunroom of No 6. It is noted the proponent is proposing hoods on the western windows that overlook no 4. The proponent has not explained how these hoods work. Usually window hoods are used to reduce western sun penetration in the afternoon and early evening; not for privacy as someone can still look through and down.

Section 7.7-10 refers to privacy screens on the rear terrace; these are not evident in any of the plans and the material that is to be used in these screens is not identified.

The statement is made in 7.7-10 that no terraces will be within 9 metres of habitable spaces. It is queried whether the back terrace will be within 9 metres of the ground floor habitable areas of Nos 4 and 6 Cadogan Crescent. Using an appropriate scale the edge of the terrace seems to be within 9 metres of both rear north facing habitable areas.

Fencing

The proponent's response to 7.7-5 of the DCP is "Compliant" but there is no reference to the material to be used in the fencing to the north, west and east of property and adjacent to the internal courtyards. This is of interest to residents; is it hardwood paling or something else?

Groundwater and Pool

Section 7.6 of the LEP deals with Groundwater. The proponent makes the statement that tank water will be used "for topping up of pool". The plans do not indicate a pool nor does the Environmental Effects statement. Any Pool should be subject to a DA application which is not evident.

Conclusion

The bulk and size of this development is of major concern to us and to others in this residential and family area of Orange.

My family and I are not opposed to development but believe in this residential area of Orange the development needs to take appropriate cognisance of the character and nature of the area in which the development is being constructed. This proposal :

- a) imposes a development that encompasses the majority of the Lot.
- b) has excessive bulk both length and height causing shadowing and visual loss of amenity.
- c) is not in character with the other buildings in the Crescent.
- d) overlooks backyards to the east and west from the second storey causing Privacy issues.
- e) reduces substantially available open space at the rear of the property.
- f) does not detail the floor layout and the location of the pool to understand the veracity of certain claims.

A well-developed Development Application enhances the character and appearance of the street and adds to the underlying value of surrounding properties and the ambiance of this central residential area of Orange; this DA falls short of these objectives for the reasons stated above.

Please notify me when this Development Application comes before Council as I would like to provide a presentation to Councillors on behalf of concerned residents in Cadogan Crescent.

Yours sincerely

29th September 2023

ORANGE CITY COUNCIL
BYNG STREET
ORANGE NSW 2800

Submission 5

RE DEVELOPMENT APPLICATION DA 266/2023(1)
LOT NO 22 DP-587007 S CADOGAN CRESENT

I

WISH TO EXPRESS MY FEELINGS
RE A TWO STORY HOUSE BEING
BUILT IN OUR STREET. I STRONGLY
DISAGREE WITH A TWO STORY
BUILDING GOING AHEAD IN CADOGAN
CRESENT, THINKING IT IS TOTALLY
OUT OF PLACE IN THIS STREET
AS ALL OTHER BUILDINGS ARE
IN ORDER WITH OUR AREA AND
THIS TYPE OF HOUSE WOULD BE
RIGHT OUT OF ORDER.
HOPING PLANNING CAN SEE WHERE
I AM COMING FROM.

Submission 6

Orange N.S.W 2800
1st October 2023

Mr. David Waddell
Chief Executive Officer
Orange City Council, 135 Byng St.
Orange N.S.W. 2800

Dear Sir

Re Development Application DA 266/2023 (i)
Lot 22 DP 527007 - 5 Gadogan Crescent Orange.

Demolition of existing house and shed;
Erection of a New Dwelling.

We are writing in response to your letter
D23/67223 (PAN-356373) dated 7th September 2023

We are

the residents of

Our concern is that the new dwelling
while attractive, is a modern style not in
keeping with the homes in the area of our street.

Despite statements that homes adjacent
will not be overshadowed, we believe that

-2-

the height and depth (along the block) will overshadow our home, depriving us of valuable sunshine, light and warmth in our living area. If this were to occur devaluation of our property would result.

More information would be helpful in regard to this matter.

Yours sincerely

P.S. Our street (Cadogan Crescent) is a time capsule of the 1970's era in my opinion, and worthy of preserving as such (in my opinion)

Submission 7

Orange NSW 2800

2nd October 2023

Mr Mark Hodges,
Director Development Services
Orange City Council
PO Box 35
Orange NSW 2800
BY HAND

Your ref: D23/69651
PAN-356373

Dear Sir,
Re: Development Application DA 266/2023(1)
5 Cadogan Crescent Orange

I am writing to confirm my objection to the above application for erection of a two storey building as proposed within the above application.

The building will remove privacy and visual amenity from surrounding neighbours and is not consistent with the immediate neighbourhood. It will also increase traffic and introduce a rotation of visitors into what is a quiet and

(2)

safe street occupied and used by older people.

Retention of reasonable privacy and safety for residents requires rejection of this building.

I authorise my ^{to speak} further and to be a contact upon my behalf in this matter.

Yours faithfully,

Submission 8

Mr M Hodges
Orange City Council
By Hand

Your ref: D/23/69651, PAN-356373

Re: DA 266/2023(1) Lot 22, DP 587007 – 5 Cadogan Crescent, Orange

I am writing to confirm my opposition to the construction of a two storey building at 5 Cadogan Crescent, Orange.

The immediate surrounding area comprises single storey residential homes occupied by their owners.

The proposed development would significantly and adversely affect the privacy of neighbours, would invite commercial activity in a residential area, and would also involve increased traffic.

I authorise my son, [REDACTED] to engage in this matter upon my behalf.

Kind regards

Submissions received during the second exhibition period

Submission 1

To

30-1-2024

Mr. David Waddell

Chief Executive Officer, Orange City Council.

Dear Sir,

This letter is from

- residents of

Crescent Orange, to restate our worries regarding the demolition and, as we were notified, there will be a new house built next to us at 5 Cadogan Crescent.

We have been shown plans for this new building and did state our objections at that time. It is not in keeping with our 1970's style crescent.

We are also concerned about the upper storey of the building that may invade our privacy + perhaps overshadow us.

Yours sincerely.

D24/2226

Submission 2

PAN-356373 5 Cadogan Crescent

31 January 2024

Chief Executive Officer

Orange City Council

PO Box 35

Orange NSW 2800

Dear Sir,

Regarding the demolition and rebuilding of a dwelling at 5 Cadogan Crescent, there are several issues in relation to the lodged Development Application and Statement of Environmental Effects that we continue have serious and genuine concerns about. Despite efforts to mediate made to date and the minor alterations made to the proposal, most of our concerns have not been addressed.

The Development Application does not show-

- Clear measurements of proposed development and surrounds
- An accurate Visual Bulk Envelope (VBE)
- Calculations on solar aspect (missing and not addressed)
- Clear measurements on the plans to accurately assess where the building and windows lie in relation to other properties.
- Plans do not clearly show proximity to adjoining buildings.
- Any fixed reference point for elevation plans

Plans submitted omit dimensions of the proposed building in some plans and elevations making it difficult to determine the actual length of the second story, a particular concern regarding the miscalculated VBE.

Statement of Environmental Effects**Part 2 Clause 6**

4.5 Height of Buildings (b) *to protect the amenity of neighbouring properties and public places, with particular regard to visual bulk, scale, overshadowing, privacy and views.*

1. We will be significantly affected by overshadowing in our main living area and backyard. One of the reasons for purchasing this property was because of the abundance of sunlight in the main northeast facing living room and north facing back yard and the winter warmth that this provides to the whole house. Our eastern windows are the main source of early morning sun, with our northern windows shaded by existing structures. We have been told to expect the sun to appear around 10:30AM on the winter solstice. The addition of a second storey that extends to the north well beyond the northern walls of our dwelling appears to be the main problem. It is difficult to assess the impact of the ground floor without knowing the fill height.

2. The designers have stated to us several times that the building sits well within the desired VBE, however at the stated height of 5850mm with a stated setback of 3190mm of the top parapet the envelope would start at a height of 2660mm (not 2500mm) plus whatever level of fill needs to be added. This would appear to be a mistake in the submission.

3. We have concerns regarding the accuracy of the shadow diagram provided and we ask the council to reassess the prospective shadowing to our property including existing shadowing and allowing for height of fill and actual base level.

4 There is a fall of approximately 550mm from the front to the rear of the proposed construction. This will affect the height of the building, shading calculations and VBE. No reference point has been provided in relation to the building elevations.

5. There are four second storey windows that face our property and will overlook a bedroom, bathrooms, toilet and main living room and primary outdoor area.

7. Without adequate dimensions provided it appears that the ground floor parapet alignment will be above that of the neighboring properties.

4.5 Floor Space Ratio (a) *to ensure the scale and bulk of development does not have an unacceptable or adverse impact on streetscape and the character of the area in which the development is located.*

1. The footprint and scale of the development is much larger than other properties in Cadogan Crescent, essentially consuming the entire block except the front setback and two enclosed courtyards. There is no indication of the type or height of the proposed screening of the indicated private open space. This development is completely out of the existing character of the area and would appear to contravene the local Development Control Plan. The eastern elevation presents a solid brick wall from the end of Cadogan Crescent. If approved all future development in Cadogan Crescent would be able to be of a similar nature by precedent.

2. It will have an impact on sunlight and will adversely overshadow neighbouring properties as outlined previously.

7.1 Earthworks (a) & (e)

There is a fall of approximately 550mm from front to back of proposed development that will require fill and will affect the shade calculations and VBE and impact drainage patterns.

Part 7**7.7 Design Elements for Residential Development**

Streetscape 1. *To ensure that the development fits into its setting and environmental features of the locality*

It is not considerate of neighbouring properties, it has a much larger footprint, height and scale and does not fit with the character of other properties in the street.

When viewed from the eastern end of Cadogan Crescent the design presents as a monolithic brick wall completely out of character for the relaxed cul-de-sac (see artists impression in architects design).

7. to provide consistent design elements that protect private investment

This development will significantly devalue our property due to the overshadowing effects, loss of privacy, loss of local ambience, loss of views and severely decreased morning sunlight to our living areas.

7.7-1 Neighborhood Character

Unsympathetic to the existing character of the street.

There are no other two storey houses in Cadogan Crescent.

This would set a precedent for more intensive development of Cadogan Crescent.

7.7-2 Building Appearance 1. *The building design, detailing and finishes relate to the desired neighborhood character, complement the residential scale of the area and add visual interest to the street.*

The addition of a second storey does not complement the bulk and scale of the area. There are no other two-storey buildings in Cadogan Crescent, and it is out of step with the general ambience of the street and the desires of most residents. The proposed building does not offer any more bedrooms than the existing single level house.

7.7 Bulk and Scale 2. *To allow adequate daylight, sunlight and ventilation to living areas and private open spaces of new and neighbouring developments*

As previously outlined, the building extending all the way to the rear fence will adversely impact our property in all these areas. Although the second storey is set back, it extends well past the rear of our house and will have a significant impact on our outlook.

The views from our main living room windows to the north and east will be completely blocked.

7.7-8 Daylight and Sunlight

Daylight to habitable rooms in our dwelling will be significantly reduced.

Overshadowing of our back yard and main living area will be significantly increased.

Sunlight to proposed western courtyard at 5 Cadogan will be very limited due to existing vegetation (not shown in shadowing diagram).

7.7-10 Visual Privacy

The second storey windows on the western boundary will overlook windows onto our bedrooms, both bathrooms, toilet and main living area and main outdoor area. This was discussed at the mediation meeting, however, there is still no clarification or detail as to how the proposed window hoods will mitigate this issue.

Conclusion

We would suggest the solution is to limit this development to a single storey with reasonable scale in relation to the street, with eave height comparable to adjacent dwellings. It would also be helpful to us to know councils' responsibilities for rectification of any issues that do not comply with stated effects of this development such as shadowing effects.

Yours faithfully,

Submission 3

Orange

NSW 2800

31 January 2024

Mr David Waddell

Chief Executive Officer

Orange City Council

135 Byng Street

Orange NSW 2800

Dear Sir,

Amended Development Application DA 266/2023(1)**Lot 22 DP 587007- 5 Cadogan Crescent Orange****Demolition of Existing House & Shed; Erection of a New Dwelling**

I am writing in response to your letter D24/2226 dated 10 January 2024. I have previously written on 2 October 2023 in respect to Orange Council's letter D23/67223 (PAN- 356373) dated 7 September 2023. For completeness this is a complete submission including relevant sections that still apply from my 2 October 23 submission.

The property Cadogan Crescent is owned by me and lived in by my and Located properties to the east of the proposed development at 5 Cadogan Crescent. We are not opposed to sympathetic development in the street, such as the development previously undertaken at 4 Cadogan Crescent which enhances the street, however the current proposal will diminish the streetscape and the general amenity of the Crescent. It is not sympathetic to the character and ambiance of the street.

Neighbourhood Character and Appearance

The current ambiance of the street is single storey houses of brick and brick veneer with gable rooves constructed in the 1960s and 70s and in accordance with the Deeds issued by Hedley and Jeanette Taylor when they undertook the subdivision of this street. The proposal is not in keeping with the other buildings in the Crescent and the general ambiance of the Crescent. The proposed construction is of a curved design (maybe modern art deco in concept) and flat roof that is not replicated in this Crescent or in the immediate vicinity, so it is out of character within this Conservation Area. The bulk and density of the development is such that it will dominate the streetscape with its size, bulk and different architectural style. Houses such as nos 2,3,4 ,6 and 7 which have backyards on the north side of the street will see their backyards and vista dominated by this development (nearly 6 metres tall) which extends to nearly the rear fence. Whilst the proponent may say they have met the open

space requirements of Orange's Development Control Plan (DCP) this is through constructing three (3) internal courtyards so that there is a negligible backyard area. The internal Courtyards do not in any way add to the neighbourhood character and appearance and do not add to open space generally as typified by most Orange residences with open backyards. In particular the nature of this development is completely out of character for this street with large backyards that allow children and residents to relax, garden, barbecue and play at the rear of their houses. We do not believe the Proposal complements and enhances the neighbourhood character as required by Section 7.7-1 of the Orange DCP or the Appearance under 7.7-2. The contrary is true in that it degrades and diminishes the neighbourhood character and is completely contrary to the existing character and ambiance of the street.

Height

This area is not designated under Orange Councils LEP as being suitable for development over 6 metres. The Amended plans seek to take account of the fall on this side of Cadogan Crescent from the front of the block to the rear but no reference point for the height calculation is provided so more detail on this issue is required. On the basis of the PWAO plans the development is still 5.850m above ground level. The height of this development at the rear abutting the backyards of 4 and 6 Cadogan Crescent is over imposing and is to accommodate a vaulted ceiling 5.850 metres high above the living and kitchen areas of the proposed development. The over imposing bulk and density of this development over a kitchen and living area not only diminishes the character and ambiance of the backyards of nos 4 and 6 but also for nos 2,3 and 7 Cadogan Crescent as it is directly in their line of sight from their respective backyards.

Tree Relocation

The relocation, rather than removal of the ash tree as originally proposed, is a positive step by the proponent as Orange City Council and its residents have made Orange the City it is by judicious tree planting along its streets and in implementing the Spackman Mossop Master Tree plan of July 2012.

Visual Bulk

In accordance with Section 4.5 (Floor space) of the LEP this building will have an adverse impact on the street and character of the area in which it is being constructed principally due to its bulk.

The proposed new house will extend over approximately 36 metres of the block's length of 44.635 metres. The set back from the street is 8.6 metres at the front which is just about all of the open space garden. Although the proponent claims 50% of the site is open space this is only achievable by three walled courtyards: entrance courtyard, Eastern Courtyard and Western Courtyard. The eastern and western courtyards are bounded on the non-walled side by a fence with the material not specified. In itself the character of the other properties in the street is open space at the rear of the properties not internally walled within the building envelope.

One of the great benefits of living in Cadogan Crescent and other streets in Orange is access and use of backyards that allow mostly uninterrupted views of the skyline and trees in neighbouring backyards which in Oranges winters is appreciated by residents on both sunny and overcast days. These allow children and residents to relax, garden and play at the rear of their houses.

The bulk and density of the development is such that it will dominate the streetscape with its size, bulk and different architectural style. Houses such as nos 2,3,4 ,6 and 7 which have backyards on the north side of the street will see their backyards and vista dominated by this development (nearly 6 metres tall) to accommodate a vaulted ceiling above the living and kitchen areas of the proposed

development. The backyards of Nos 6 and 7 Cadogan will be dominated to the west by the bulk of a 5.850 metre unbroken brick wall (see Views below). This is also dealt with in 7.7-6 of the DCP.

Shadowing

The Proponent states in response to 7.7 of the DCP “has no adverse effects on overshadowing” when clearly the proponents own architectural plans indicate the property does impact on at least Nos 4 and 6 Cadogan Crescent. The proponents shadow diagrams show extensive shadowing for no 4 Cadogan Crescent in the winter solstice at 9am and for No 6 Cadogan Crescent in the winter solstice at 3pm. We would be interested to see the Council’s Visual Bulk Envelope (VBE) diagrams/displays to understand the more substantive effect of this development on surrounding properties.

Views

The proponent’s response to Section 7.7-9 of the DCP states there will be no impact on views. From the perspective of Cadogan when looking west from our rear room and from our northern garden area we will see the bulk of this development which will obscure the trees and sky to the west which we currently see. If this development is allowed the view will be of an unbroken pink brick wall some 6 metres high which will look industrial in nature. Although the second floor is set back when viewed from no this set back will not be evident; it will appear as a solid brick wall.

The development will also affect the current views of the sky and surrounding trees from nos 2,3,4 and 6 Cadogan Crescent

As stated above one of the great benefits of living in Cadogan Crescent and other streets in Orange is access and use of backyards that allow mostly uninterrupted views of the skyline and trees in neighbouring backyards which in Oranges winters is appreciated by residents on both sunny and overcast days.

Layout

The proponent has stated this will be a 4 bedroom, 3 bathroom house and in various places states the sleeping areas have been separated from living spaces such as in Section 7.7-11 of the DCP. It is further stated that “All habitable rooms are provided with windows that face private open space, courtyard, verandah, patio or the like”.

However, no layout plan identifying the size and use of each room of the house ground floor and top storey have been included as part of the DA for Privacy reasons, so the veracity of these statements and similar statements cannot be verified.

Visual Privacy

Section 7.7-10 of the DCP deals with Visual Privacy. There appears to be at least one window on the second floor facing east that would allow line of sight to numbers 6 & 7 of Cadogan Crescent and views into their back yards and possibly into the back room and sunroom of No 6. It is noted the proponent is proposing hoods on the western windows that overlook no 4. The proponent has not explained how these hoods work or what material is to be used in their construction. Usually, window hoods are used to reduce western sun penetration in the afternoon and early evening; not for privacy.

Fencing

The proponent's response to 7.7-5 of the DCP is "Compliant" but there is no reference to the material to be used in the fencing to the north, west and east of property and adjacent to the internal courtyards. This is of interest to residents; is it hardwood paling or something else?

Conclusion

The bulk and size of this development is of major concern to us and to others in this residential and family area of Orange. The development is of a completely different architectural style to existing houses in the street and will completely change the character and ambiance of the street.

My family and I are not opposed to development but believe in this residential area of Orange the development needs to take appropriate cognisance of the character and nature of the area in which the development is being constructed. This proposal:

- a) imposes a development that encompasses the majority of the Lot.
- b) has excessive bulk both length and height causing shadowing and visual loss of amenity.
- c) is not in character with the other buildings in the Crescent; the other residences being single storey brick and brick veneer houses with gable roofs and large open backyards.
- d) reduces visual amenity by reducing sunlight, views of the sky and trees.
- e) Imposes an industrial brick wall some 6 metres in height that will be viewed from the garden of Nos 6 & 7 Cadogan Crescent
- f) overlooks backyards to the east and west from the second storey causing Privacy issues.
- g) reduces substantially available open space at the rear of the property.

A well-developed Development Application enhances the character and appearance of the street and adds to the underlying value of surrounding properties and the ambiance of this central residential area of Orange; this DA falls short of these objectives for the reasons stated above.

Please notify me when this Development Application is to come before Council as I would like to provide a presentation to Councillors on behalf of concerned residents in Cadogan Crescent.

Yours sincerely

Submission 4

31/1/2024

Development Services
Orange City Council
Civic Centre
135 Byng Street
ORANGE NSW 2800

Dear Sir/Madam

Re: DA 266/2023(1) – PAN-356373
5 Cadogan Crescent, Orange

We write regarding the Amended Development Application for 5 Cadogan Crescent, Orange.

Issues of access outlined in our letter dated 25/9/2023 remain outstanding. A site inspection by Council will confirm the narrow nature of the cul-de-sac including no pedestrian access from Byng Street.

The houses in Cadogan Crescent are located in the Central Orange Heritage Area and represent a distinct period in Orange history. To dismiss these houses as being of no value is to provide a precedent across the Heritage area.

The replacement house is a modern, two storey curved house with brickwork of a modern pattern. The houses in the cul-de-sac have straight lines and traditional brickwork. It is very difficult to determine how the replacement is in keeping with the houses in the cul-de-sac.

We would very much appreciate your feedback on how you are going to manage this precedent should this development go ahead as submitted and your feedback for the management of access to the cul-de-sac.

Kind regards

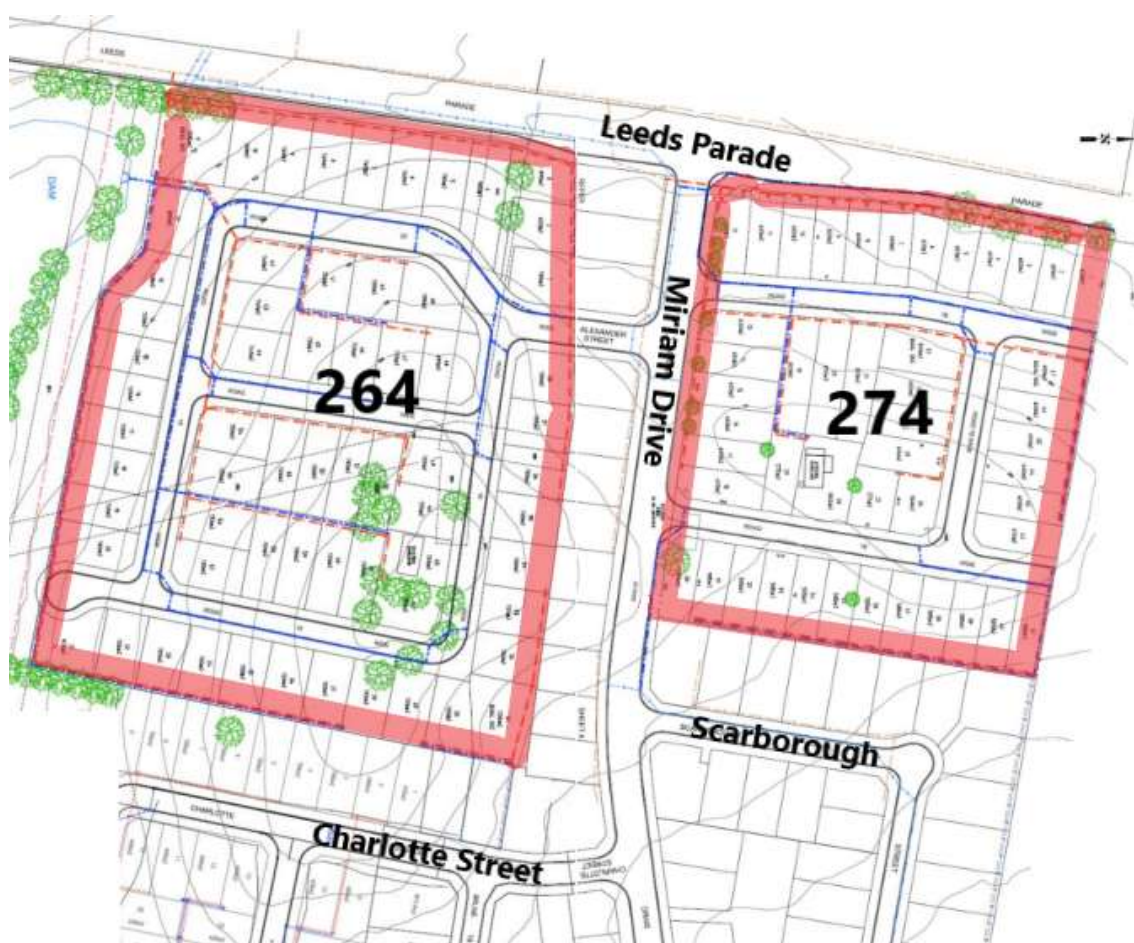
2.3 POST-EXHIBITION - LEP AMENDMENT 34 - REZONING OF 264 - 274 LEEDS PARADE

RECORD NUMBER: 2024/204

AUTHOR: Craig Mortell, Senior Planner

EXECUTIVE SUMMARY

At the 7 March 2023 meeting Council resolved to support a planning proposal in relation to 274 Leeds Parade with the matter forwarded to the NSW Department of Planning and Environment (DPE). Council received a response from the Department of Planning noting that the subject site only included 274 Leeds Parade from the Leeds Parade Candidate Area within the Orange Local Housing Strategy. The Department interpreted the housing strategy as requiring that candidate areas be designed and planned holistically and recommended the proposal include all of the candidate area. Accordingly at the 4 July 2023 PDC meeting Council resolved to include 264 Leeds Parade and resubmit to the gateway process.



Once the proposal was updated in accordance with the Gateway conditions the matter was placed on public exhibition from 18 January 2024 to 16 February 2024. A total of two submissions were received, both expressing concern for the potential loss of existing mature trees.

Internal review has identified the need to revise the draft DCP in relation to 264 Leeds Parade, which may be undertaken as a separate DCP amendment process at a later date.

LINK TO DELIVERY/OPERATIONAL PLAN

The recommendation in this report relates to the Delivery/Operational Plan Strategy “8.1. Plan for growth and development that balances liveability with valuing the local environment”.

FINANCIAL IMPLICATIONS

Nil

POLICY AND GOVERNANCE IMPLICATIONS

Nil

RECOMMENDATION

- 1 That Council authorise the CEO to formally make the plan to rezone the land, adjust the minimum lot size and place the land within an Urban Release Area.**
- 2 That, in relation to 274 Leeds Parade, Council authorise the CEO to formally amend the Orange Development Control Plan 2004 to incorporate the provisions of the exhibited DCP amendment, subject to adjusting the formatting and branding of the Draft DCP to be consistent with DCP 2004.**
- 3 That, in relation to 264 Leeds Parade, Council advise the proponent and landowner that the exhibited DCP is not formally adopted and will require further changes with respect to:**
 - Alignment or relocation of the electricity easements on 264 Leeds Parade, subject to further consultation with Essential Energy, and**
 - Include within the road layout a western connection point to Leeds Parade and an eastern connection point to Lot 4 DP 1301767, to enhance permeability and provide alternative traffic routes that will improve the efficiency of the local road network in this area.**

FURTHER CONSIDERATIONS

Consideration has been given to the recommendation’s impact on Council’s service delivery; image and reputation; political; environmental; health and safety; employees; stakeholders and project management; and no further implications or risks have been identified.

SUPPORTING INFORMATION**Gateway Determination Conditions**

The Gateway Determination was issued on 15 September 2023 and contained 5 conditions that have been addressed or satisfied as follows:

Condition 1

The condition required inclusion of land at 264 Leeds Parade, deletion of superseded zoning references and inclusion of all land being rezoned as an Urban Release Area (URA) on appropriate maps.

Condition 2

Public Exhibition is required for a minimum 20 working days. The proposal was placed on public exhibition from 18 January 2024 through to 16 February 2024. Two submissions were received.

Condition 3

As the proposal does not involve reclassification of public land a public hearing is not required.

Condition 4

Council has plan making functions and must confirm proposal is consistent with Section 9.1 Ministerial Directions.

Condition 5

The condition requires the proposal to be completed by 1 April 2024.

Public Exhibition - Submissions

Two submissions were received from residents in Miriam Drive expressing a concern for the retention of the larger trees.



Image showing locations of tree corridors on the subject land at 264 and 274 Leeds Parade

On 264 Leeds Parade an east-west row of trees lines the driveway to the existing house consisting of a mix of species at different heights. This row is approximately 40m south of the residential lots along Miriam Drive. On 274 Leeds Parade landscaping around the existing house is more centralised with some additional trees inside the southern boundary fronting Miriam Drive and western boundary fronting Leeds Parade.

The concept layout at 264 Leeds Parade indicates a design that would necessitate the removal of most of the east-west corridor of trees. While the mature trees on 274 Leeds Parade are also likely to be removed during subsequent development, albeit with some scope to retain trees along the southern frontage and western frontages.

Any DA for subdivision of the land will need to be accompanied by a flora and fauna assessment to confirm potential and appropriate tree retention.

It must be noted that the conceptual layouts presented in the Planning Proposal are indicative only and subject to further consideration during the development assessment process.

The concept for 264 Leeds Parade in particular will most likely need considerable reconfiguration as the land is currently burdened by overhead powerline easements that would render several of the lots unworkable and the site has an opportunity to provide an additional access / egress point both to the residential land further east and to Leeds Parade to the west. Refer to comments under the Access section of this report.

Section 9.1 Ministerial Directions.

The planning proposal provides responses to the relevant Ministerial Directions under Section 9.1 of the Environmental Planning and Assessment Act 1979.

In relation to Employment and Resources, the proposal is consistent with Directions 1.1 and 1.3, as it allows for residential development and does not hinder mining or extractive industries. Directions 1.2, 1.4 and 1.5 relating to rural zones, oyster aquaculture and rural lands are not applicable.

For Environment and Heritage, Directions 2.1 to 2.6 relating to environment protection zones, coastal protection, heritage conservation, recreational vehicle access and environmental overlays are not relevant as there are no such constraints on the site. The proposal addresses Direction 2.6 on remediation of contaminated land through a preliminary site contamination investigation.

In terms of Housing, Infrastructure and Urban Development, the proposal gives effect to Directions 3.1 and 3.3, providing housing choice and allowing home occupations. Directions 3.2 on caravan parks, 3.4 on integrating land use and transport, 3.5 on development near aerodromes, and 3.6 on shooting ranges are not inconsistent. Direction 3.7 on short term rental accommodation periods does not apply.

For Hazard and Risk, Directions 4.1 to 4.4 relating to acid sulfate soils, mine subsidence, flooding and bushfire risk are not applicable as these hazards have not been identified on the site.

In relation to Regional Planning, only Direction 5.10 on implementing regional plans is relevant, which the proposal is consistent with. The other directions in this section do not apply.

For Local Plan Making, the proposal is consistent with Directions 6.1 on approval requirements, 6.2 on reserving land for public purposes, and 6.3 on site-specific provisions.

The Metropolitan Planning directions in Section 7 are not applicable as the site is not within Metropolitan Sydney.

The planning proposal provides detailed responses demonstrating consistency with the relevant Ministerial Directions under Section 9.1 of the EP&A Act.

State Environmental Planning Policies

The planning proposal discusses several relevant State Environmental Planning Policies (SEPPs) that provide guidance and requirements for development in New South Wales.

SEPP (Transport and Infrastructure) 2021 aims to facilitate delivery of infrastructure like roads, water, and sewerage. Development under 200 lots does not trigger traffic impact requirements.

SEPP (Housing) 2021 seeks to enable diverse housing types like affordable, social, and rental housing. It provides concessions to facilitate affordable housing.

SEPP (Resilience and Hazards) 2021 requires investigation of contaminated land. Land must be proven suitable for a proposed use, including remediation if needed. Investigations are required before development applications are approved.

SEPP (Biodiversity and Conservation) 2021 aims to protect trees and vegetation. Removal of identified tree species requires Council approval under the Orange Development Control Plan 2004. This is relevant where vegetation clearing may occur.

The identified SEPPs promote infrastructure delivery, housing diversity, management of contaminated land, and biodiversity conservation. The proposal provides guidance on policy objectives and is considered to be broadly consistent with requirements.

Central West and Orana Regional Plan Directions

The planning proposal discusses how it aligns with the relevant directions and actions of the Central West and Orana Regional Plan 2036 (CWORP).

It refers to Direction 22 on managing growth and change in regional cities and centres, stating the proposal is consistent as it provides for additional housing supply to meet demand in the Orange area. Action 22.2 is relevant in reinforcing Orange's role through the local housing strategy.

Direction 25 on increasing housing diversity and choice is also addressed, with the proposal allowing for general residential housing to increase supply. Actions 25.1 on local housing strategies, 25.2 on housing diversity near services/jobs, and 25.3 on aligning infrastructure are applicable.

The proposal states it can accommodate good urban design principles promoted in Direction 29 on delivering healthy built environments and better urban design.

Overall, the planning proposal explains how it gives effect to Directions 22, 25 and 29 of the CWORP 2036 relating to managing growth, increasing housing diversity, and urban design. It identifies the relevant actions under these directions and how the proposal is consistent with the regional plan.

Orange Local Housing Strategy

The proposal provides detailed commentary on how it aligns with the Orange Local Housing Strategy (OLHS), specifically the guidelines for the Leeds Parade candidate area. The proposed R1 General Residential zoning and ten lots per hectare density is consistent with the OLHS. The road layout enables connections to surrounding areas and limits cul-de-sacs.

For infrastructure, the site can efficiently connect to existing water, sewer and drainage services. Stormwater and drainage flows are conceptually addressed. Environmental considerations like vegetation and groundwater vulnerability are discussed in general terms. Urban design and buffers to busy roads are also outlined.

Overall, the planning proposal demonstrates how it gives effect to the Leeds Parade candidate area provisions in the OLHS in terms of zoning, density, infrastructure servicing, environment, and design.

Development Control Plan

The planning proposal response to the Development Control Plan (DCP) matters for the Leeds Parade Candidate Area consists of:

Staging Plan:

- The proposal provides for staging with 47 lots in the northern section and 64 in the southern section. This aligns with Council's infrastructure and servicing plans.

Transport and Movement:

Limited additional access points are proposed to Leeds Parade under the current proposal. Following an analysis of the draft concept it is recommended that the exhibited draft DCP should only be adopted in relation to 274 Leeds Parade. With respect to 264 Leeds Parade, the proponent and landowners should be advised of the easement and circulation issues described elsewhere in this report need to revise the structure / concept to be subject to a further DCP amendment in due course.

Landscaping Strategy:

- A landscape buffer is proposed along the southern edge for amenity and water quality management. Further landscaping is proposed along Leeds Parade.

Recreation Network:

- Links to regional open space networks and cycleways are noted, rather than smaller local parks.

Stormwater and Water Quality:

- Stormwater flows are conceptually addressed to connect into the existing stormwater harvesting scheme nearby. The southern landscape area contributes to water quality outcomes.

Natural Hazards:

- The site is confirmed to not be flood prone.

Urban Design and Significant Sites:

- The DCP provides for setbacks, landscaping and access controls along Leeds Parade to manage the interface.

Higher Density and Commercial Uses:

- Not proposed due to lack of supporting facilities.

Public Services and Facilities:

- Not proposed as the site can access existing services.

The proposal summarises how it aligns with each relevant theme of the DCP matters for the Leeds Parade area. It demonstrates that site specific planning controls can be implemented through the DCP to achieve the desired character and amenity for the locality. A Draft DCP document was placed on exhibition alongside the planning proposal and includes provisions and requirements related to the above. The formatting of the Draft DCP will need some minor adjustments for consistency with DCP 2004 and in order to remove the consultants' branding elements.

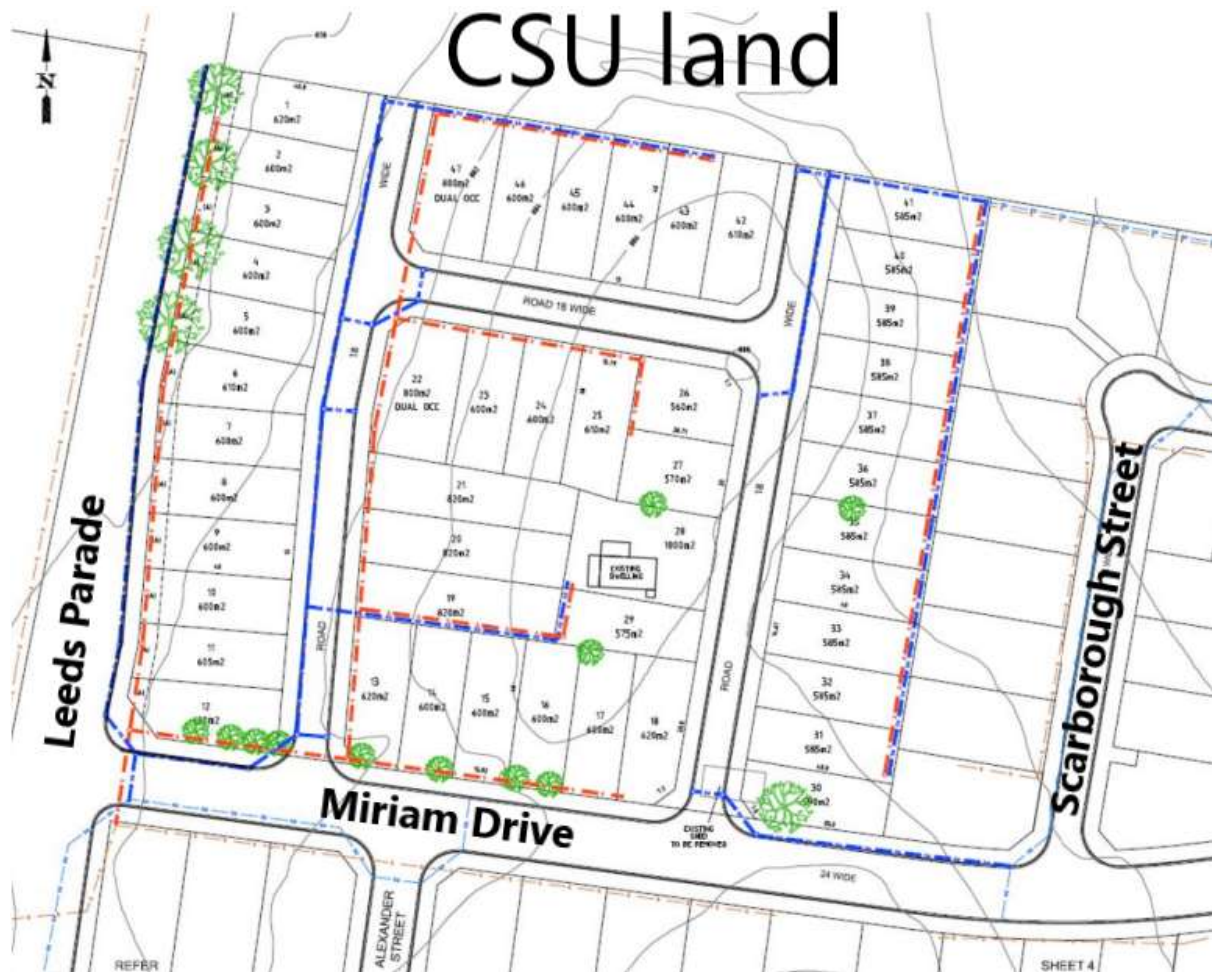
Access and Layouts

Miriam Drive extends from Leeds Parade eastwards land that was zoned residential as part of Amendment 6 of the former Orange LEP 2000.

That amendment can be regarded as somewhat short sighted in the sense that it has enabled a sizable residential estate with a single access point. This means that should there be a temporary blockage of Miriam Drive, due to an accident or roadworks for example, then a significant number of residents may be stranded unable to either reach or leave their homes. This also raises concerns in terms of emergency services access during such times.

Reliance on single access points also tends to concentrate traffic flows and reduce the performance and efficiency of the network overall. For these reasons as well as providing greater permeability for pedestrians and cyclists Council should seek to avoid single access point estates wherever possible. The current proposal is on land that straddles the Miriam Drive access and represents an opportunity to address and partially remedy this concern.

274 Leeds Parade



The image above shows a conceptual layout for 274 Leeds Parade. Of note are the 600m² lots along the western Leeds Parade frontage. These are to be denied direct access onto Leeds Parade and must provide a dedicated 5m wide landscape buffer in that area. Access to individual lots is to be provided by internal roads and Miriam Drive only.

The road layout demonstrates potential connection points to the Charles Sturt University land to the north. While the CSU land is not zoned for residential development at this time it is anticipated that a future review of the Orange Local Housing Strategy may consider the role and capacity of that land, given that it adjoins this site.

It is therefore important to avoid creating a series of residential pockets only accessible from Leeds Parade. Such a pattern would add unnecessary movements to Leeds Parade which, given the proximity and barrier of the railway to the west needs to be retained as the main north-south route for traffic in this area.

Enabling local traffic to filter through secondary streets will reduce this pressure and provide an alternative north-south capacity in the event of roadworks or similar occurring on Leeds Parade itself. Unfortunately, the lots in Scarborough Street to the east have been fully developed and this limits the ability to achieve a direct east-west connection from this site. Future development of the CSU land to the north (if that eventuates) could include a looping connection around to the remainder of the estate.

While the layout does not directly access onto Leeds Parade by incorporating a loop this could allow a bypass of any blockage at the Alexander Street intersection and reduce the extent of potential blockage to the small stretch between the easternmost access point and Scarborough Street / Miriam Drive intersection. While this still leaves a potential choke point at the western end of Miriam Drive it is regarded as an improvement.

Longer term future development of the CSU land to the north could include a connection point westwards to Leeds Parade which would remove the potential bottleneck, as such development of 274 Leeds Parade should be required to ensure road network connections to the northern boundary the site (even though the adjoining land is not zoned residential at this time).

264 Leeds Parade

As can be seen in the image below the concept layout from the planning proposal the land at 264 Leeds Parade is subject to overhead powerline easements that do not align with the suggested road network. It should be noted that this concept was prepared in response to feedback from the Department of Planning when originally seeking a gateway determination for 274 Leeds Parade only. The design for 264 Leeds Parade provided in the Planning Proposal may therefore be regarded as expedient rather than the result of a detailed analysis or design process.

Additionally, given that Charlotte Street has not been completed - the greyed-out area below is yet to be constructed - there remains an opportunity to provide an additional linkage to the east and a potential second connection westward to Leeds Parade. While the eastern linkage may or may not occur (due to the current concept plan for that land having been previously established under Amendment 6 to LEP 2000) establishing an additional connection to Leeds Parade should be considered as the main way to alleviate the potential bottleneck issues at the Leeds Parade / Miriam Drive intersection described above. Achieving both east and west connections on this site would be the preferred outcome from a permeability perspective.



**Concept layout at 264 Leeds Parade (overhead powerline easement highlighted)
Grey area to east reflects the concept plan for that land but is yet to be approved/constructed**

It is anticipated that Miriam Drive will remain the dominant route from Leeds Parade into the residential estate. However, achieving a secondary ingress / egress for this estate would improve circulation and permeability as well as provide an important alternative route for both emergency services and residents during any future roadworks or maintenance in Miriam Drive.

A future development for subdivision of 264 Leeds Parade may respond to the powerline easements by seeking a substantial change to the layout, or alternatively negotiate with Essential Energy in relation to relocation of their assets. Any change to services would need to demonstrate support from the relevant authority and would be at the developer's expense.

What is evident from the concept plan provided is that the land at 264 Leeds Parade can be accessed, serviced and designed in a variety of ways and there is no impediment to proceeding with the zone and lot size nominated. It is expected that a developer will refine the approach to be taken as they undertake more detailed analysis of the site.

Given the above it is recommended that the exhibited draft DCP should only be adopted in relation to 274 Leeds Parade. With respect to 264 Leeds Parade, the proponent and landowners should be advised of the easement and circulation issues described above and advised of the need to revise the structure / concept to be subject to a further DCP amendment in due course.

Environmental, Social and Economic Impact

The responses related to environmental, social and economic impacts in the planning proposal are:

Environmental Impacts

- No adverse impacts identified on threatened ecological communities or critical habitat. The site has limited native vegetation.
- Standard environmental assessments can be undertaken at DA stage (e.g. traffic, noise, stormwater).
- Preliminary contamination assessment has not identified any significant risks.

Social Impacts

- Good access to transport links, employment, services and facilities will benefit future residents.
- Site enables a range of housing options.

Economic Impacts

- Development will support the local construction sector.
- Meets identified demand for residential land, particularly low-density housing.
- Enables efficient use of existing infrastructure.

The proposal identifies there are minimal adverse environmental impacts anticipated, with appropriate assessment processes to be followed. Socially and economically, it outlines the benefits of the additional housing supply and opportunities for good residential amenity outcomes. The proposal demonstrates the development can achieve positive planning outcomes for the environment, existing community and future residents.

Conclusion

When taken together both sites in this proposal are anticipated to provide a yield of approximately 111 lots (47 lots at 274 Leeds Parade and a further 64 Lots at 264 Leeds Parade) this equates to just under half a year of supply, although timing and delivery of these lots will likely be spread over time.

Some issues in relation to the layout of 264 Leeds Parade will need to be resolved during a subsequent DCP amendment and development assessment. However, the land has been shown to be broadly capable and suitable for residential development.

Two submissions were received from incoming residents in Miriam Drive expressing a desire to see the established mature trees in the area retained. Specific trees were not identified in the submission and there is a mix of pine and eucalypts on the site, believed to be the result of landscaping efforts in association with the existing dwellings. The trees are not considered to have significant habitat value, but future development applications can be expected to provide flora and fauna assessments and several trees can potentially be retained. This potential is greatest along the Leeds Parade frontage where future lots will be required to have a 5m wide landscaping buffer to enhance the appearance of the estate viewed from Leeds Parade.

ATTACHMENTS

- 1 Submissions (redacted), D24/27476 [↓](#)
- 2 Gateway Determination - Cover Letter (redacted), D24/27524 [↓](#)
- 3 Gateway Determination (redacted), D24/27529 [↓](#)
- 4 Planning Proposal - 264-274 Leeds Parade (redacted), D24/27563 [↓](#)
- 5 Planning Proposal - 264-274 Leeds Parade - Draft Development Control Plan, D23/9742 [↓](#)
- 6 Planning Proposal - Preliminary Site Investigation (Contamination) (redacted), D24/27580 [↓](#)

Submission 1

From:
Sent: Sunday, 14 January 2024 9:53 PM
To: Orange City Council
Subject: RE: Development proposal 274 Leeds Parade, Orange

Director Development Service,
Orange City Council,
Orange, NSW 2800.

Att: Paul Johnston
RE: Development proposal 274 Leeds Parade, Orange

I will be a resident going to have an impact due to this development project. I understand the requirement to have more residential lands: but that should be done with minimum impact on the environment.

My main concern is how this project is going to save those nicely grown big trees along Miriam Drive. The nicely grown trees along the Miriam Drive provide significant landscape features within the Orange LGA as well as help to maintain the ecosystem. They reduce air pollution, provide food and shelter for wildlife, minimize erosion and maintain healthy soil, increase rainfall, and absorb sunlight as energy. , trees are an essential component of life on Earth.

Therefore, please take suitable steps to develop sustainably by protecting the nicely grown trees along the Miriam Drive.

Thank you for your understanding.

Kind regards,

Submission 2

From:
Sent: Sunday, 14 January 2024 9:47 PM
To: Orange City Council
Subject: RE:Amendment 34 to Orange Local Environmental Plan 2011 264 and 274 Leeds Parade, Orange

Paul Johnston,
Acting Director Development Service,
Orange City Council,
Orange, NSW 2800.

Dear Paul,
RE: Amendment 34 to Orange Local Environmental Plan 2011 264 and 274 Leeds Parade, Orange

I received your letter dated 8/12/2023 (D23/102170 F3823-9). As a resident (who will be in) going to be affected by this proposed development project, I don't have any objection to the proposed project as long as the larger grown trees (along the Mirriam Drive) are not going to be removed.

As you know, trees provide oxygen and limit carbon in the atmosphere. It is well known that trees act as carbon sinks, taking in carbon dioxide from the air during photosynthesis and releasing the oxygen that humans breathe. While trees use carbon dioxide to make their food, they need oxygen (much like humans do) to process that food into energy. They reduce air pollution, provide food and shelter for wildlife, minimize erosion and maintain healthy soil, increase rainfall, and absorb sunlight as energy.

I strongly believe that the council will take necessary steps to protect those trees (along the Mirriam Drive) working with the developer as a leader in protecting the natural environment around Orange.

Thank you.

Yours truly,



Department of Planning and Environment

PP-2021-6584/IRF23/2179

Mr David Waddell
Chief Executive Officer
Orange City Council
PO Box 35
ORANGE NSW 2800

Attention: Craig Mortell – Senior Planner – Development Services

Dear Mr Waddell

Planning proposal (PP-2021-6584) to amend Orange Local Environmental Plan 2011 – 274 Leeds Parade and part of 264 Leeds Parade, Orange.

I am writing in response to the planning proposal you have forwarded to the Minister under section 3.34(1) of the *Environmental Planning and Assessment Act 1979* (the Act) and additional information received on 11 July 2023 to amend zone and minimum lot size for 274 Leeds Parade and part of 264 Leeds Parade, Orange.

As delegate of the Minister for Planning and Open Spaces, I have determined that the planning proposal should proceed subject to the conditions in the enclosed Gateway determination.

I have also agreed, as delegate of the Secretary, the inconsistency of the planning proposal with the Ministerial Directions under section 9.1 of the Act direction 1.4 Site Specific Provision and 7.1 Employment zones is justified in accordance with the terms of the Direction.

Considering the nature of the planning proposal I have determined that Council may exercise local plan-making authority functions in relation to the planning proposal.

Prior to public exhibition, Council is to address condition 1 of the gateway determination to ensure exhibited documents for this planning proposal are adequate. Should Council seek to make a proposed LEP, the request to draft the LEP should be made directly to Parliamentary Counsel's Office well in advance of the date the LEP is projected to be made. The proposed local environmental plan (LEP) is to be finalised on or before 01 April 2024.

The NSW Government has committed to reduce the time taken to complete LEPs. To meet these commitments, the Minister may appoint an alternate planning proposal authority if Council does not meet the timeframes outlined in the Gateway determination.

The Department's categorisation of planning proposals in the *Local Environmental Plan Making Guideline* (Department of Planning and Environment, 2023) is supported by category specific timeframes for satisfaction of conditions and authority and Government agency referrals, consultation, and responses. Compliance with milestones will be monitored by the Department to ensure planning proposals are progressing as required.

Should you have any enquiries about this matter, I have arranged for Oyshee Iqbal to assist you. Ms Iqbal can be contacted on

Yours sincerely

15/9/2023

Garry Hopkins
Director, Western Region
Local and Regional Planning

Encl: Gateway determination



Department of Planning and Environment

Gateway Determination

Planning proposal (Department Ref: PP-2021-6584): to rezone land from E3 Productivity Support to R1 General Residential and amend minimum lot size from 2ha and 2000m² to 500m² at 274 Leeds Parade and part of 264 Leeds Parade, Orange.

I, the Director, Western Region at the Department of Planning and Environment, as delegate of the Minister for Planning and Public Spaces, have determined under section 3.34(2) of the *Environmental Planning and Assessment Act 1979* (the Act) that an amendment to the Orange Local Environmental Plan 2011 to amend zone and minimum lot size for 274 Leeds Parade and part of 264 Leeds Parade, Orange should proceed subject to the following conditions:

1. Prior to public exhibition, the planning proposal and all supporting documents and reports are to be updated to:
 - (a) Include the additional subject land, being part of 264 Leeds Parade
 - (b) delete all superseded employment zoning references and replace with correct zone
 - (c) include the land being rezoned residential as an Urban Release Area on the appropriate maps.
2. Public exhibition is required under section 3.34(2)(c) and clause 4 of Schedule 1 to the Act as follows:
 - (d) the planning proposal is categorised as standard as described in the *Local Environmental Plan Making Guidelines* (Department of Planning and Environment, 2023) and must be made publicly available for a minimum of 20 working days; and
 - (e) the planning proposal authority must comply with the notice requirements for public exhibition of planning proposals and the specifications for material that must be made publicly available along with planning proposals as identified in *Local Environmental Plan Making Guidelines* (Department of Planning and Environment, 2023).
3. A public hearing is not required to be held into the matter by any person or body under section 3.34(2)(e) of the EP&A Act. This does not discharge Council from any obligation it may otherwise have to conduct a public hearing (for example, in response to a submission or if reclassifying land).
4. The Council as planning proposal authority is authorised to exercise the functions of the local plan-making authority under section 3.36(2) of the EP&A Act subject to the following:
 - (a) the planning proposal authority has satisfied all the conditions of the gateway determination;
 - (b) the planning proposal is consistent with applicable directions of the Minister under section 9.1 of the Act; and

(c) there are no outstanding written objections from public authorities.

5. The LEP should be completed on or before 01 April 2024.

Dated 15th day of September 2023.

Garry Hopkins
Director, Western Region
Local and Regional Planning
Department of Planning and Environment

Delegate of the Minister for Planning and
Public Spaces



PLANNING PROPOSAL TO AMEND ORANGE LEP 2011

To Permit R1 – General Residential

Lot 211 DP1177178

Lot 20 DP1117081

**264 and 274 Leeds Parade,
Orange NSW 2800**

274 Leeds Parade, ORANGE NSW 2800

1.0 OVERVIEW

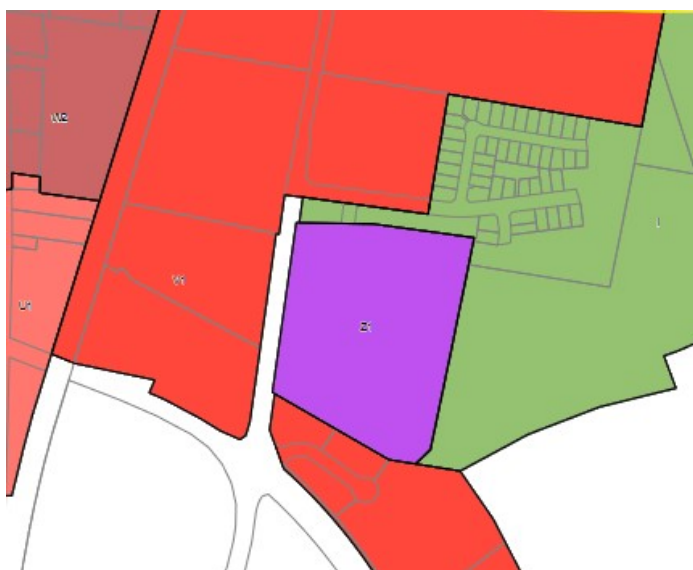
We have been engaged to present a Planning Proposal to Orange City Council for to investigate the merit of establishing a residential subdivision development upon a 3.78 hectare and 9.7 hectare holding fronting Leeds Parade and Miriam Drive. The property is situated to the south of Charles Sturt University Campus in North Orange and has access to the Northern Distributor via Leeds Parade.

The study area is situated approximately 3.5 kilometres north east of Orange Post Office. The land is situated adjacent to recently subdivided and developed lands upon Scarborough Street, Miriam Drive and Milne Street.

We have undertaken preliminary discussions with Orange City Council's planning staff regarding the proposal and are prepared to consider now the Orange Local Housing Strategy has been adopted. We were advised to now address the adopted Leeds Parade Candidate listing notes and create a draft DCP for the candidate area.

We envisage the Lot Size amendments to represent a mix of lot sizes from 560m² to 1365m². The lot yield comprises 111 lots.

The minimum lot size map will need to show a 500 square metre minimum lot size consistent with the surrounding area.



274 Leeds Parade, ORANGE NSW 2800

Minimum Lot Size (sq m)	
B	200
C	250
F	400
I	500
Q	700
S1	800
S2	850
U1	1,000
U2	1,500
U3	1,750
V1	2,000

2.0 APPLICANT

c/ Saunders Property
2/124-128 Summer Street
ORANGE NSW 2800

3.0 SUBJECT LAND

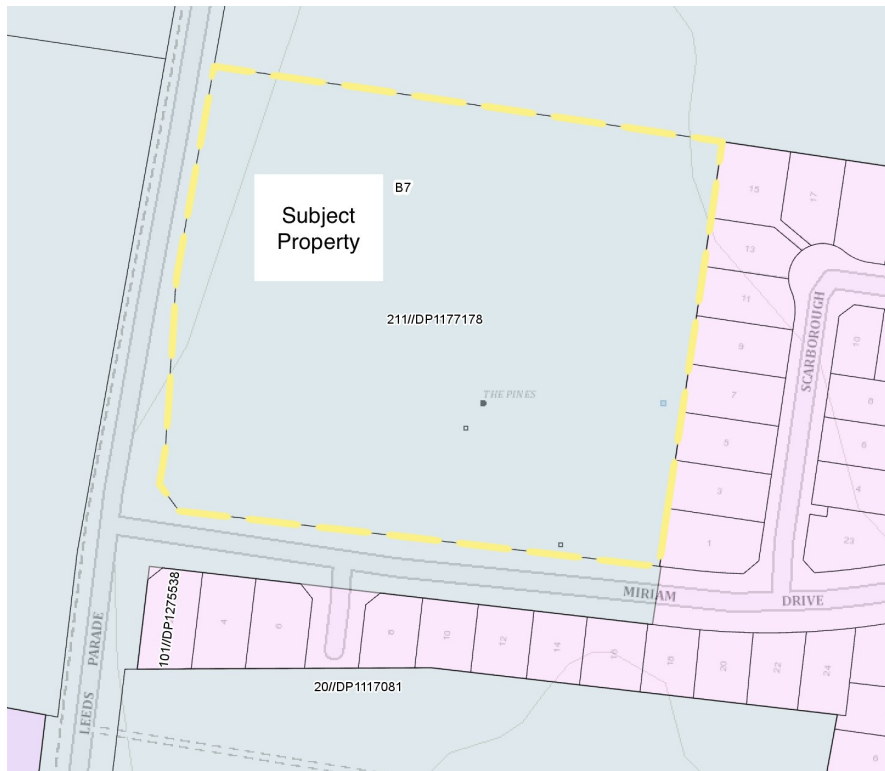
3.1 Location and Land Description

The subject land is located at the eastern side of Leeds Parade and on the northern and southern side of Miriam Drive.

The study area comprises:

- 274 Leeds Parade – Lot 211 DP1177178 – 3.79 hectares
- 264 Leeds Parade – Lot 20 DP 1117081 – 9.7 hectares

274 Leeds Parade, ORANGE NSW 2800



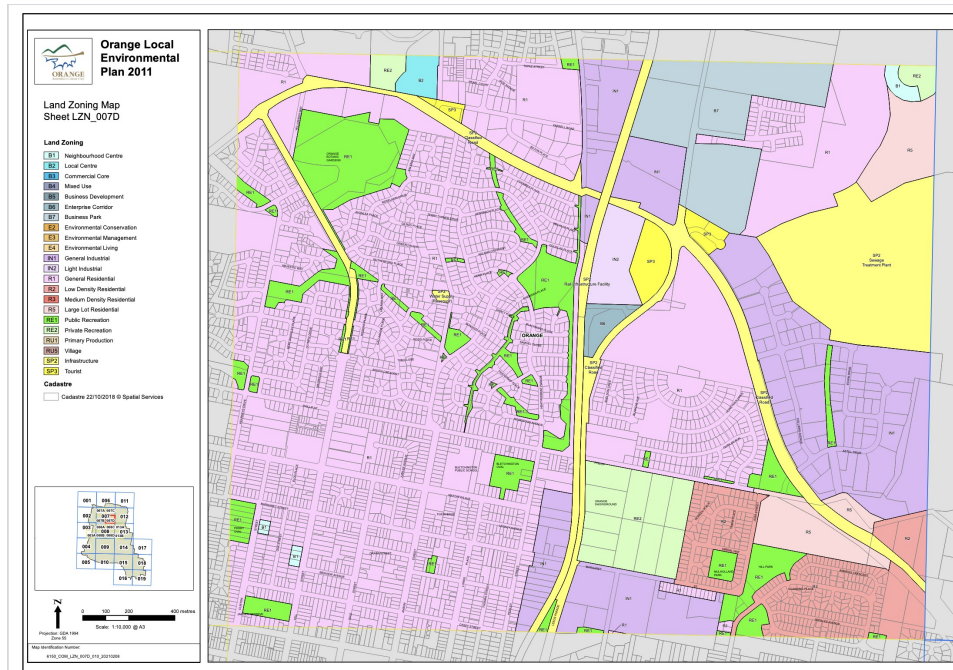
This information is obtained from various sources and cannot be guaranteed. You must make your own enquiries as to its accuracy.

Figure 1. Location of subject property.

4.0 THE PROPOSAL

The proposal incorporates the inclusion of the subject land into the Leeds Parade/Narrambla urban release development for the purposes of residential zoned land use in accordance with Sub Regional Strategy recommendations for lands east of Leeds Parade to the south of Charles Sturt University campus.

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This information is obtained from various sources and cannot be guaranteed. You must make your own enquiries as to its accuracy.

It has been identified that the proposed land use is not permissible in the B7 – Business Park zone.

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5.0 PLANNING REQUIREMENTS AND ASSESSMENT

In determining the application, Council is required to consider the relevant matters identified under the Environmental Planning and Assessment Act, 1979 and associated Regulations 2000. This section forms the basis of our assessment below.

5.1. Provisions of Environmental Planning Instruments

The subject land is currently zoned B7 Business Park as follows: -

Zone B7 Business Park

1 Objectives of zone

- *To provide a range of office and light industrial uses.*
- *To encourage employment opportunities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.*
- *To encourage a mix of light industrial activities and research activities that encourage the sharing of facilities.*
- *To ensure development is ordered in such a way as to maximise public transport patronage, and encourage walking and cycling, in close proximity to settlement.*

2 Permitted without consent

Environmental protection works

3 Permitted with consent

Centre-based child care facilities; Garden centres; Hardware and building supplies; Light industries; Neighbourhood shops; Office premises; Oyster aquaculture; Passenger transport facilities; Respite day care centres; Roads; Take away food and drink premises; Tank-based aquaculture; Warehouse or distribution centres; Any other development not specified in item 2 or 4

4 Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Forestry; Freight transport facilities; Function centres; Heavy industrial storage

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establishments; Helipads; Highway service centres; Home-based child care; Home business; Home occupations; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Places of public worship; Pond-based aquaculture Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Retail premises; Rural industries; Service stations; Sewage treatment plants; Sex services premises; Storage premises; Tourist and visitor accommodation; Transport depots; Vehicle body repair workshops; Veterinary hospitals; Waste or resource management facilities; Water recreation structures; Water recycling facilities; Wholesale supplies

State Environmental Planning Policies

State Environmental Planning Policy (Transport and Infrastructure) 2021

The State Environmental Planning Policy (Transport and Infrastructure) 2021 aims to facilitate the effective delivery of infrastructure throughout the state.

This provides for local Council's and other public authorities to deliver necessary infrastructure to communities via a framework of assessment and accountability. Any proposed sewer, water or stormwater works will require consent.

We also note that the subject area would not trigger Traffic Generating Development under Schedule 3 requirements being less than 200 lots.

State Environmental Planning Policy (Housing) 2021

The aims of the *State Environmental Planning Policy (Housing) 2021* are:

3 Principles of Policy

The principles of this Policy are as follows—

- (a) enabling the development of diverse housing types, including purpose-built rental housing,*
- (b) encouraging the development of housing that will meet the needs of more vulnerable members of the community, including very low to moderate income households, seniors and people with a disability,*
- (c) ensuring new housing development provides residents with a reasonable level of amenity,*
- (d) promoting the planning and delivery of housing in locations where it will make good use of existing and planned infrastructure and services,*
- (e) minimising adverse climate and environmental impacts of new housing development,*

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(f) reinforcing the importance of designing housing in a way that reflects and enhances its locality,

(g) supporting short-term rental accommodation as a home-sharing activity and contributor to local economies, while managing the social and environmental impacts from this use,

(h) mitigating the loss of existing affordable rental housing.

The policy applies to all of the state. Via the demographic analysis in Section 2.1, affordable and social housing are recognised as forms of housing in key demand within the Orange LGA. The Housing SEPP seeks to facilitate delivery of these forms of housing.

The Housing SEPP provides a range of enabling clauses that seek to promote the provision of affordable housing, including infill development, secondary dwellings, boarding houses, supportive accommodation and residential flat buildings. The SEPP provides a variable range of concessions with respect to matters like minimum site area, car parking provision, landscaping, deep soil zones and solar access. These provisions are designed to facilitate the provision of affordable housing.

State Environmental Planning Policy (Resilience and Hazards) 2021

State Environmental Planning Policy (Resilience and Hazards) 2021 Chapter 2 aims to:

...promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment...

This policy applies to the whole of the State, including the Orange LGA. The SEPP defines 'contaminated land' as per the definition in Part 5 of the *Contaminated Land Management Act 1997 No 140* as:

the presence in, on or under the land of a substance a concentration above the concentration at which the substance is normally present in, on, or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.

Clause 4.6 of the SEPP states:

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

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

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

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(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.

(2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subsection (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

(3) The applicant for development consent must carry out the investigation required by subsection (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation (as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.

(4) The land concerned is—

(a) land that is within an investigation area,

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

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

(i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and

(ii) on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).

The Resilience and Hazards SEPP is a relevant consideration at rezoning and DA stage and the identification of contamination land is relevant Planning Proposal preparation level to identify those areas confirmed as being affected by known contamination and which may act as a limit, particularly in relation to greenfield re-development or urban consolidation situations.

Refer to the Enviroscience Report attached on the Planning Portal.

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State Environmental Planning Policy (Primary Production) 2021

The land is zoned B7. The not relevant to the Planning proposal.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

The Chapter 2 objectives of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* are:

- (a) *to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and*
- (b) *to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation.*

Clause 2.9 of the SEPP identifies that the SEPP applies where a Development Control Plan has been created that identifies species or types of trees for which consent is required prior to removal and which refers to the SEPP. Chapter 0 of the Orange Development Control Plan 2004 (DCP) identifies tree types and species that require approval prior to removal. Tree clearing occurring as a result of urban development requires consideration and is therefore relevant in the context of this Planning Proposal.

5.2 Provisions of Draft Environmental Planning Instruments

There is no known draft regional, state or local environmental planning instruments that affect the subject property.

The new Central West and Orana Regional Plan 2036 is referred to later in our Planning Proposal.

The recently adopted Orange Local Housing Strategy is in support of the designated land being identified for residential zoning.

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5.3 LEP Options

Zone R1 General Residential

1 Objectives of zone

- 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.
- To ensure development is ordered in such a way as to maximise public transport patronage and encourage walking and cycling in close proximity to settlement.
- To ensure that development along the Southern Link Road has an alternative access.

2 Permitted without consent

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

3 Permitted with consent

*Attached dwellings; Bee keeping; Boarding houses; Building identification signs; Business identification signs; Camping grounds; Caravan parks; Centre-based child care facilities; Community facilities; **Dwelling houses**; Electricity generating works; Environmental facilities; Exhibition homes; Exhibition villages; Group homes; Home businesses; Home industries; Hostels; Information and education facilities; Kiosks; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); **Residential accommodation**; Residential flat buildings; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Shop top housing; Tank-based aquaculture; Tourist and visitor accommodation; Veterinary hospitals; Water supply systems*

4 Prohibited

Farm stay accommodation; Rural workers' dwellings; Any other development not specified in item 2 or 3

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5.4 Part 1 - Objectives or Intended Outcomes

To enable a site specific residential precinct upon the subject land adjacent to the east Leeds Parade/Narrambla urban release development.

The intended outcome is to allow an R1 zone that allows for serviced general residential development.



Existing Land Use Zones

Proposed Land Use Zones



Existing Minimum Lot Size

Proposed Minimum Lot Size

Figure 2 Showing the existing and proposed Land Use Zones and development controls for the subject site.

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5.5 Part 2 – Explanation of Provisions

The proposed outcome will be achieved by means of changing the zone from B7 to R1 and the relevant lot size map. This is one alternative.

5.6 Part 3 - Justification – The Need

The proposal may be justified in terms of the need for general residential housing where minimal impact is likely is reasonable and practical from an economic, social and environmental perspective.

Section A – Need for the Planning Proposal

Question 1: *Is the planning proposal a result of an endorsed local strategic planning statement, strategic study or report?*

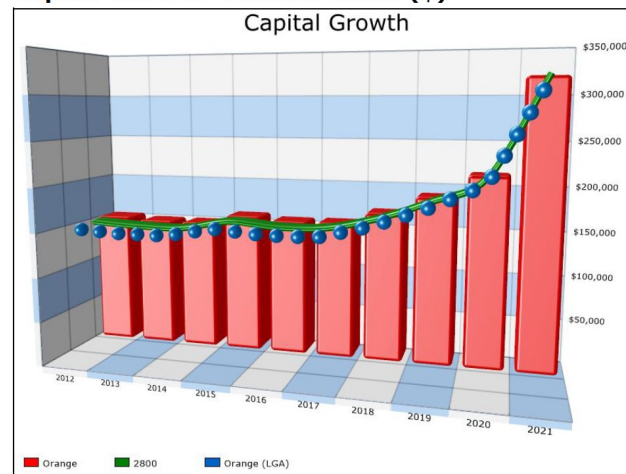
The scale of the proposal does not warrant a detailed Planning Strategy rather a full description of the existing environment and the proposed description of the proposed use and associated impacts in the context of the existing strategies for Orange. We have referred to the Orange Local Housing Strategy.

Supply and Demand

Please refer to some of the data considered in the Draft Housing Strategy. The Strategy identifies a growth rate of 1.1% or 52 000 by 2041. Vacant sales show reduced supply and increased demand in the last 3 years.

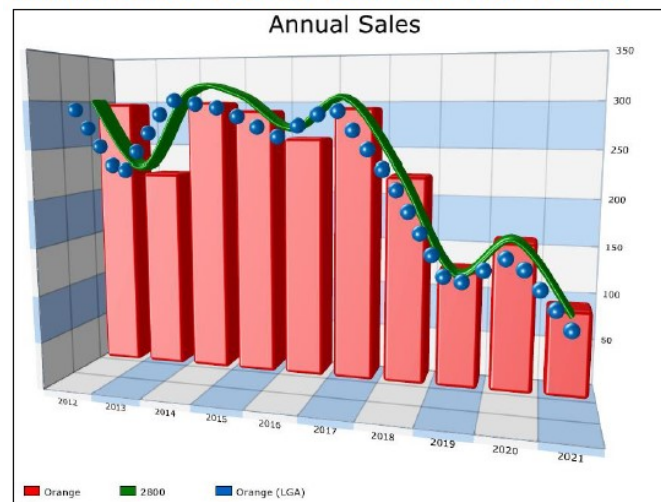
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Capital Growth - Last 10 Years (\$)



Vacant land values (Source EAC Red Square)

Annual Sales - Last 10 Years and Year to Date



Period	Orange	2800	Orange (LGA)
Sales	Sales	Sales	Sales
2021	92	97	93
2020	159	168	162
2019	127	132	128
2018	224	230	226
2017	294	303	295
2016	261	272	265
2015	291	306	292
2014	300	310	301
2013	221	230	223
2012	298	300	300

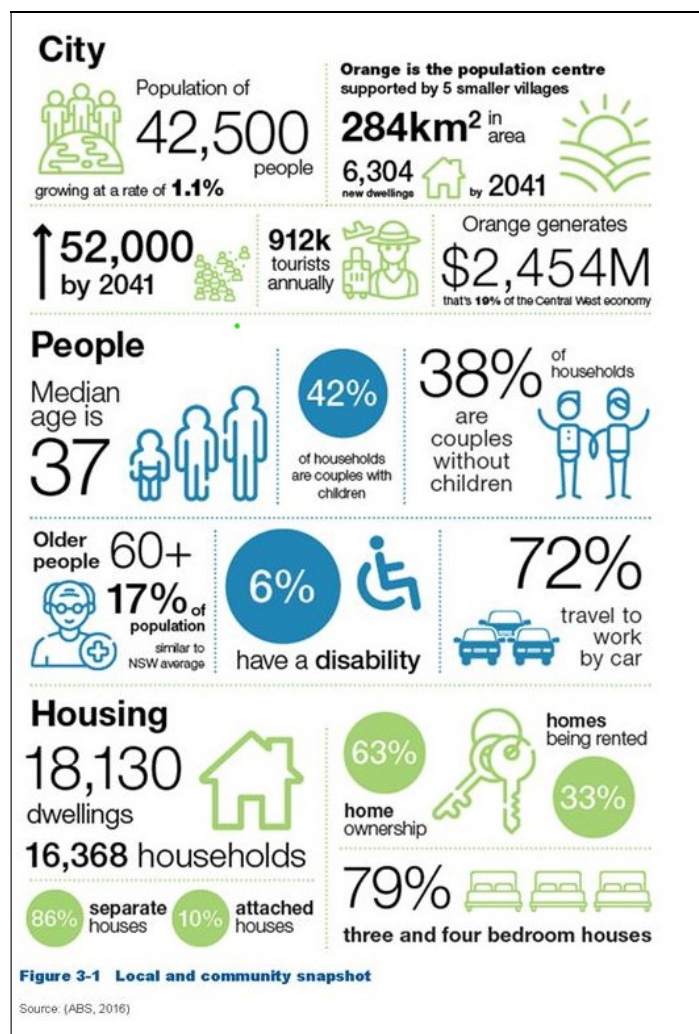
Information provided is for Vacant Land

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The above data illustrates that despite a well known surge in the Orange property market, vacant land sales have experienced a reduction in volume. Builders and designers have been forced to undertake consolidations, renovations and additions due to buyers having limited supply compared to demand. This has resulted in vacant land in average locations selling at over \$400 000 and development sites selling for over \$100 000 per lot compared to \$45 000 2-3 years ago.

Projects such as the submitted land will assist in meeting demand and providing needed supply. Sales rates in Shiralee and the Carwoola area illustrate the proposed lots will sell off the plan, before construction, in less than 6 weeks.

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Source Council Local Housing Strategy

Question 2: *Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?*

We submit that the proposal is a logical step as an extension to existing residential development between the Northern Distributor and CSU.

The proposal considers the location of efficient transport links, access to facilities and associated environmental advantages in less carbon production.

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The proposal also allows opportunity for sound urban design principles, housing affordability and diversity.

The proposal (through the DCP) also considered buffer treatment to busy roads and sound water management principles with existing dams and Stormwater Harvesting links close to the site.

The proposal considers supply and demand for the City, current growth pressures and strategic links regarding transport and infrastructure development in an efficient, incremental manner.

Section B – Relationship to Strategic Planning Framework

Question 3: *Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy (including any exhibited draft plans or strategies)?*

The newly adopted **Central West and Orana Regional Plan 2036** needs to be considered in reference to its objectives and strategies and the current planning proposal. However, not all parts of the region are projected to experience growth equally and as such the plan will identify strategies to ensure population sustainability and to manage population decline.

We have considered the context of the proposal and its relationship to the CWORP 2036:

CWORP Direction 22:

Manage growth and change in regional cities and strategic and local centres

Strengthened relationships across the three regional cities, five strategic centres and the local centres will form the backbone of a diverse, interconnected and interdependent network of centres – a major strength for the region. The growth of regional cities and strategic centres will encourage future investment, increase housing choices, diversify industry and create new job opportunities – all of which will benefit the immediate and broader regional community. For example, Dubbo acts as the primary service centre for the Far West and has a catchment population that extends well beyond the boundaries of the region, to more than 120,000 people.³³ The regional cities and strategic centres will capitalise on their location along national highways and rail networks. Bathurst and Lithgow can capitalise on their proximity to Sydney, and Dubbo and Mudgee on their proximity to Newcastle. Over the next 20 years, most new housing is likely to be built in regional cities and strategic centres, and this will need to be supported by infrastructure. Many councils have planned for aspirational growth, reflecting the desires of local communities, through land use planning decisions (for example, making land or infrastructure available for development). This may influence population growth patterns. Local centres and rural communities make an important contribution to the region by providing affordable housing, attractive lifestyles and jobs in agribusiness, mining and tourism. These areas need access to

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regional cities and strategic centres for higher level services. As the population gets older, public transport will also assume greater importance in these centres.

Actions

22.1 Coordinate infrastructure delivery across residential and industrial land in regional cities and strategic centres.

22.2 Reinforce the role, function and relationship between regional cities and strategic centres in local housing strategies.

22.3 Improve transport in regional cities and strategic centres, and their connections with regional communities.

The proposal is not inconsistent with the regional planning objectives of the above Plan and Directions.

CWORP Direction 25:

Increase housing diversity and choice

Local housing strategies identify housing needs, plan for a range of housing types and identify the infrastructure needed to support local communities. The strategies need to be flexible and responsive to shifts in local housing demand and supply, and deal with uneven rates of development or unexpected population growth. Infrastructure must be planned and provided to support the construction of new housing.

Areas with stable or declining populations will still face demand for new dwellings and for a variety of housing types. It is important that new dwellings reflect the character and heritage of the area.

More one and two bedroom homes, and smaller homes, such as studio apartments with good access to infrastructure and services, will be needed. Opportunities for medium density development should be encouraged near town centres and villages to take advantage of existing services. Councils should consider these factors when planning for housing in local land use strategies.

Appropriate planning controls and incentives that can deliver more affordable housing include:

- expanding the range of model provisions that promote or require the inclusion of affordable housing in developments. For example, a floor space bonus to deliver a percentage of affordable housing in a development;*

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- *providing development incentives and reduced contributions, or using other mechanisms that may boost construction of secondary dwellings as alternative affordable housing;*
- *ensuring councils consider planning incentives under the State Environmental Planning Policy Affordable Rental Housing (2009); and*
- *promoting the establishment of new caravan parks and manufactured home estates on unconstrained land in existing settlements and new land release areas*

Social and affordable housing is available across the region, with the largest amount of social housing in Orange. Dubbo, Bathurst and Lithgow also have significant of social housing stock. The NSW Land and Housing Corporation owns social housing estates at East Dubbo, Kelso in Bathurst, and Bowen and Glenroi in Orange.

A number of community housing providers also provide affordable housing options. The NSW Land and Housing Corporation is reviewing social housing estates across NSW.

Actions

- 25.1 Prepare local housing strategies that increase housing choice, including affordable housing options.*
- 25.2 Increase housing choice in regional cities and strategic centres at locations near or accessible to services and jobs.*
- 25.3 Align infrastructure planning with new land release areas to provide adequate and timely infrastructure.*
- 25.4 Locate higher density development close to town centres to capitalise on existing infrastructure and increase housing choice.*
- 25.5 Promote incentives to encourage greater housing affordability including a greater mix of housing in new release areas.*
- 25.6 Prepare guidelines for local housing strategies to address local affordable housing needs.*
- 25.7 Work with councils to appropriately plan for future social and affordable housing needs.*

The R1 zone allows for a diversity of lower density planning and design solutions. Broad strategies relate to the whole City with higher density R2 and R3 considered in areas suited to infill development. Release areas such as the study area are best suited to lower density and dual occupancy style development. This approach also allows for modest affordable housing for the first home buyer.

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CWORP Direction 29:

Deliver healthy built environments and better urban design

Good urban design can add to the community's cultural, economic and physical wellbeing by creating safe, healthy and socially inclusive places that meet the needs of children, young people, families, singles, people with disabilities and seniors. Planning for redeveloping town centres should consider how pedestrians and cyclists will move about, landscaping and infrastructure for public spaces. Councils should apply water sensitive urban design to improve water use, supply and security. This includes re-using wastewater on parks, gardens and reserves, or to supplement agricultural uses. Urban design guidelines are commonly developed with a metropolitan focus and do not necessarily apply to regional and rural environments. Regional urban design guidelines will help councils when preparing environmental planning instruments for new development in existing areas or land release areas, to revitalise town centres and respond to climate and water security challenges. The design guidelines will promote design excellence particularly in higher density areas such as regional cities and strategic centres.

Actions

29.1 Develop regional urban design guidelines for planning, designing and developing healthy built environments.

29.2 Enhance the quality of neighbourhoods by integrating recreational walking and cycling networks.

29.3 Reflect local built form, heritage and character in new housing developments.

29.4 Incorporate water sensitive urban design in new developments.

Council's DCP Planning Outcomes largely promote good housing design principles in terms of privacy, solar access, built form and open space access. The proposal can accommodate these principles at the appropriate design stage.

Assessment Criteria

a) Does the proposal have strategic merit? Will it:

- give effect to the relevant regional plan outside of the Greater Sydney Region, the relevant district plan within the Greater Sydney Region, or corridor/precinct plans applying to the site, including any draft regional, district or corridor/precinct plans released for public comment; or*
- give effect to a relevant local strategic planning statement or strategy that has been endorsed by the Department or required as part of a regional or district plan or local strategic planning statement; or*

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- *responding to a change in circumstance, such as the investment in new infrastructure or changing demographic trends that have not been recognised by existing strategic plans.*

The proposal is consistent with current and draft planning policies.

b) Does the proposal have site-specific merit, having regard to the following?

- *the natural environment (including known significant environmental values, resources or hazards and*
- *the existing uses, approved uses, and likely future uses of land in the vicinity of the proposal and*
- *the services and infrastructure that are or will be available to meet the demands arising from the proposal and any proposed financial arrangements for infrastructure provision.*

The site and its surrounds are consistent with the above requirements, presenting some logical land use continuity with a logical link to existing service infrastructure. The proposal also has a logical flow-on to development likely between the adjoining Miriam Drive and vacant development land further north to the CSU Campus.

Question 4: *Will the planning proposal give effect to a Council's endorsed local strategic planning statement, or another endorsed local strategy or strategic plan?*

The proposal is not inconsistent with any local planning strategy though is considered a logical planning approach given the zoning boundary using Leeds Parade as the gateway to the Narrambla urban release sector. Further comment below regarding the Leeds Parade Candidate Area is presented in terms of the planning merits and outcomes to be achieved.

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Orange Sustainable Settlement Strategy Update

1.2 Strategy purpose and objectives

The purpose of the 2004 SSS was to provide Council with a strategic plan to manage growth and to provide strategic direction for urban and rural residential land release in the City. The objectives of the 2004 SSS were to:

- *prepare a strategic analysis of urban and rural residential land supply and demand;*
- *understand infrastructure servicing constraints for candidate future urban areas;*
- *identify appropriate direction and form for future growth in the City; and*
- *recommend indicative staging of urban land release areas in the City*

The preparation of the 2004 SSS was considered important to the ongoing responsible management of land use decisions in the City in that it:

- gave landowners and investors greater certainty about the future;
- could remove or reduce the speculative element in subsequent land use planning and settlement;
- informed landowners whose land fell outside the strategy release areas so they will be less likely to have false rezoning expectations;
- could decrease conflict over land use decisions in the future;
- could decrease wastage in public or private resources;
- provided a basis for good planning and development decisions; and
- ensured there was enough land available to prevent large increases in land prices.

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Orange Local Housing Strategy

We submit detailed justification and planning comment regarding specifically section 8.4.2.4 Leeds Parade:



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Leeds Parade Candidate Area Considerations

Planning Provisions

The proposal is consistent with the Leeds Parade OLHS Candidate Area guidelines. The proposed R1 zoning and 10 lots per hectare is achieved with 111 lots over 13.49 hectares.

Infrastructure

The DCP presents a good road design scenario that allows for linkage to adjoining land and limits long culdesacs and promotes a good orientation scenario in terms of solar access for dwelling design and urban living. The lot yield is well under the Traffic Generating Development criteria of 200 lots. Council is able to consider traffic design, intersection locations and transport planning principles without a small scale Traffic Study. Further compliance with the Subdivision Code can also address intersection and road designs, footpaths and the like as part of the DA assessment stage.

The site can be efficiently serviced with a leap frogging of infrastructure having occurred with subdivision already developed further east along Miriam Drive. From an infrastructure servicing perspective, the proposal presents a good opportunity to connect to passing infrastructure and linkage to stormwater drainage infrastructure.

The DCP illustrates how drainage will flow at a concept level to allow use of an existing dam to the south for retention and water quality management.

The DCP also considers a buffer to the south for good amenity to the southern dam retention area. Further buffer treatment is also considered along Leeds Parade as detailed with landscaping and shed width consideration to protect visual amenity and a traffic/noise buffer for residents facing west over Leeds Parade.

Environmental Considerations

Vegetation cover is minimal and naturally occurring asbestos are low level considerations for the Candidate Area.

Groundwater vulnerability is a consideration in urban environments with infrastructure design, slope management, vegetation on individual sites and site coverage all considerations that can protect groundwater infiltration and water quality.

Other Considerations

The proposal has regard to existing urban design east along Miriam Drive and future development to the north with expected road connections.

The OLHS also discusses visual quality toward CSU to the north and also from CSU overlooking the site and Orange Urban Area in a broader perspective.

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DCP Consideration

Development Control Plan Matters for the Leeds Parade Candidate Area.

In addition to a conceptual layout Council anticipates that the following matters will be reflected in the Development Control Plan required by section 6.3 of Orange LEP 2011.

• Staging Plan

Development of the urban release area is anticipated to release residential lots to the market across a number of stages. The approximate rate of release is shown below.

Note: Councils infrastructure and servicing plans, while flexible, are informed by this estimate, any accelerated release rate should be discussed with Council at an early stage.

- To extend logically from land adjacent to existing urban areas
- Infrastructure to be sized and located to suit the full development to avoid duplication.

The northern section (47 lots) will be undertaken with no response or interest from the owner of the southern section (64 lots) as this time.

The northern section will be considered as one DA with possible staging of the 47 lots to be determined.

Miriam Drive presents an obvious staging and servicing focus to the north and southern sectors with sewer and drainage links as shown on the DCP.

• Transport and Movement Hierarchy / Roads

- Upgrade of Leeds Parade frontage.

The draft DCP considers limited access to Leeds Parade and existing Miriam Drive intersection suitable for existing and proposed lot yield.

• Landscaping Strategy

- The southern edge built form exclusion zone to be embellished for both visual amenity and as a contribution to water quality management.

The DCP allows for a landscape area to the south of residential lots 11-21, allowing for existing vegetation to be retained along the northern side of the existing dam.

Further landscaping is to be included along Leeds Parade as a buffer between the eastern side of Leeds Parade and lots 3-11 south and lots 1-12 north.

• Passive and Active Recreation Network

- Sports field and open space areas to be informed by a review / update of the Orange recreational needs study.
- Active transport route to connect into the existing north Orange active transport network.

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- Community open space (1 lot) with a playground located to be within easy walking distance of majority of residents

The DCP identifies cycleway and pedestrian access to larger regional open space links and local sportsgrounds in the vicinity such as Waratahs Sports Precinct, Brendon Sturgeon Oval and the Botanic Gardens. The larger scale higher utility areas have been opted rather than smaller scale parks that have been transitioned toward larger facilities. Council has opted to sell small neighbourhood parks over the last 25 years with reduced utility and maintenance considerations.

- **Stormwater and Water Quality Management**

- Stormwater flows detained to pre-development levels, southern built form exclusion zone incorporated into water quality management through suitable landscaping treatment.

Consideration has been made to enable stormwater detention as the southern end of the site utilising the existing dam for water quality management and the Stormwater Harvesting Scheme further east.

- **Natural Hazards**

- Localised flood study to accompany planning proposal.

The subject land is not flood prone nor forms part of the Blackmans Swamp Creek area situated further east.

- **Urban Design and Significant Sites**

- Limited driveway access directly onto Leeds Parade to be managed by establishing a minimum lot width along this frontage.
- All built form along Leeds Parade to be setback behind landscape edge, including any lots that are accessed internally.

Achieved in DCP with buffer strip and landscaping as part of subdivision approval. Other urban design consideration presented under Subdivision Design in DCP.

- **Higher Density Living**

- Not applicable. Site will not contain supporting facilities.

- **Neighbourhood Commercial**

- None envisaged.
- Site is in proximity to both North Orange shopping centre and the Leeds Parade B1 zone

- **Public Services and Facilities**

- None envisaged.

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Site is in proximity to both North Orange shopping centre and the Leeds Parade B1 zone

Question 5: *Is the planning proposal consistent with applicable State Environmental Planning Policies?*

Yes

Question 6: *Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?*

9.1 Directions by the Minister (cf previous s 117)

(1) *The Minister may direct a public authority or person having functions under this Act or an environmental planning instrument to exercise those functions at or within such times as are specified in the direction.*

(2) *In addition to any direction which may be given under subsection (1), the Minister may direct a council—*

- (a) to exercise its functions under section 3.21 or Division 3.4 of Part 3 in relation to the preparation of a local environmental plan in accordance with such principles, not inconsistent with this Act, as are specified in the direction, and*
- (b) without limiting paragraph (a), to include in a planning proposal prepared by the council provisions which will achieve or give effect to such principles or such aims, objectives or policies, not inconsistent with this Act, as are specified in the direction, and*
- (b1) on a matter relating to the establishment and procedure of a local planning panel, on the development applications (including applications to modify development consents) that are to be determined on behalf of a council by a local planning panel and on the planning proposals that are required to be referred to a local planning panel for advice, and*
- (c) to provide the Minister, in the manner and at the times specified in the direction, with reports, containing such information as the Minister may direct, on the council's performance in relation to planning and development matters.*

(2A) *A direction under subsection (2)—*

- (a) may be given to a particular council or to councils generally, and*
- (b) may require the inclusion in planning proposals of provisions to achieve or give effect to particular principles, aims, objectives or policies, and*

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(c) may require planning proposals to be strictly consistent or substantially consistent with the terms of the direction (or provide for the circumstances in which an inconsistency can be justified).

Any such direction may be given to councils generally by its publication in the Gazette or on a website maintained by the Department (or both).

(2B) A reference to a council in subsections (2) and (2A) includes a reference to a planning proposal authority under Division 3.4 that is not a council.

(3) A public authority or person to whom a direction is given under subsection (1) or (2) shall comply, and is hereby empowered to comply, with the direction in accordance with the terms of the direction.

(4) Before giving a direction under subsection (1) or (2), the Minister shall consult with the responsible Minister concerned.

(4A) Before giving a direction under subsection (2)(c), the Minister is to consult with the Local Government and Shires Association of New South Wales and any other industry organisation the Minister considers to be relevant, in relation to the information that the Minister is proposing to seek. This requirement is in addition to the requirement under subsection (4).

(5) A local environmental plan (or any planning proposal or purported plan) cannot in any court proceedings be challenged, reviewed, called into question, prevented from being made or otherwise affected on the basis of anything in a direction under subsection (1) or (2).

1. Employment and Resources

1.1 Business and Industrial Zones

The proposal allows for a residential precinct and does not threaten the consolidation of North Orange commercial precinct, Narrambla Business Park or Orange CBD.

1.2 Rural Zones – Not applicable in the zone

The location of the land in an urban fringe area tagged under existing and draft strategies identifies other areas of significant agricultural land. The size of the land does not support sustainable rural activity or production.

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1.3 Mining, petroleum Production and Extractive Industries

The proposal does not prevent mining or extractive industries, however in the context of the planning directions for North Orange and the close proximity to Orange urban area it is unlikely that a mining or quarry proposal would be able to achieve environmental compliance in such a developed locality. The proposal is considered to have minimal impact on the operations of the Phillip Street Quarry situated approximately 1.7 kilometres south east of the subject land.

1.4 Oyster Aquaculture – Not applicable

1.5 Rural Lands – The property does not affect the production of agricultural commodities and degrade agricultural resources.

2. Environment and Heritage

2.1 Environment Protection Zones – Not applicable with no sensitive areas present.

2.2 Coastal Protection – Not applicable

2.3 Heritage Conservation – Not applicable

2.4 Recreational Vehicle Access – The area is not environmentally sensitive nor are recreational vehicles part of the proposal

2.5 Application of E2 and E3 Zones and Environmental Overlays in Far North Coast LEP's – Not applicable

2.6 Remediation of Contaminated Land – Historically the land has been used for general grazing with no history of contamination relating to fuel storage or farm pesticide usage.

It is envisaged that suitable assessment will occur as part of the PP for residential land use. Refer to the Enviroscience Report.

3 Housing, Infrastructure and Urban Development

3.1 Residential Zones

Objectives

(1) The objectives of this direction are:

- (a) to encourage a variety and choice of housing types to provide for existing and future housing needs,*
- (b) to make efficient use of existing infrastructure and services and ensure that new housing has appropriate access to infrastructure and services, and*

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(c) to minimise the impact of residential development on the environment and resource lands.

The proposal is consistent with this direction promoting a diversity of housing choice of general residential land. This type of housing represents approximately 20% of the current housing choice or vacant sales per annum. The location of the proposal area close to the City's facilities and services is a positive feature.

The proposal therefore supports the objectives in terms of housing diversity, utilising infrastructure whilst minimising impacts on natural resources and environmentally sensitive areas.

- 3.2 Caravan Parks and Manufactured Home Estates – The proposal does not involve this use and would be prohibited by exclusion in the Land Use table for the proposed R1 zone.
- 3.3 Home Occupations – The proposal is consistent providing the ability to work at home.
- 3.4 Integrating Land Use and Transport – The proposal present good access to local connector roads, the Northern Distributor and local and regional services. The development will also consolidate local bus services in conjunction with adjoining residential development.

Objectives

(1) The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives:

(a) improving access to housing, jobs and services by walking, cycling and public transport, and

(b) increasing the choice of available transport and reducing dependence on cars, and

(c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car, and

(d) supporting the efficient and viable operation of public transport services, and

(e) providing for the efficient movement of freight.

The location of the site close to transport links and local employment sources is a positive outcome with opportunities to promote links to the university and Narrambla as employment sources as well as North Orange commercial area including Woolworths, Bunnings and fast food outlets in walking/cycling distance.

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3.5 Development Near Licensed Aerodromes – Not Inconsistent

3.6 Shooting Ranges – Not Inconsistent

3.7 Reduction in non-hosted short term rental accommodation period – Not applicable, applies to Byron Bay Shire Council

4. Hazard and Risk

4.1 Acid Sulfate Soils – Not evident

4.2 Mine Subsidence and Unstable Land – Not evident

4.3 Flooding – Not applicable

4.4 Planning for Bushfire Protection – no obvious risk.

5. Regional Planning

5.1 Implementation of Regional Strategies (Revoked 17 October 2017)

5.2 Sydney Drinking Water Catchment – Not Inconsistent

5.3 Farmland of State and Regional Significance on the NSW Far North Coast – No applicable

5.4 Commercial and Retail Development along the Pacific highway, North Coast – Not applicable

5.5 Development in the vicinity of Ellalong, Paxton and Millfield (Cessnock LGA) (Revoked 18 June 2010)

5.6 Sydney to Canberra Corridor (Revoked 10 July 2008)

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5.5.1 Central Coast (Revoked 10 July 2008)

5.6 Second Sydney Airport: Badgery's Creek (Revoked 20 August 2018)

5.7 North West Rail Link Corridor Strategy – Not applicable

5.10 Implementation of Regional Plans - The proposal discusses the key objectives within the Central West and Orana Regional Plan 2036 that are relevant being Objectives 22, 25 and 29. The proposal is consistent in this regard by managing growth and delivering infrastructure in a co-ordinated manner, increasing housing diversity and choice, and delivering healthy built environments through better urban design.

5.11 Development of Aboriginal Land Council land – Not applicable

6.0 Local Plan Making

6.1 Approval and Referral Requirements - The proposal will be able to be managed with specific standards that allow the desired planning outcomes through an R1 General Residential Zone and supporting DCP planning controls for associated development.

6.2 Reserving Land for Public Purposes – consistent with local open space planning such as the Waratahs Precinct.

6.3 Site Specific Provisions – The proposal will comply with local design criteria, subdivision Code and minimum LEP and DCP criteria.

The proposed road concept will promote good urban design principles for the end built form within normal expectations.

7.0 Metropolitan Planning

7.1 Implementation of A Plan for Growing Sydney (Revoked 9 November 2020)

7.2 Implementation of Greater Macarthur Land Release Investigation (Revoked 28 November 2019)

7.3 Parramatta Road Corridor Urban Transformation Strategy – Not applicable

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- 7.4 Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan – Not applicable
- 7.5 Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan – Not applicable
- 7.6 Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan – Not applicable
- 7.7 Implementation of Glenfield to Macarthur Urban Renewal Corridor – Not applicable
- 7.8 Implementation of the Western Sydney Aerotropolis Plan – Not applicable
- 7.9 Implementation of Bayside West Precincts 2036 Plan – Not applicable
- 7.10 Implementation of Planning Principles for Cooks Cove Precinct – Not applicable
- 7.11 Implementation of St Leonards and Crows Nest 2036 Plan – Not applicable
- 7.12 Implementation of Greater Macarthur 2040 – Not applicable
- 7.13 Implementation of the Pyrmont Peninsula Place Strategy – Not applicable

Section C – Environmental, social and economic impact

Question 7: *Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?*

There are no adverse planning issues that relate to critical habitat, populations or ecological communities upon the subject land. The land is devoid of any significant native vegetation.

The proposal area is substantially altered by European settlement patterns resulting in broad acre land clearing. Further, the proximity to an urban area has resulted in native fauna being driven out by foxes, dogs and cats. Any remnant eucalypts are limited to the southern border of the subject land and would not be considered a significant habitat for native species.

The existing settlement pattern of General residential and Business Park along Leeds Parade and the Northern Distributor also promotes disturbance and impact on pets upon native populations. Areas of remnant vegetation to the east of Ophir Road and north of Banjo Patterson Way are more likely to present areas to promote and protect native habitat.

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Question 8: *Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?*

Any likely environmental effects can be assessed at a more specific DA assessment stage. Matters such as traffic generation, effluent and stormwater management or occasional noise generation are considered within expectations.

Question 9: *Has the planning proposal adequately addressed any social and economic effects?*

The location of the site close to transport links, employment opportunities and open space networks provides a logical social and economic scenario for positive living with good access to services, community interaction and support systems such as medical, employment and recreational opportunities.

Section D – State and Commonwealth interests

Question 10: *Is there adequate public infrastructure for the planning proposal?*

The proposal will utilise existing infrastructure in the vicinity of the Leeds Parade/Narrambla Urban release development including water, sewer, drainage and telecommunications available.

Question 11: What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination

The proposal has not been referred with no required transport, heritage, water and environmental agencies of interest at this point. We understand the Proposal will be referred as part of the Gateway determination process.

5.7 Part 4 - Mapping

The attached plans indicate a likely subdivision layout that compliments the adjacent residential development. The lot yield may be applied to an LEP Lot Size Map with a further DCP amendment to have regard to the outcomes for the location for general residential land use.

5.8 Part 5 – Community Consultation

As part of the Gateway assessment appropriate public exhibition of the proposal will be applied for the prescribed period.

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It is envisaged that the proposal will be advertised in the prescribed manner under the Gateway procedures.

5.9 Part 6 – Project Timeline

It is envisaged that the gateway process will take approximately 6 months for a project of this scale dependent on the grouping of the proposal with other LEP amendments.

5.10 Environmental Compatibility

The site is largely cleared under European settlement and is considered to have satisfactory environmental management included in the proposal such as stormwater retention, soil erosion control and soil suitability assessment.

5.11 Control of Stormwater Runoff from Site

The site will be linked to off-site systems including Council's Stormwater Harvesting System situated nearby to the south east.

5.12 Contamination

The property does not to the best of our knowledge have any toxic soil issues and no toxic products are produced on the property. Normal 8 point analysis will occur to assess whether more detailed assessment or 'hotspots' are identified. Refer to the attached Enviroscience report on the NSW Planning Portal.

5.13 Other Studies

The modest size and scale of the proposal, the suitability of the site, existing transport links and previous grazing use does not warrant further studies at this stage.

5.14 Application Management

The Planning Proposal is the first stage with further consultation envisaged regarding environmental management and design and further engineering design and DA management in due course.

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5.15 Merit of Proposal

The proposal is considered to present a good opportunity to provide for residential development close to existing urban facilities and employment opportunities. The current limited supply and escalating demand presents an obvious case for sites ready for development.

Environmentally and in terms of good urban design, the proposal has merit with suitable location, land characteristics and opportunities for good living outcomes likely.

5.16 Utility Services

The site is surrounded by a mix of residential and business land uses and has good access to a range of utility services including water and sewage reticulation, gas and communication infrastructure.

5.17 The Suitability of the Site for Development

It is submitted the proposal is well suited to a general residential environment in terms of landform and aspect plus proximity to road networks, services and surrounding land uses.

Access opportunities are easily available from the Northern Distributor, via Leeds Parade, and directly from Miriam Drive.

5.18 The Public Interest

We submit that it is the public interest to fulfill current housing needs in a manner that presents a good opportunity for good urban design outcomes. The project will be positive for the local building and development sector and will consolidate the economic needs of the City overall.

6.0 CONSEQUENCES OF NOT PROCEEDING

Should the site not be developed then other sites will be required in other locations.

Ecologically Sustainable Development

The Precautionary Principle

An assessment of all potential environmental interactions indicates no threat of serious damage. Suitable measures could be adopted to prevent environmental degradation if apparent and in particular to ensure protection of the local environment. Accordingly, the development would comply with the precautionary principle.

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Inter-Generational Equity

The proposed development will not compromise the health, diversity or productivity of the environment for future generations and it does not require the use of resources that are, or are likely to be in short supply. At present there is a level of uncertainty as to the planning direction for landholders and the future use of the land and how it will relate to surrounding land.

Conservation of Biological Diversity and Ecological Integrity

The development will cause no significant reduction in habitat for threatened species of flora and fauna and has the ability to enhance the locality. Accordingly, biodiversity diversity will not be jeopardised nor would ecological integrity be threatened.

Improved Valuation and Pricing of Environmental Resources

The ability to utilise the land with minimal impact on the general environment will result in an economic benefit to the locality. The resultant development upon completion will allow the area to be better utilised with enhanced sustainability.

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7.0 CONCLUSION

The planning proposal could be supported by Council on the following grounds:-

- The proposal is supported under the Orange Local Housing Strategy.
- Minor environmental impact.
- Presents a justified and firmer planning direction for the land with the context of the CWROP 2036 and OSSS update.
- Council's ability to impose relevant conditions of consent at the subdivision and construction stage under a DA with specified performance criteria under the DCP.

We trust the above information satisfies Council's requirements at this preliminary level.

We request that Council make a recommendation to proceed with an appropriate change to R1 General Residential zoning and amendment to the relevant Lot Size Map 007D to allow 500m² allotments as shown on the proposed layout.

Yours faithfully,

ANDREW SAUNDERS

FAPI Certified Practising Valuer
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**DRAFT
DEVELOPMENT CONTROL PLAN**

DCP 07.17 DEVELOPMENT MIRIAM DRIVE-LEEDS PARADE

ORANGE NSW 2800

Exhibition Summary

Principal Intent:

Rezone 264 and 274 Leeds Parade to R1 General Residential

Specify minimum lot size of 500 square metres

DCP Control measures:

- Control Leeds Parade access
- Control visual amenity along rear fence to Leeds Parade including shed length and heights
- Control stormwater and water quality management
- Allow for continuity of urban design concepts across land parcels
- Show servicing concepts
- Provide for landscaping between southern residential lots and retention basin
- Provide for landscape buffer along Leeds Parade

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7.17 DEVELOPMENT IN THE VICINITY OF LEEDS PARADE AND MIRIAM DRIVE

This chapter applies to land zoned R1 General Residential northern and southern side of Miriam Drive and west of Leeds Parade.

The land is identified as 274 Leeds Parade lot 211 DP 1177178 and 264 Leeds Parade lot 20 DP1117081 as shown on DCP Map 19 – Leeds Parade/Miriam Drive.

The intention is to create a residential design outcome that respects development to Leeds Parade, co-ordinated grid street layout and consideration of urban concept design between land holdings to the north and south.

SUBDIVISION LAYOUT

A masterplan for the precinct is attached in Map 19. The defined road and allotment layout provides for an accessible and permeable network of streets, walkways and open spaces. The layout includes opportunities for detention basins to manage stormwater. The DCP also addresses visual and access treatment to Leeds Parade. The masterplan also provides for connectivity with surrounding lands to the north and south.

PO 7.17-1 PLANNING OUTCOMES – SUBDIVISION LAYOUT

- 1 The subdivision layout is generally in accordance with the Conceptual Subdivision Layout (Map 19).
- 2 Subdivision design and construction complies with the Orange City Development and Subdivision Code.
- 3 Lots are oriented to maximise energy-efficiency principles. Where practicable, lots are rectangular rather than splay shaped and oriented to provide the long axis within the range N 20 degrees W to N 30 degrees E or E 20 degrees N to E 30 degrees S.
- 4 An achievable range of lot sizes are provided that provide for diversity in housing development and choice. A minimum lot size of 550 square metres overall.
- 5 Road widths are provided consistent with or greater than indicated on the masterplan.
- 6 Connectivity within the internal road network is consistent with the DCP Map.

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7 Future road link connections to adjoining lands are provided for as indicated on the DCP Map.

8 Battleaxe lots have a minimum area of 650m², excluding the access handle. Access handles have a minimum width of 4.5m incorporating a 3m- wide driveway.

9 Local collector roads connect to Leeds Parade generally at the locations shown on the Conceptual Subdivision Layout. Future road connections to adjoining land are located generally in accordance with the Conceptual Subdivision Layout.

10 Residential lots have direct frontage and access to a public road. Access is not available to Leeds Parade for adjoining lots.

11 On-site stormwater detention basins and drainage reserves are provided.

12 All utility services are provided to the proposed lots.

13 Significant landscape features are retained and disturbance to natural vegetation, landform and overland-flow paths is minimised.

14 Public open-space areas are sited in accordance with the Conceptual Subdivision Layout. Public open-space contains significant trees/tree groups, threatened species, populations, ecological communities or their habitats. Public open-space areas incorporate stormwater detention basins where required.

15 A 15m- wide landscape buffer with a vegetative height of 15-20m is provided adjacent to the rear western boundary of lots adjoining Leeds Parade.

WATER SENSITIVE URBAN DESIGN

The site comprises land at and above the headwaters of first order streams. First order streams are frequently vulnerable to erosion and scouring if significant additional volumes of overland flow are experienced. As such it is imperative that development of the overall site and individual lots within manage stormwater discharges appropriately.

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PO 7.17-2 PLANNING OUTCOMES - WATER SENSITIVE URBAN DESIGN

- 1 Stormwater runoff from the precinct is managed through appropriate detention basins to manage volumes, quality and runoff speeds to pre-development levels.
- 2 Raingardens are incorporated into public open spaces to manage the runoff speeds and water quality.
- 3 Development of individual lots minimises impermeable surfaces to reduce the extent of runoff.
- 4 Development of individual lots includes raingardens to minimise discharge rates and improve water quality.

PEDESTRIAN & CYCLIST AMENITY

The masterplan illustrates a deformed grid layout that provides a high degree of permeability for motorists. This is augmented by the inclusion of midblock walkways on extended blocks. The walkways loosely align to provide for ease of movement without creating gun barrel rat runs.

Additionally street widths are sufficient to provide for footpaths and street trees that will provide for a village feel to the pedestrian experience.

Traffic calming speed humps on the principal internal road aligned with walkways will reduce potential conflicts between motorists and pedestrians and/or cyclists. A wide principal road allows space for cyclists on the road. Road locations further help to provide more direct travel routes for alternate modes of travel on footpaths and roadside cycling routes.

PO 7.17-3 PLANNING OUTCOMES - PEDESTRIAN AND CYCLIST AMENITY

- 1 Walkways be incorporated with road locations as indicated on the masterplan in Map 19.
- 2 Road design loosely aligns to provide a reasonably direct travel route across the precinct, connecting open spaces with the future student housing area further north.
- 3 Side and rear fencing that forms part of the perimeter of this master plan is encouraged to be made of colorbond construction using a consistent style to other perimeter fencing in the area. Where factory pre-coloured metal fencing is used it must be of a light cream colour so as to blend with any timber fencing that will be visible from beyond the master plan area.

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SOLAR ACCESS

The majority of lots indicated in the masterplan have been oriented north-south or east west or within a few degrees of such alignments. This configuration has natural benefits for passive solar design and ensures that private outdoor spaces receive a considerable amount of solar access.

PO 7.17-4 PLANNING OUTCOMES - SOLAR ACCESS

- 1 Lot layouts are consistent with the prevailing orientations indicated in the masterplan, i.e. predominately north-south or east-west, or within a few degrees of such, to maximise solar passive design options.
- 2 The majority of lots have a width to depth ratio of 1:1.6 or greater to ensure sufficient space behind primary dwellings for outdoor courtyard space with good solar access.
- 3 Dual occupancy sites have a near square configuration and are located to the northern side of intersections to minimise the extent of overshadowing on neighbouring land.

PUBLIC SAFETY

Minimal use of cul-de-sacs, battle-axe lots and the adoption of modest street curvature helps to maximise passive surveillance of public spaces. Providing open road areas and minimal hidden walkways will deter antisocial use of these features. Open space landscaping needs to be designed to limit concealment opportunities while also providing pleasant visual relief. Placement of street trees is to be considered in relation to the placement of street lights to ensure appropriate night time illumination of footpaths.

PO 7.17-5 PLANNING OUTCOMES – PUBLIC SAFETY

- 1 Street trees and street lights are located clear of each other to ensure appropriate illumination of footways as well as roads
- 2 Open space area landscaping is configured to minimise concealment opportunities and maximise passive surveillance to discourage antisocial use of the area.
- 3 Traffic calming speed bumps are incorporated into the main internal road that align with walkways to ensure there are sufficient safe crossing points.

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FENCING

Front fences and walls:

- assist in highlighting entrances and creating a sense of identity within the streetscape.
- are constructed of materials compatible with associated housing and with fences visible from the site that positively contribute to the streetscape.
- provide for facilities in the street frontage area such as mail boxes.

PO 7.17-5 PLANNING OUTCOMES – FENCING

- 1 Front fences and walls have a maximum height of 1.2 metres.
- 2 Front fences and walls are designed to use similar or compatible materials used in the locality to positively contribute to the streetscape.
- 3 Front fencing is integrated with a variety of plantings.
- 4 Colorbond, timber, masonry or similar solid fencing is not erected on Leeds Parade forward of the 15m front dwelling setback. (relates to lot 12 only).
- 5 Side fences on corner lots fronting a street:
 - have a maximum height of 1.8 metres behind the front building line of the dwelling;
 - use similar or compatible materials used in the locality to positively contribute to the streetscape.

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ALLOTMENTS ADJACENT TO LEEDS PARADE

Allotment facing the eastern side of Leeds Parade will not have access to Leeds Parade.

As part of the subdivision, landscape treatment and fencing is to be constructed. A detailed landscape and fencing plan will be required with the development application for subdivision. Landscaping is to be placed in the shown open space buffer area with rear fencing not to include access gates.

Provide a visual landscape barrier between rear yards and Leeds Parade to achieve privacy.

Provide visual amenity when travelling along Leeds Parade.

Reduce the visual dominance of sheds in yards facing Leeds Parade in terms of width and height.

PO 7.17-6 PLANNING OUTCOMES – ALLOTMENTS FACING LEEDS PARADE

The location and design of backyard sheds is to be a minimum width of 7 metres with landscaping situated between the rear boundary and the shed.

A detailed landscape plan is required as part of an application for a shed or other outbuilding (studio, green house, BBQ structure etc).

Rear sheds are to be no higher than 3.5 metres ridge height and 2.5 metres wall height.

Dwellings on these lots will face an internal street with associated access from that internal street.

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MAP 19 – LEEDS PARADE MIRIAM DRIVE



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PRELIMINARY CONTAMINATED SITE INVESTIGATION

274 Leeds Parade,
Orange, NSW 2800

September 2022

**PRELIMINARY CONTAMINATED SITE INVESTIGATION**

274 Leeds Parade,
Orange, NSW 2800

September 2022
Report #27182

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Status	Date	Prepared	Reviewed	Approved
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- Appendix 3 - Lot Search Report



1. EXECUTIVE SUMMARY

EnviroScience Solutions Pty Ltd were engaged by _____ to undertake a preliminary contaminated site investigation for the residential property and vacant land located at 274 Leeds Parade, Orange, NSW 2800.

The site is surrounded by residential properties, vacant land, and agricultural paddocks, located on the northeast edge of the township of Orange, NSW, 2800.

The available history of the site found potential contaminants from on-site and nearby activities including the use and storage of fuels, oils, metals, herbicides, and pesticides.

Potential contamination of soil from a variety of sources is shown in Table 3.

Sample results reported to be below the HIL A - Residential, HSL A – Residential, and ESL Urban residential and public open spaces for all analytes assessed. Alongside the lack of visual indicators at the time of inspection to suggest further contamination at a depth greater than that sampled, no further sampling is necessary.

It is recommended that future development works operate under an unexpected finds protocol. Should any unexpected foreign material be exposed, discoloured soils or odours observed then works should cease and the areas assessed by an environmental scientist for assessment and testing.



2. INTRODUCTION

EnviroScience Solutions Pty Ltd were engaged by _____ to undertake a preliminary contaminated site investigation for the commercial property located at 274 Leeds Parade, Orange, NSW 2800.

The site is surrounded by residential properties and adjacent to a service station, located on the Northeast edge of the township of Orange, NSW, 2800.

The land is zoned B7 – Business Park and it is proposed to be converted into residential housing.

3. OBJECTIVES AND SCOPE OF WORKS

The objectives of the Preliminary Site Investigation were to:

- Identify potential contaminants of concern on-site
- Identify potential locations of contaminants
- Identify potential exposure routes and pathways
- Identify appropriate Assessment criteria for chemicals of concern, and
- Determine if the site requires further investigation, remediation or management prior to works commencing

To achieve these objectives, the scope of works includes:

- Undertake a site history to identify potential contaminants on site,
- To ensure the investigation undertaken meets the identified data quality objectives, and
- Determine if further sampling or remediation of the site is required.



4. SITE DESCRIPTION

The site is located in the northeast portion of the township of Orange, NSW, 2800.

The site consists of one (1) parcel of land located at 274 Leeds Parade. A house, located in the southwestern quarter of the lot, was built prior to 1954 based on available historical aerial photographs. The sheds adjacent to the house are present from the aerial photograph from 1973.

The majority of the site is covered with short grasses, with some shrubs and trees dividing the southeast quadrant from the rest of the lot. A gravel driveway leads up to the house on the south edge of the lot via Mariam Drive.

The land surrounding the site consists of residential properties, vacant lots, and agricultural paddocks. The site is relatively flat and slopes slightly to the north. Numerous small dams lie to the north, east, and south of the lot, with the closest water way being Summer Hill Creek, located approximately 1.65km to the east. The site is identified in Figure 1.

Site Owner: Unknown

Address: 274 Leeds Parade, Orange, NSW 2800

Planned Land use: Residential Housing

Local Government Area: Orange City Council

Real Property Description: Lot 211 DP1177178

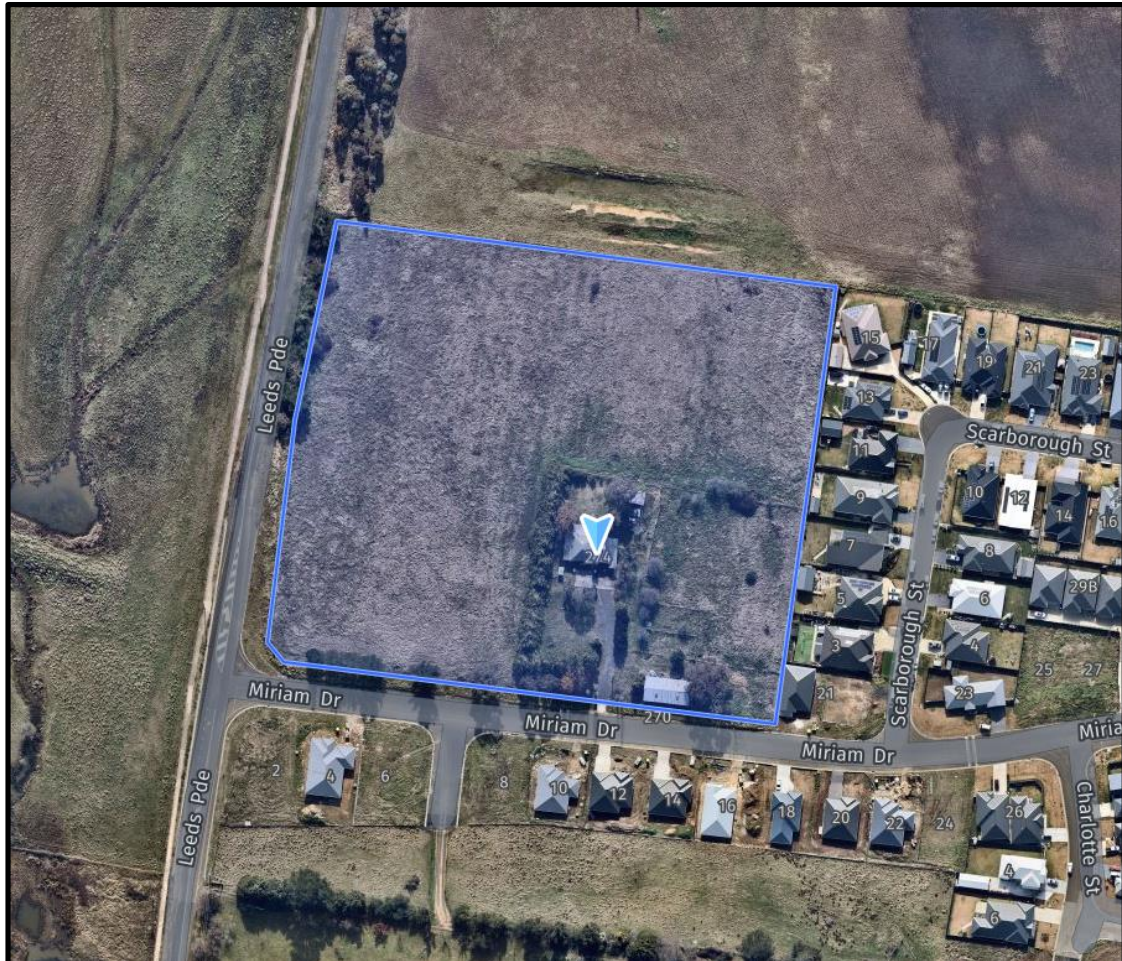


Figure 1-Site Location 274 Leeds Parade, Orange, NSW 2800 – Courtesy of Nearmap



4.1 NEIGHBOURING LAND USES

Current land uses in the vicinity of the site can be described as Residential and Agricultural.

4.2 PREVIOUS LAND USE

The property appears to have been used for agricultural purposes from 1954 to 1989 based on historical aerial photographs.

4.3 TOPOGRAPHY

Orange is located near the slopes of Mount Canobolas in New South Wales, Australia. The lot resides on the northeast edge of the township, is relatively flat, and slopes slightly towards the north; a decline of approximately 3 metres between the south and north boundaries.

4.4 GEOLOGY

Gisbornian to Bolindian in age; part of the Oakdale Formation. The Oakdale formation contains mafic volcanic sandstone of basalt, basaltic andesite, and latite; volcanoclastic breccia and conglomerate, siltstone, shale, and chert.

An examination of the Geological Survey of NSW maps of Naturally Occurring Asbestos, shows the site is mapped as being underlain by geological units with low naturally occurring asbestos potential.

4.5 SOILS

The soils within the area are identified as being Kandosol soils, which have a sandy to loamy surface, and porous sandy-clay subsoils. Kandosol soils have low chemical fertility and poor water-holding capacity.

4.6 HYDROLOGY

Reference to the Water NSW All Groundwater Map shows there is one (1) registered groundwater bore within 500m of the site, which does not have its water supply level listed. The profile consists of topsoil which overlies clay-coloured and grey rock, serpentine green rock, and coarse granite. Aquifers within the area are described as fractured or fissured, low to moderately productive aquifers.

The bore cards are included in Appendix 3. The location of the bores is shown in Appendix 3.



Table 1: Groundwater information

Groundwater Bore Reference	Authorised Purpose	Total Depth (m)	Yield (L/s)	Standing Water Level	Salinity (ppm)
GW048167	Water Supply	90.6	-	-	0-500

4.7 ASSESSMENT CRITERIA

The primary assessment tool for the site will be the *National Environment Protection (Assessment of Site Contamination) Measure 2013* (NEPM). The NEPM uses different settings to manage the risk to human health and the environment. Health Investigation Level Setting A - Standard residential with garden/accessible soil settings will be used given the surrounding land zoning and use.



5. SITE HISTORY

A site history was undertaken to identify potential contaminants of concern for the site, pathways and exposure routes. The site history comprised of database searches, a review of previous investigations undertaken on the site, supplied aerial photographs and Council records.

The following information has been reviewed to determine historical land use and assess the likelihood of potentially contaminating activities having occurred at the site:

- Historical aerial photographs;
- NSW Environment Protection Authority (EPA) contaminated land database and public register for regulated contaminated sites;
- Protection of Environment Operations Act 1997 Public Register;
- List of NSW Contaminated Sites Notified to EPA;
- Business Directory Records;
- Historic Parish Maps; and
- Land holder interviews.

5.1 HISTORICAL AERIAL PHOTOGRAPHS

Historical aerial photographs were obtained as part of the research results for the site.

The research results are below;

- The historic aerial photographs from 1954 to 1982 show the house in its current location, surrounded by a plantation of unknown variety. The plantation is absent on site from the 1989 photograph to present day.
- Aerial photographs from 1982 to 2022 show the sheds adjacent to the house. They may have existed prior to this; however, it is unclear in early photographs due to the poor picture quality.
- A large, rectangular, grey section east of the house, possible a concrete slab or gravelled area, is present in the 1998 aerial photograph but not in the subsequent 2003 photograph.
- A small dam east of the house appears in the 2012 and 2016 aerial photographs but is absent in 2022. Due to its small size, it may have been a depression temporarily filled by rain.



5.2 NSW ENVIRONMENT PROTECTION AUTHORITY (EPA) CONTAMINATED LAND DATABASE AND PUBLIC REGISTER FOR REGULATED CONTAMINATED SITES

A search of the register was undertaken on the 31st of August 2022. No sites in the vicinity were listed.

5.3 PROTECTION OF ENVIRONMENT OPERATIONS ACT 1997 PUBLIC REGISTER

A search of the register was undertaken on the 31st of August 2022. One (1) licensed activity is active within 500m of the site. This is classed as “Railway Systems Activities” by UGL Regional Linx Pty Ltd, located 260m west of the lot, and is part of the country regional railway network.

Former licensed activities located in nearby waterways 96m to the southeast of the lot were listed as “application of herbicides”. These were issued in September and November 2000 but have since been surrendered.

5.4 LIST OF NSW CONTAMINATED SITES NOTIFIED TO EPA

A search was conducted of the NSW Contaminated Sites Notified to EPA on the 31st of August 2022. No sites were listed in the area.

5.5 BUSINESS DIRECTORY RECORDS

A search of the Historic Business Directories was undertaken on the 31st of August 2022. It states that no dry cleaners, motor garages & service stations are active, or have been active, within 500m of the site.

5.6 HISTORIC PARISH MAPS

A review of the available historic was reviewed on the 31st of August 2022. The historic maps for the site did not show any additional important information regarding the property.

5.7 SOURCES OF POTENTIAL CONTAMINATION ON SITE

Multiple potential contamination sources have been identified on the area of interest. Sources and potential contaminants are listed in Table 2 below.

**Table 2:** Sources and Potential Contaminants on Site

Source	Potential Contaminants	Migration/exposure pathways
Residential Housing and Storage Sheds	Asbestos, Lead Paint, PCBs, biological	Asbestos debris may exist in structures or in the soil from previous structures that have been removed. Direct contact with contaminated soils during excavations. Inhalation of dust from soils during excavations. Inadvertent ingestion of soils due to poor hygiene practices during excavations.
Adjacent Roads - Petrol / Diesel / Oil Runoff	BTEX, TRH, PAH, Phenols	Direct contact with contaminated soils during excavations. Inhalation of dust from soils during excavations. Inadvertent ingestion of soils due to poor hygiene practices during excavations. Migration to surface waters through erosion and sediments.
Nearby Farmland - Pesticide and Herbicide Runoff	Pesticides and herbicides, such as DDT	Direct contact with contaminated soils during excavations. Inhalation of dust from soils during excavations. Inadvertent ingestion of soils due to poor hygiene practices during excavations. Migration to surface waters through erosion and sediments.
Waste burial	Low risk- no evidence of waste burial on site over history available.	None evident.

5.8 RECEPTORS

Human receptors are the most likely with the site being developed as a residential area. Methods of exposure include inhalation of dust, direct skin contact with soils, ingestion of soils, and contact with potentially contaminated surface water.



6. CONCEPTUAL SITE MODEL

Based on the above history, a conceptual site model was developed to identify the potential pathways for transport and exposure to contaminants. The conceptual site model is in Table 3 below.

Table 3: Summary of Conceptual Site Model

Source	Fuels and oils spills from on-site fuel storage and vehicles from adjacent roads; chemical storage from on-site sheds and adjacent sites; agrichemical runoff from nearby farmland, and asbestos and lead building products.
Pathways	Direct contact with soil, inhalation of dust, ingestion of dust. Surface water. Potential for groundwater contamination given depth of groundwater in the area.
Receptors	Humans during destruction, construction, landscaping, and servicing.
Depth of Impacts	Surface staining. Filling and leaks from tanks, drips onto soil. Surface around chemical, oil and fuel storage, debris on surface from previous demolitions.
Locations of known soil Impacts	Unknown
Depth of GW	Deep groundwater reported in bore logs available for the area. Groundwater bores were not ground truthed to confirm this information.
GW Impacts	Potential for groundwater contamination, given the high mobility of water through the soil.



7. PRELIMINARY SAMPLING RESULTS

Preliminary Sampling was conducted as an initial indicator to provide analysis proof of what was identified from the desktop study. Twelve (12) samples were obtained from exposed soil locations in areas deemed most likely to contain contaminants. Samples were compared against the Health Investigation Level A Residential limits. Ecological settings were compared Urban residential and public open space limits, given the surrounding land zoning and use. Laboratory Analysis Certificate of Analysis can be found attached in Appendix 2.

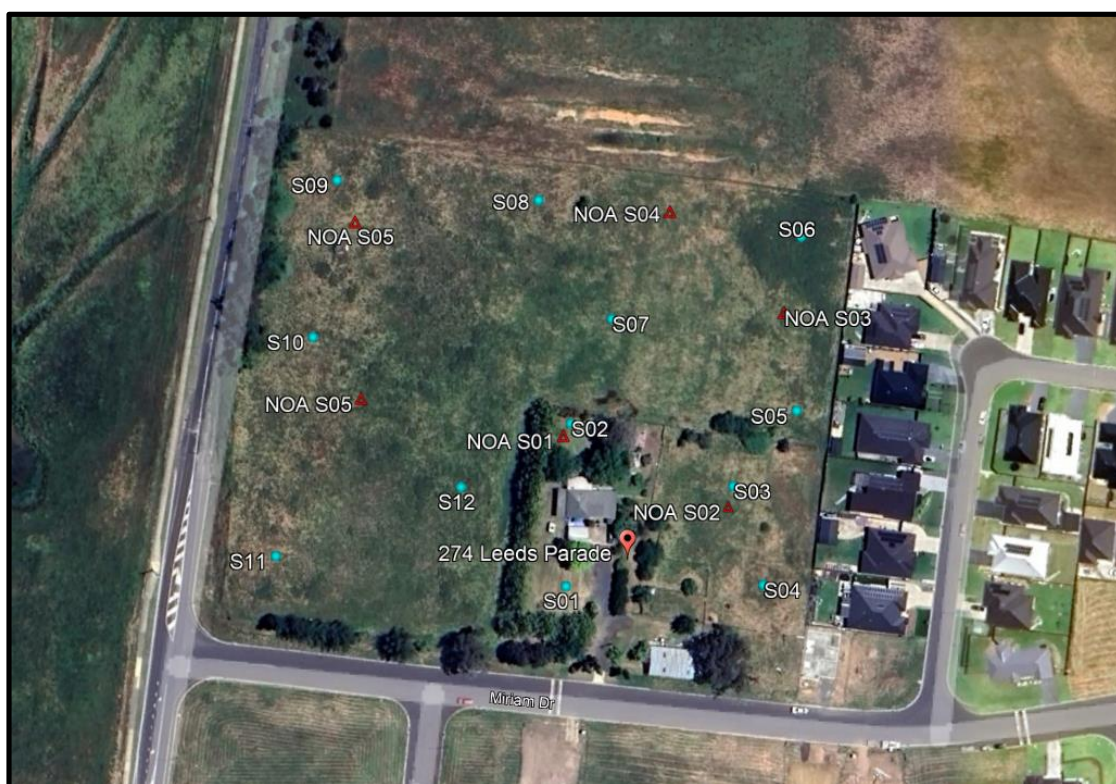


Figure 2: Sampling locations at 274 Leeds Parade, Orange, NSW 2800 – Courtesy of Google Earth.



7.1 ASSESSMENT CRITERIA

Analysis Results will be assessed against the Health Investigation Levels (HILs) for HIL-A Residential as displayed in the Table below.

Table 4: Health Investigation Levels Residential A-Residential (NEPM, 2013)

Chemical	HIL A Residential (mg/kg)
Metals	
Arsenic	100
Cadmium	20
Chromium (VI)	100
Copper	7000
Lead	300
Mercury	200
Nickel	400
Zinc	8000
Cyanide (free)	250
Polycyclic Aromatic Hydrocarbons (PAHs)	
Carcinogenic PAHs (as BaP TEQ)	3
Total PAHs	300
Phenols	
Phenol	3000
Organochlorine Pesticides	
DDT+DDE+DDD	260
Aldrin and dieldrin	7
Chlordane	50
Endosulfan	300
Endrin	10
Heptachlor	7
HCB	10
Methoxychlor	400
Other Pesticides	
Chlorpyrifos	170
Other Organics	
PCBs	1



The analysis results will also be assessed against the Health Screening Levels (HSLs) for HSL A Residential for clay at a depth of 0 to <1m *Table 1A (3) Schedule B1 NEPM*.

Table 5: Health Screening Levels A-Residential (NEPM, 2013)

Chemical	HSL A (mg/kg) Clay 0m to<1m
Benzene	0.8
F1 (C ₆ -C ₁₀)	60

The analysis results will also be assessed against the Ecological Significance Levels (ESLs) for Urban Residential use for Fine Soil *Table 1B(6) Schedule B1, NEPM*.

Table 6: Ecological Screening Levels A-Urban residential and public open space (NEPM, 2013)

Chemical	ESLs Urban residential (mg/kg) Coarse Soil
F1 (C ₆ -C ₁₀)	180
F2 (>C ₁₀ -C ₁₆)	120
F3 (>C ₁₆ -C ₃₄)	300
F4 (>C ₃₄ -C ₄₀)	2800
Benzene	50
Toluene	85
Ethylbenzene	70
Xylenes	105
Benzo (a) pyrene	0.7

7.2 ANALYSIS RESULTS

Sample results for the twelve (12) samples obtained were found to be below the HIL A, HSL A and ESL Urban residential thresholds. It should be noted that analytes were not considered to be elevated to a level that require further investigations.

**Table 7:** Metal Analysis Results VS Health Investigation LEVEL A Residential (NEPM, 2013)

Sample	Depth	Date Sampled	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium Cr6+ (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)	Cyanide (mg/kg)
27182-S1	0-400mm	06/09/2022	15	<0.4	-	42	31	<0.1	26	52	<0.5
27182-S2	0-400mm	06/09/2022	36	<0.4	-	42	20	<0.1	16	45	<0.5
27182-S3	0-400mm	06/09/2022	21	<0.4	<1	83	45	<0.1	78	130	<0.5
27182-S4	0-400mm	06/09/2022	6	<0.4	2	29	16	<0.1	54	22	<0.5
27182-S5	0-400mm	06/09/2022	62	<0.4	<1	40	180	<0.1	37	23	<0.5
27182-S6	0-400mm	06/09/2022	15	<0.4	<1	47	21	<0.1	44	17	<0.5
27182-S7	0-400mm	06/09/2022	22	<0.4	-	51	18	<0.1	16	84	<0.5
27182-S8	0-400mm	06/09/2022	18	<0.4	-	24	13	<0.1	18	12	<0.5
27182-S90	0-400mm	06/09/2022	18	<0.4	-	33	14	<0.1	15	12	<0.5
27182-S10	0-400mm	06/09/2022	28	<0.4	-	52	21	<0.1	22	22	<0.5
27182-S11	0-400mm	06/09/2022	16	<0.4	-	28	31	<0.1	22	22	<0.5
27182-S12	0-400mm	06/09/2022	50	<0.4	<1	43	51	<0.1	29	29	<0.5
27182-S13 (Triplicate)	0-400mm	06/09/2022	28	<0.4	-	40	17	<0.1	46	46	<0.5
Residential A Health Investigation Levels (mg/kg)			100	20	100	7000	300	200	400	8000	250

**Table 8:** PAH Analysis Results VS Health Investigation LEVEL A Residential (NEPM, 2013)

Sample	Depth	Date Sampled	Carcinogenic PAHs (as BaP TEQ) (mg/kg)	Total PAHs (mg/kg)
27182-S1	0-400mm	06/09/2022	<0.5	<0.05
27182-S2	0-400mm	06/09/2022	<0.5	<0.05
27182-S3	0-400mm	06/09/2022	<0.5	<0.05
27182-S4	0-400mm	06/09/2022	<0.5	<0.05
27182-S5	0-400mm	06/09/2022	<0.5	<0.05
27182-S6	0-400mm	06/09/2022	<0.5	<0.5
27182-S7	0-400mm	06/09/2022	<0.5	<0.5
27182-S8	0-400mm	06/09/2022	<0.5	<0.5
27182-S9	0-400mm	06/09/2022	<0.5	<0.5
27182-S10	0-400mm	06/09/2022	<0.5	<0.5
27182-S11	0-400mm	06/09/2022	<0.5	<0.5
27182-S12	0-400mm	06/09/2022	<0.5	<0.5
Residential A Health Investigation Levels (mg/kg)			3	300

**Table 9:** Organochlorine Pesticides Analysis Results VS Health Investigation LEVEL A Residential (NEPM, 2013)

Sample	Depth	Date Sampled	DDT + DDE + DDD (mg/kg)	Aldrin and dieldrin (mg/kg)	Chlordane (mg/kg)	Endosulfan (mg/kg)	Endrin (mg/kg)	Heptachlor (mg/kg)	HCB (mg/kg)	Methoxychlor (mg/kg)
27182-S1	0-400mm	06/09/2022	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S2	0-400mm	06/09/2022	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S3	0-400mm	06/09/2022	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S4	0-400mm	06/09/2022	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S5	0-400mm	06/09/2022	1.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S6	0-400mm	06/09/2022	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S7	0-400mm	06/09/2022	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S8	0-400mm	06/09/2022	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S9	0-400mm	06/09/2022	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S10	0-400mm	06/09/2022	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S11	0-400mm	06/09/2022	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
27182-S12	0-400mm	06/09/2022	0.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Residential A Health Investigation Levels (mg/kg)			260	7	50	300	10	7	10	400

**Table 10:** Other Pesticides Analysis Results VS LEVEL A Residential (NEPM, 2013)

Sample	Depth	Date Sampled	Chlorpyrifos (mg/kg)
27182-S1	0-400mm	06/09/2022	<0.1
27182-S2	0-400mm	06/09/2022	<0.1
27182-S3	0-400mm	06/09/2022	<0.1
27182-S4	0-400mm	06/09/2022	<0.1
27182-S5	0-400mm	06/09/2022	<0.1
27182-S6	0-400mm	06/09/2022	<0.1
27182-S7	0-400mm	06/09/2022	<0.1
27182-S8	0-400mm	06/09/2022	<0.1
27182-S9	0-400mm	06/09/2022	<0.1
27182-S10	0-400mm	06/09/2022	<0.1
27182-S11	0-400mm	06/09/2022	<0.1
27182-S12	0-400mm	06/09/2022	<0.1
Residential A Health Investigation Levels (mg/kg)			170

**Table 11:** Other Organics and Phenols Analysis Results VS Health Investigation LEVEL A Residential (NEPM, 2013)

Sample	Depth	Date Sampled	PCBS (mg/kg)	Phenol (mg/kg)
27182-S1	0-400mm	06/09/2022	<0.1	<5
27182-S2	0-400mm	06/09/2022	<0.1	<5
27182-S3	0-400mm	06/09/2022	<0.1	<5
27182-S4	0-400mm	06/09/2022	<0.1	<5
27182-S5	0-400mm	06/09/2022	<0.1	<5
27182-S6	0-400mm	06/09/2022	<0.1	<5
27182-S7	0-400mm	06/09/2022	<0.1	<5
27182-S8	0-400mm	06/09/2022	<0.1	<5
27182-S9	0-400mm	06/09/2022	<0.1	<5
27182-S10	0-400mm	06/09/2022	<0.1	<5
27182-S11	0-400mm	06/09/2022	<0.1	<5
27182-S12	0-400mm	06/09/2022	<0.1	<5
LEVEL A Residential Health Investigation Levels (mg/kg)			1	3000

**Table 12:** Hydrocarbon results VS Health Screening Levels A Residential Clay (NEPM, 2013)

Sample	Depth	Date Sampled	Benzene (mg/kg)	F1 (C ₆ C ₁₀) (mg/kg)
27182-S1	0-400mm	3/08/2022	<0.2	<25
27182-S2	0-400mm	3/08/2022	<0.2	<25
27182-S3	0-400mm	3/08/2022	<0.2	<25
27182-S4	0-400mm	3/08/2022	<0.2	<25
27182-S5	0-400mm	06/09/2022	<0.2	<25
27182-S6	0-400mm	06/09/2022	<0.2	<25
27182-S7	0-400mm	06/09/2022	<0.2	<25
27182-S8	0-400mm	06/09/2022	<0.2	<25
27182-S9	0-400mm	06/09/2022	<0.2	<25
27182-S10	0-400mm	06/09/2022	<0.2	<25
27182-S11	0-400mm	06/09/2022	<0.2	<25
27182-S12	0-400mm	06/09/2022	<0.2	<25
HSL A Health Screening Clay Levels (mg/kg)			0.8	60

**Table 13:** Analysis results VS Ecological Screening Levels Urban residential and public open space coarse Soil (NEPM, 2013)

Sample	Depth	Date Sampled	F1 C ₆ -C ₁₀ (mg/kg)	F2 (C ₁₀ - C ₁₆) (mg/kg)	F3 (C ₁₆ - C ₃₄) (mg/kg)	F4 (C ₃₄ - C ₄₀) (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl benzene (mg/kg)	Xylenes (mg/kg)	Benzo(a)pyrene (mg/kg)
27182-S1	0-400mm	06/09/2022	<25	82	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S2	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S3	0-400mm	06/09/2022	<25	<50	<100	190	<0.2	<0.5	<1	<1	<0.05
27182-S4	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S5	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S6	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S7	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S8	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S9	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S10	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S11	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
27182-S12	0-400mm	06/09/2022	<25	<50	<100	<100	<0.2	<0.5	<1	<1	<0.05
Ecological Screening Levels Urban Residential Coarse Soil (mg/kg)			180	120	300	2800	50	85	70	105	0.7



Table 14: Analysis results for Naturally occurring Asbestos (NOA)

Sample Number	Depth	Date Sampled	Sample Type	Asbestos Fibres Detected
27182-S1	0-400mm	06/09/2022	Soil Core	No Naturally Occurring Asbestos Detected
27182-S2	0-400mm	06/09/2022	Soil Core	No Naturally Occurring Asbestos Detected
27182-S3	0-400mm	06/09/2022	Soil Core	No Naturally Occurring Asbestos Detected
27182-S4	0-400mm	06/09/2022	Soil Core	No Naturally Occurring Asbestos Detected
27182-S5	0-400mm	06/09/2022	Soil Core	No Naturally Occurring Asbestos Detected



8. DISCUSSION

8.1 SITE OBSERVATIONS

The site largely consists of paddocks, with the house and all structures on site being located in the southeast quadrant of the lot. A gravel driveway leads to the house from Miriam Drive on the southern border.

A raised portion of land was sighted south of the house which contained remnants of a concrete slab, household waste, and blue-grey rocks similar to those in the driveway. This appears to be as a result of levelling the adjacent area for a yard.

A chicken shed, storage shed, and gardens shed are located near the house. A fibre cement pipe which has been assumed to contain asbestos was sighted behind a storage shed. The area around the sheds contained general household debris.

Small stockyards, a large storage shed, rock and timber walls, a water tank, and water troughs are located to the east and southeast of the house.

No surface staining or other abnormal vegetation growth was observed to be present on the site.



9. CONCLUSION AND RECOMMENDATIONS

Given the information provided from within this Preliminary Site Investigation, EnviroScience believes that the following further investigations at 274 Leeds Parade, Orange, NSW, 2800;

- The structures on site do not have a Hazardous Materials Register as far as EnviroScience Solutions staff are aware. Since, according to historical aerial images, the current structures had been constructed prior to 2003 and since an asbestos-containing pipe was found on the site, it is recommended that at minimum an asbestos register and management plan is developed before demolition or renovation works.
- Sample results reported to be below the HIL A - Residential, HSL A – Residential, and ESL Urban residential and public open spaces for all analytes assessed. Alongside the lack of visual indicators at the time of inspection to suggest further contamination at a depth greater than that sampled, no further sampling is necessary.
- Initial total Chromium results reported levels above the Residential A - Health Investigation Levels in samples S3, S4, S5, S6, and S12. However, when analysed specifically for hexavalent Chromium Cr6+, all fell well below the threshold.
- It is recommended that future development works operate under an unexpected finds protocol. Should any unexpected foreign material be exposed, discoloured soils or odours observed then works should cease and the areas assessed by an environmental scientist for assessment and testing.
- If asbestos fragments are found during excavations work should cease and the affected area be investigated by an independent Licensed Asbestos Assessor.



9.1 CONCLUSIONS

The objectives of the Preliminary Site Investigation were to:

- Identify potential contaminants of concern on site
- Identify potential locations of contaminants
- Identify potential exposure routes and pathways
- Identify appropriate assessment criteria for chemicals of concern, and
- Determine if the site requires further investigation, remediation or management prior to works commencing

The available history of the site found no potential contaminants from on-site activities including the potential use and storage of chemicals, oils, fuels and gas.

Given the above investigations and the data quality assessment, the investigation has met the identified objectives.

9.2 CONTINGENCY/UNEXPECTED FINDS PLAN

9.2.1 HAZARDOUS MATERIALS

If unexpected hazardous materials are discovered during the construction activities, the following procedures are recommended;

- Cease work and evacuate the area of work immediately
- Erect barricades to isolate the area and ensure no one accesses without permission from the Environmental Consultant (EnviroScience Solutions).
- Immediately notify the Site Project Manager
- Sampling of the suspected material is to be carried out by the Environmental Consultant to undergo laboratory testing
- The Environmental Consultant will develop a management plan for the discovered material dependent on the laboratory analysis results.
- Remedial works, if required, will need to be undertaken in the area by personnel suitably qualified
- Once the area has remediated and clearance report issued, only then may the barricade be removed and work activities resumed, under direction of the Environmental Consultant.



9.2.2 OTHER UNEXPECTED FINDS

- Heritage – Stop work immediately if you uncover anything that might be an Aboriginal tool or carving or if European heritage items are encountered and contact the Environmental Consultant



10. LIMITATIONS

The proposed works were limited to areas indicated above that are outlined in this report. The following also applies;

1. To the extent permitted by law, EnviroScience Solutions Pty Ltd will not be responsible in tort, contract or otherwise for any loss or damage, including for any personal injuries or death, or any consequential loss, loss of markets and pure economic loss, suffered by the Customer, whether or not the loss or damage occurs in the course of performance by EnviroScience Solutions of this contract or in events which are in the contemplation of EnviroScience Solutions and/or the Customer or in events which are foreseeable by EnviroScience Solutions and/or the Customer.
2. To the extent that liability has not been effectively excluded by the proceeding clause, then EnviroScience Solutions limits its liability to:-
 - (a) The supply of services again; or
 - (b) The payment of the cost of supplying the services again, at the election of EnviroScience Solutions Pty Ltd.



11. REFERENCES

Code of Practice; How to Manage and Control Asbestos in the Workplace [Safe Work NSW: 2019]
Code of Practice; How to Safely Remove Asbestos [SafeWork NSW: 2019].
Contaminated Land Management Act, 1997 (CLM Act).
Guidelines for Consultants Reporting on Contaminated Land (April 2020)
National Environment Protection (Assessment of Site Contamination) Measure, NEPC 2013
NSW EPA, Contaminated Sites, Sampling Design Guidelines
NSW Work Health and Safety Act 2011
NSW Work Health and Safety Regulation 2017
Protection of the Environment Operations Act, 1997 (POEO Act).
State Environmental Planning Policy No- 55 2014 (SEPP 55).
The National Standard for Synthetic Mineral Fibres – NOHSC: 1004(1990)
Waste Avoidance and Resource Recovery Act, 2001 (WARR Act).
Waste Classification Guidelines – Part 1 – Classifying Waste (November 2014) – NSW Environment Protection Authority (EPA)
Western Australia Department of Health, 'Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in WA'
WorkCover NSW, *Managing asbestos in or on soil*, March 2014
Managing Urban Stormwater: *Soils and Construction*. Landcom, (4th Edition) March 2004 (reprinted 2006) (the "Blue Book"). Volume 1 and Volume 2.



Appendix 1: Site Images – 274 Leeds Pde, Orange



Image 1 – House



Image 2 – Ground Surface near house



Image 3 – Mound of waste and fill south of house



Image 4 – Fibre cement pipe behind shed



Image 5 – Paddock; looking east



Image 6 – Paddock; looking north



Image 7 – Soil sample 1



Image 8 – Soil sample 2



Image 8 – Soil sample 3



Image 9 – Soil sample 4



Image 10 – Soil sample 5



Image 11 – Soil sample 6



Image 11 – Soil sample 7



Image 12 – Soil sample 8



Image 13 – Soil sample 9



Image 14 – Soil sample 10



Image 15 – Soil sample 11



Image 16 – Soil sample 12



Image 17 – Soil sample 1 (NOA)



Image 18 – Soil sample 2 (NOA)



Image 19 – Soil sample 3 (NOA)



Image 20 – Soil sample 4 (NOA)



Image 21 – Soil sample 5 (NOA)



Image 22 – Soil sample 6 (NOA)

**LABORATORY ANALYSIS REPORT**
Asbestos Identification Report

Report No: B27182-R1
Client:
Client Address:

Report Date: Monday, September 12, 2022
Analysed Date: Monday, September 12, 2022
Laboratory Receival Date: Monday, September 12, 2022
Sampled Date: Tuesday, September 6, 2022
Sampled by : Michael Williamson
Approved Identifier and Signatory: Simone Lobo

Attention: Tom Miers
Sampled From: 274 Leeds Parade, Orange NSW 2800

Test Method: Polarised Light Microscopy (PLM) including Dispersion Staining (DS), EnviroScience Solutions Pty Ltd in-house laboratory method, in accordance with Australian Standard AS4964-2004 'Method for the qualitative identification of asbestos in bulk samples'. Accredited for compliance with ISO/IEC:17025-Testing.
Please note that EnviroScience Solutions does not accept responsibility for the sample submitted in relation to its source.

Sample Number	Sample Location	Sample Description	Sample Size	Asbestos Fibres Detected
B27182-S1	Location 13	Soil Core	790.0 gm	No Naturally Occurring Asbestos Detected
B27182-S2	Location 14	Soil Core	646.0 gm	No Naturally Occurring Asbestos Detected
B27182-S3	Location 15	Soil Core	669.0 gm	No Naturally Occurring Asbestos Detected
B27182-S4	Location 16	Soil Core	678.0 gm	No Naturally Occurring Asbestos Detected
B27182-S5	Location 17	Soil Core	597.0 gm	No Naturally Occurring Asbestos Detected
B27182-S6	Location 18	Soil Core	552.0 gm	No Naturally Occurring Asbestos Detected

ENVIROSCIENCE SOLUTIONS PTY LTD
NATA Accreditation No. 19366
ACN 157 918 262
Ph 1300 372 436
info@enviroscience.com.au
www.enviroscience.com.au
LABORATORY LOCATED AT 2/3 DOUGLAS MAWSON ROAD, DUBBO NSW 2830





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customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 305195

Client Details

Client	EnviroScience Solutions
Attention	Michael Williamson
Address	PO Box 1645, Dubbo, NSW, 2830

Sample Details

Your Reference	<u>27182, 274 Leeds Parade, Orange, NSW</u>
Number of Samples	12 Soil
Date samples received	08/09/2022
Date completed instructions received	08/09/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	15/09/2022
Date of Issue	15/09/2022
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Diego Bigolin, Inorganics Supervisor
Kyle Gavril, Senior Chemist
Liam Timmins, Organic Instruments Team Leader
Loren Bardwell, Development Chemist
Steven Luong, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference	UNITS	S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	93	88	83	94	89

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference	UNITS	S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
TRH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	93	90	96	89	94

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

vTRH(C6-C10)/BTEXN in Soil			
Our Reference		305195-11	305195-12
Your Reference	UNITS	S11	S12
Date Sampled		06/09/2022	06/09/2022
Type of sample		Soil	Soil
Date extracted	-	12/09/2022	12/09/2022
Date analysed	-	12/09/2022	12/09/2022
TRH C ₆ - C ₉	mg/kg	<25	<25
TRH C ₆ - C ₁₀	mg/kg	<25	<25
vTPH C ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25
Benzene	mg/kg	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1
m+p-xylene	mg/kg	<2	<2
o-Xylene	mg/kg	<1	<1
Naphthalene	mg/kg	<1	<1
Total +ve Xylenes	mg/kg	<1	<1
Surrogate aaa-Trifluorotoluene	%	103	102

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

svTRH (C10-C40) in Soil						
Our Reference		305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference	UNITS	S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ - C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ - C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	95	98	97	95	98

svTRH (C10-C40) in Soil						
Our Reference		305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference	UNITS	S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C ₁₆ - C ₃₄	mg/kg	<100	<100	<100	<100	<100
TRH >C ₃₄ - C ₄₀	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	101	97	98	97	96

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

svTRH (C10-C40) in Soil			
Our Reference		305195-11	305195-12
Your Reference	UNITS	S11	S12
Date Sampled		06/09/2022	06/09/2022
Type of sample		Soil	Soil
Date extracted	-	12/09/2022	12/09/2022
Date analysed	-	12/09/2022	12/09/2022
TRH C ₁₀ - C ₁₄	mg/kg	<50	<50
TRH C ₁₅ - C ₂₈	mg/kg	<100	<100
TRH C ₂₉ - C ₃₆	mg/kg	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50
TRH >C ₁₀ - C ₁₆	mg/kg	<50	<50
TRH >C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50
TRH >C ₁₆ - C ₃₄	mg/kg	<100	<100
TRH >C ₃₄ - C ₄₀	mg/kg	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50
Surrogate o-Terphenyl	%	97	98

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

PAHs in Soil						
Our Reference		305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference	UNITS	S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	115	115	115	110	113

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

PAHs in Soil						
Our Reference		305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference	UNITS	S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	112	113	111	109	107

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

PAHs in Soil			
Our Reference		305195-11	305195-12
Your Reference	UNITS	S11	S12
Date Sampled		06/09/2022	06/09/2022
Type of sample		Soil	Soil
Date extracted	-	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022
Naphthalene	mg/kg	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	105	104

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Organochlorine Pesticides in soil						
Our Reference		305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference	UNITS	S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	0.6	<0.1	1.6
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	0.6	<0.1	1.8
Surrogate TCMX	%	117	114	115	115	116

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Organochlorine Pesticides in soil						
Our Reference		305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference	UNITS	S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	112	113	117	117	113

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Organochlorine Pesticides in soil			
Our Reference		305195-11	305195-12
Your Reference	UNITS	S11	S12
Date Sampled		06/09/2022	06/09/2022
Type of sample		Soil	Soil
Date extracted	-	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022
alpha-BHC	mg/kg	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	0.1	0.8
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	0.1	0.8
Surrogate TCMX	%	112	110

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Organophosphorus Pesticides in Soil						
Our Reference		305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference	UNITS	S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	117	114	115	115	116

Organophosphorus Pesticides in Soil						
Our Reference		305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference	UNITS	S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	112	113	117	117	113

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Organophosphorus Pesticides in Soil			
Our Reference		305195-11	305195-12
Your Reference	UNITS	S11	S12
Date Sampled		06/09/2022	06/09/2022
Type of sample		Soil	Soil
Date extracted	-	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022
Dichlorvos	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	112	110

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

PCBs in Soil						
Our Reference		305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference	UNITS	S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	117	114	115	115	116

PCBs in Soil						
Our Reference		305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference	UNITS	S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	112	113	117	117	113

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

PCBs in Soil			
Our Reference		305195-11	305195-12
Your Reference	UNITS	S11	S12
Date Sampled		06/09/2022	06/09/2022
Type of sample		Soil	Soil
Date extracted	-	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	112	110

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Acid Extractable metals in soil						
Our Reference		305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference	UNITS	S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Date analysed	-	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Arsenic	mg/kg	15	36	21	6	62
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	87	37	220	270	180
Copper	mg/kg	42	42	83	29	40
Lead	mg/kg	31	20	45	16	180
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	26	16	78	54	37
Zinc	mg/kg	52	45	130	22	23

Acid Extractable metals in soil						
Our Reference		305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference	UNITS	S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Date analysed	-	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Arsenic	mg/kg	15	22	18	18	28
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	130	46	46	77	91
Copper	mg/kg	47	51	24	33	52
Lead	mg/kg	21	18	13	14	21
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	44	16	18	15	22
Zinc	mg/kg	17	84	12	12	22

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Acid Extractable metals in soil				
Our Reference	UNITS	305195-11	305195-12	305195-13
Your Reference		S11	S12	S01 - [TRIPLICATE]
Date Sampled		06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil
Date prepared	-	14/09/2022	14/09/2022	14/09/2022
Date analysed	-	14/09/2022	14/09/2022	14/09/2022
Arsenic	mg/kg	16	50	14
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	83	190	89
Copper	mg/kg	28	43	40
Lead	mg/kg	31	51	17
Mercury	mg/kg	<0.1	<0.1	<0.1
Nickel	mg/kg	11	78	25
Zinc	mg/kg	22	29	46

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Misc Soil - Inorg						
Our Reference		305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference	UNITS	S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Date analysed	-	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Total Cyanide	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference	UNITS	S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Date analysed	-	14/09/2022	14/09/2022	14/09/2022	14/09/2022	14/09/2022
Total Cyanide	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg			
Our Reference		305195-11	305195-12
Your Reference	UNITS	S11	S12
Date Sampled		06/09/2022	06/09/2022
Type of sample		Soil	Soil
Date prepared	-	14/09/2022	14/09/2022
Date analysed	-	14/09/2022	14/09/2022
Total Cyanide	mg/kg	<0.5	<0.5
Total Phenolics (as Phenol)	mg/kg	<5	<5

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Moisture						
Our Reference	UNITS	305195-1	305195-2	305195-3	305195-4	305195-5
Your Reference		S01	S02	S03	S04	S05
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
Moisture	%	15	20	22	19	15

Moisture						
Our Reference	UNITS	305195-6	305195-7	305195-8	305195-9	305195-10
Your Reference		S06	S07	S08	S09	S10
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	12/09/2022	12/09/2022	12/09/2022	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022	13/09/2022	13/09/2022	13/09/2022
Moisture	%	16	13	20	22	22

Moisture			
Our Reference	UNITS	305195-11	305195-12
Your Reference		S11	S12
Date Sampled		06/09/2022	06/09/2022
Type of sample		Soil	Soil
Date prepared	-	12/09/2022	12/09/2022
Date analysed	-	13/09/2022	13/09/2022
Moisture	%	24	19

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-014	Cyanide - free, total, weak acid dissociable by segmented flow analyser (in line dialysis with colourimetric finish). Solids/Filters and sorbents are extracted in a caustic media prior to analysis. Impingers are pH adjusted as required prior to analysis. Cyanides amenable to Chlorination - samples are analysed untreated and treated with hypochlorite to assess the potential for chlorination of cyanide forms. Based on APHA latest edition, 4500-CN_G,H.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Method ID	Methodology Summary
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	305195-2
Date extracted	-			12/09/2022	1	12/09/2022	12/09/2022		12/09/2022	12/09/2022
Date analysed	-			12/09/2022	1	12/09/2022	12/09/2022		12/09/2022	12/09/2022
TRH C ₆ - C ₉	mg/kg	25	Org-023	<25	1	<25	<25	0	102	90
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	<25	1	<25	<25	0	102	90
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	96	84
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	104	92
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	102	89
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	105	93
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	105	96
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	108	1	93	87	7	107	95

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	12/09/2022	12/09/2022		[NT]	[NT]
Date analysed	-			[NT]	11	12/09/2022	12/09/2022		[NT]	[NT]
TRH C ₆ - C ₉	mg/kg	25	Org-023	[NT]	11	<25	<25	0	[NT]	[NT]
TRH C ₆ - C ₁₀	mg/kg	25	Org-023	[NT]	11	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-023	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-023	[NT]	11	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-023	[NT]	11	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-023	[NT]	11	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-023	[NT]	11	<1	<1	0	[NT]	[NT]
Naphthalene	mg/kg	1	Org-023	[NT]	11	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	[NT]	11	103	100	3	[NT]	[NT]

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	305195-2
Date extracted	-			12/09/2022	1	12/09/2022	12/09/2022		12/09/2022	12/09/2022
Date analysed	-			12/09/2022	1	12/09/2022	12/09/2022		12/09/2022	12/09/2022
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	<50	1	<50	<50	0	107	106
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	<100	1	<100	<100	0	78	86
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	<100	1	<100	<100	0	86	121
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	<50	1	<50	<50	0	107	106
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	<100	1	<100	<100	0	78	86
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	<100	1	<100	<100	0	86	121
Surrogate o-Terphenyl	%		Org-020	93	1	95	98	3	88	94

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	12/09/2022	12/09/2022		[NT]	[NT]
Date analysed	-			[NT]	11	12/09/2022	12/09/2022		[NT]	[NT]
TRH C ₁₀ - C ₁₄	mg/kg	50	Org-020	[NT]	11	<50	<50	0	[NT]	[NT]
TRH C ₁₅ - C ₂₈	mg/kg	100	Org-020	[NT]	11	<100	<100	0	[NT]	[NT]
TRH C ₂₉ - C ₃₆	mg/kg	100	Org-020	[NT]	11	<100	<100	0	[NT]	[NT]
TRH >C ₁₀ -C ₁₆	mg/kg	50	Org-020	[NT]	11	<50	<50	0	[NT]	[NT]
TRH >C ₁₆ -C ₃₄	mg/kg	100	Org-020	[NT]	11	<100	<100	0	[NT]	[NT]
TRH >C ₃₄ -C ₄₀	mg/kg	100	Org-020	[NT]	11	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-020	[NT]	11	97	95	2	[NT]	[NT]

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	305195-2
Date extracted	-			12/09/2022	1	12/09/2022	12/09/2022		12/09/2022	12/09/2022
Date analysed	-			13/09/2022	1	13/09/2022	13/09/2022		13/09/2022	13/09/2022
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	103	105
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	95	97
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	99	105
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	112
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	106	106
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	109	111
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	87	79
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	136	128
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	111	1	115	117	2	107	109

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	12/09/2022	12/09/2022		[NT]	[NT]
Date analysed	-			[NT]	11	13/09/2022	13/09/2022		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	[NT]	11	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	[NT]	11	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	[NT]	11	105	103	2	[NT]	[NT]

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	305195-2
Date extracted	-			12/09/2022	1	12/09/2022	12/09/2022		12/09/2022	12/09/2022
Date analysed	-			13/09/2022	1	13/09/2022	13/09/2022		13/09/2022	13/09/2022
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	108
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	103	110
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	103	107
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	124	128
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	110
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	121	121
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	118	118
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	102	111
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	98
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	106	108
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	109	1	117	118	1	102	108

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	12/09/2022	12/09/2022		[NT]	[NT]
Date analysed	-			[NT]	11	13/09/2022	13/09/2022		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	[NT]	11	0.1	0.2	67	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	11	112	110	2	[NT]	[NT]

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	305195-2
Date extracted	-			12/09/2022	1	12/09/2022	12/09/2022		12/09/2022	12/09/2022
Date analysed	-			13/09/2022	1	13/09/2022	13/09/2022		13/09/2022	13/09/2022
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	117	113
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	95	101
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	99
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	106
Chlorpyrifos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	106	114
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	84	93
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	102	119
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	109	1	117	118	1	102	108

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	12/09/2022	12/09/2022		[NT]	[NT]
Date analysed	-			[NT]	11	13/09/2022	13/09/2022		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos-methyl	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	[NT]	11	112	110	2	[NT]	[NT]

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: PCBs in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	305195-2
Date extracted	-			12/09/2022	1	12/09/2022	12/09/2022		12/09/2022	12/09/2022
Date analysed	-			13/09/2022	1	13/09/2022	13/09/2022		13/09/2022	13/09/2022
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	122	120
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	109	1	117	118	1	102	108

QUALITY CONTROL: PCBs in Soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	11	12/09/2022	12/09/2022		[NT]	[NT]
Date analysed	-			[NT]	11	13/09/2022	13/09/2022		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	[NT]	11	112	110	2	[NT]	[NT]

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	305195-2
Date prepared	-			14/09/2022	1	14/09/2022	14/09/2022		14/09/2022	14/09/2022
Date analysed	-			14/09/2022	1	14/09/2022	14/09/2022		14/09/2022	14/09/2022
Arsenic	mg/kg	4	Metals-020	<4	1	15	14	7	96	104
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	94	74
Chromium	mg/kg	1	Metals-020	<1	1	87	80	8	97	101
Copper	mg/kg	1	Metals-020	<1	1	42	39	7	93	103
Lead	mg/kg	1	Metals-020	<1	1	31	20	43	95	88
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	100	87
Nickel	mg/kg	1	Metals-020	<1	1	26	25	4	96	80
Zinc	mg/kg	1	Metals-020	<1	1	52	50	4	102	95

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	11	14/09/2022	14/09/2022		[NT]	[NT]
Date analysed	-			[NT]	11	14/09/2022	14/09/2022		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	11	16	18	12	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	11	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	11	83	120	36	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	11	28	28	0	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	11	31	33	6	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	11	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	11	11	15	31	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	11	22	22	0	[NT]	[NT]

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: Misc Soil - Inorg						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	305195-2
Date prepared	-			14/09/2022	1	14/09/2022	14/09/2022		14/09/2022	14/09/2022
Date analysed	-			14/09/2022	1	14/09/2022	14/09/2022		14/09/2022	14/09/2022
Total Cyanide	mg/kg	0.5	Inorg-014	<0.5	1	<0.5	<0.5	0	96	90
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	105	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	11	14/09/2022	14/09/2022		[NT]	[NT]
Date analysed	-			[NT]	11	14/09/2022	14/09/2022		[NT]	[NT]
Total Cyanide	mg/kg	0.5	Inorg-014	[NT]	11	<0.5	<0.5	0	[NT]	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	11	<5	<5	0	[NT]	[NT]

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Result Definitions	
NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Report Comments

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 305195-1 for Pb. Therefore a triplicate result has been issued as laboratory sample number 305195-13.



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customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 305195-A

Client Details

Client	EnviroScience Solutions
Attention	Mark Austin
Address	PO Box 1645, Dubbo, NSW, 2830

Sample Details

Your Reference	27182, 274 Leeds Parade, Orange, NSW
Number of Samples	additional analysis
Date samples received	08/09/2022
Date completed instructions received	16/09/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	21/09/2022
Date of Issue	21/09/2022
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Nick Sarlamis, Assistant Operation Manager

Authorised By

Nancy Zhang, Laboratory Manager

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Misc Soil - Inorg						
Our Reference	UNITS	305195-A-3	305195-A-4	305195-A-5	305195-A-6	305195-A-12
Your Reference		S03	S04	S05	S06	S12
Date Sampled		06/09/2022	06/09/2022	06/09/2022	06/09/2022	06/09/2022
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/09/2022	20/09/2022	20/09/2022	20/09/2022	20/09/2022
Date analysed	-	20/09/2022	20/09/2022	20/09/2022	20/09/2022	20/09/2022
Hexavalent Chromium, Cr ⁶⁺	mg/kg	<1	2	<1	<1	<1

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Method ID	Methodology Summary
Inorg-024	Hexavalent Chromium (Cr6+) - determined colourimetrically. Waters samples are filtered on receipt prior to analysis.

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

QUALITY CONTROL: Misc Soil - Inorg						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	305195-A-4
Date prepared	-			20/09/2022	3	20/09/2022	20/09/2022		20/09/2022	20/09/2022
Date analysed	-			20/09/2022	3	20/09/2022	20/09/2022		20/09/2022	20/09/2022
Hexavalent Chromium, Cr ⁶⁺	mg/kg	1	Inorg-024	<1	3	<1	<1	0	110	127

Client Reference: 27182, 274 Leeds Parade, Orange, NSW

Result Definitions	
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PQL	Practical Quantitation Limit
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Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.



Date: 31 Aug 2022 15:55:36

Reference: LS035833 EP

Address: 274 Leeds Parade, Orange, NSW 2800

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.

You should obtain independent advice before you make any decision based on the information within the report.

The detailed terms applicable to use of this report are set out at the end of this report.

Dataset Listing

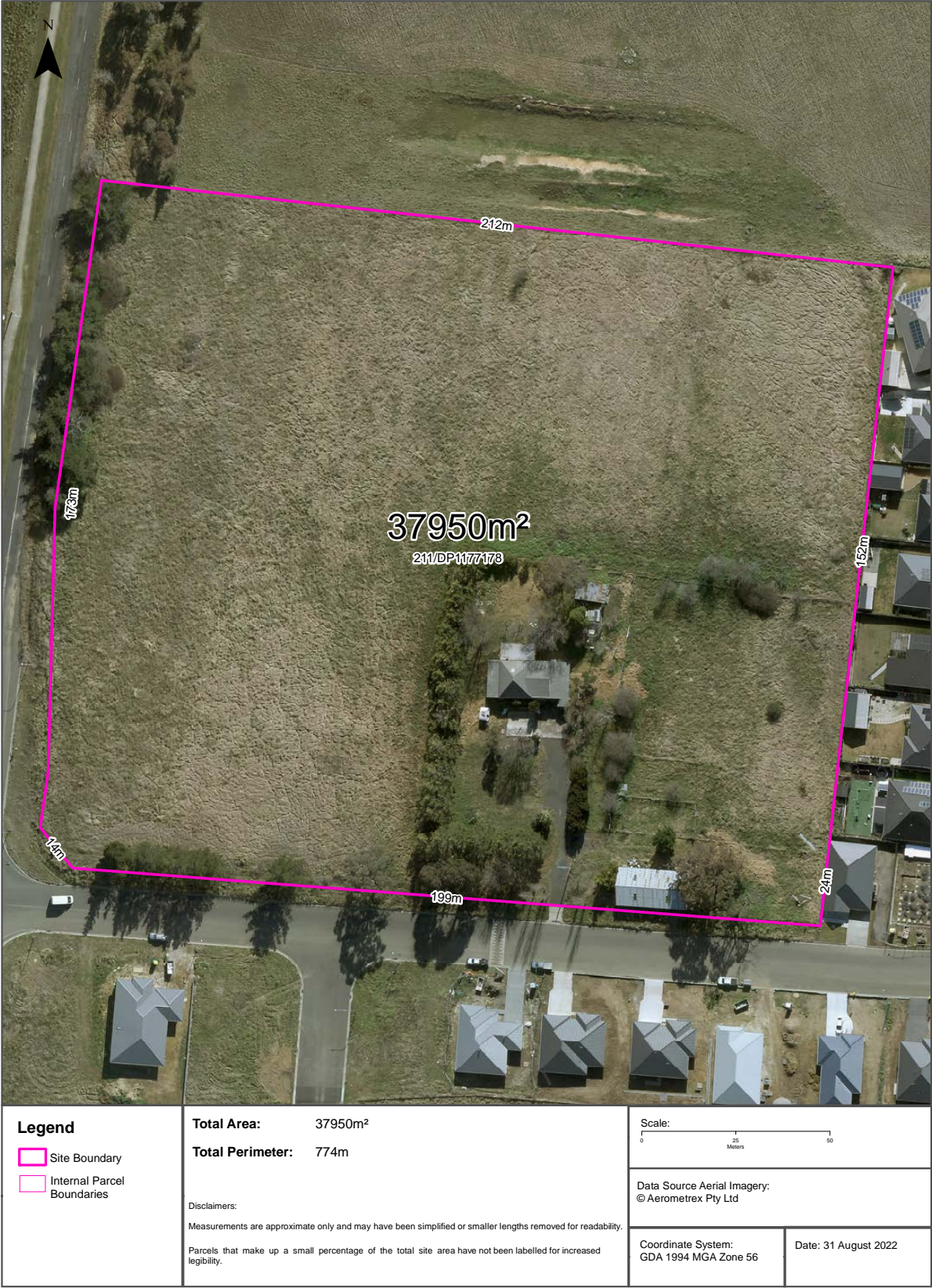
Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	NSW Department of Customer Service - Spatial Services	17/06/2022	17/06/2022	Quarterly	-	-	-	-
Topographic Data	NSW Department of Customer Service - Spatial Services	22/08/2022	22/08/2022	Annually	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	01/08/2022	07/07/2022	Monthly	1000m	0	0	0
Contaminated Land Records of Notice	Environment Protection Authority	19/08/2022	19/08/2022	Monthly	1000m	0	0	0
Former Gasworks	Environment Protection Authority	03/06/2022	14/07/2021	Quarterly	1000m	0	0	0
National Waste Management Facilities Database	Geoscience Australia	26/05/2022	07/03/2017	Annually	1000m	0	0	0
National Liquid Fuel Facilities	Geoscience Australia	23/08/2022	13/07/2012	Annually	1000m	0	0	0
EPA PFAS Investigation Program	Environment Protection Authority	01/08/2022	14/07/2021	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Department of Defence	01/08/2022	01/08/2022	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	01/08/2022	01/08/2022	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	01/08/2022	01/08/2022	Monthly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	06/06/2022	06/06/2022	Quarterly	2000m	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	16/02/2022	13/12/2018	Annually	1000m	0	0	0
Licensed Activities under the POEO Act 1997	Environment Protection Authority	19/08/2022	19/08/2022	Monthly	1000m	0	0	2
Delicensed POEO Activities still regulated by the EPA	Environment Protection Authority	19/08/2022	19/08/2022	Monthly	1000m	0	0	0
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	19/08/2022	19/08/2022	Monthly	1000m	0	3	3
UBD Business Directories (Premise & Intersection Matches)	Hardie Grant			Not required	150m	0	0	0
UBD Business Directories (Road & Area Matches)	Hardie Grant			Not required	150m	-	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500m	0	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500m	-	0	0
Points of Interest	NSW Department of Customer Service - Spatial Services	18/08/2022	18/08/2022	Quarterly	1000m	1	1	7
Tanks (Areas)	NSW Department of Customer Service - Spatial Services	18/08/2022	18/08/2022	Quarterly	1000m	0	0	0
Tanks (Points)	NSW Department of Customer Service - Spatial Services	18/08/2022	18/08/2022	Quarterly	1000m	0	0	4
Major Easements	NSW Department of Customer Service - Spatial Services	29/08/2022	29/08/2022	Quarterly	1000m	0	0	3
State Forest	Forestry Corporation of NSW	16/08/2022	14/08/2022	Annually	1000m	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	10/02/2022	31/12/2021	Annually	1000m	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	29/08/2022	19/08/2019	Annually	1000m	1	1	1
Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018	NSW Department of Planning, Industry and Environment	28/03/2022	23/02/2018	Annually	1000m	0	0	0
National Groundwater Information System (NGIS) Boreholes	Bureau of Meteorology; Water NSW	24/01/2022	24/01/2022	Annually	2000m	0	0	65

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
NSW Seamless Geology Single Layer: Rock Units	Department of Regional NSW	17/02/2022	01/05/2021	Annually	1000m	1	1	3
NSW Seamless Geology – Single Layer: Trendlines	Department of Regional NSW	17/02/2022	01/05/2021	Annually	1000m	0	0	0
NSW Seamless Geology – Single Layer: Geological Boundaries and Faults	Department of Regional NSW	17/02/2022	01/05/2021	Annually	1000m	1	1	4
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000m	1	1	2
Atlas of Australian Soils	Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES)	19/05/2017	17/02/2011	As required	1000m	1	1	1
Soil Landscapes of Central and Eastern NSW	NSW Department of Planning, Industry and Environment	18/08/2022	27/07/2020	Annually	1000m	1	1	2
Environmental Planning Instrument Acid Sulfate Soils	NSW Department of Planning, Industry and Environment	26/05/2022	06/05/2022	Monthly	500m	0	-	-
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000m	1	1	1
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000m	0	0	0
Mining Subsidence Districts	NSW Department of Customer Service - Subsidence Advisory NSW	19/08/2021	05/08/2021	Quarterly	1000m	0	0	0
Current Mining Titles	NSW Department of Industry	01/08/2022	01/08/2022	Monthly	1000m	0	0	1
Mining Title Applications	NSW Department of Industry	01/08/2022	01/08/2022	Monthly	1000m	0	0	0
Historic Mining Titles	NSW Department of Industry	01/08/2022	01/08/2022	Monthly	1000m	4	4	9
Environmental Planning Instrument SEPP State Significant Precincts	NSW Department of Planning, Industry and Environment	15/11/2021	07/12/2018	Monthly	1000m	0	0	0
Environmental Planning Instrument Land Zoning	NSW Department of Planning, Industry and Environment	15/11/2021	05/11/2021	Monthly	1000m	1	3	26
Commonwealth Heritage List	Australian Government Department of the Agriculture, Water and the Environment	03/06/2022	13/04/2022	Annually	1000m	0	0	0
National Heritage List	Australian Government Department of the Agriculture, Water and the Environment	03/06/2022	13/04/2022	Annually	1000m	0	0	0
State Heritage Register - Curtilages	NSW Department of Planning, Industry and Environment	17/08/2022	11/02/2022	Quarterly	1000m	0	0	0
Environmental Planning Instrument Local Heritage	NSW Department of Planning, Industry and Environment	26/05/2022	01/04/2022	Monthly	1000m	0	0	2
Bush Fire Prone Land	NSW Rural Fire Service	29/08/2022	08/08/2022	Weekly	1000m	0	0	0
Central Tablelands Vegetation	NSW Office of Environment & Heritage	21/11/2015	31/10/2010	Unknown	1000m	0	0	3
Ramsar Wetlands of Australia	Australian Government Department of Agriculture, Water and the Environment	28/03/2022	19/03/2020	Annually	1000m	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Annually	1000m	0	0	0
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000m	0	0	0
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	29/08/2022	29/08/2022	Weekly	10000m	-	-	-

Site Diagram

274 Leeds Parade, Orange, NSW 2800



Contaminated Land

274 Leeds Parade, Orange, NSW 2800

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist	Direction
N/A	No records in buffer								

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Contaminated Land

274 Leeds Parade, Orange, NSW 2800

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
N/A	No records in buffer							

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit
<http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm>

Former Gasworks

Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Waste Management & Liquid Fuel Facilities

274 Leeds Parade, Orange, NSW 2800

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist	Direction
N/A	No records in buffer											

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en>

National Liquid Fuel Facilities

National Liquid Fuel Facilities within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist	Direction
N/A	No records in buffer										

National Liquid Fuel Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en>

PFAS Investigation & Management Programs

274 Leeds Parade, Orange, NSW 2800

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Map ID	Site	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Defence PFAS Investigation Program

Sites being investigated by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation Program Data Custodian: Department of Defence, Australian Government

Defence PFAS Management Program

Sites being managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites

274 Leeds Parade, Orange, NSW 2800

Defence 3 Year Regional Contamination Investigation Program

Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

EPA Other Sites with Contamination Issues

274 Leeds Parade, Orange, NSW 2800

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill
- Pasminco Lead Abatement Strategy Area

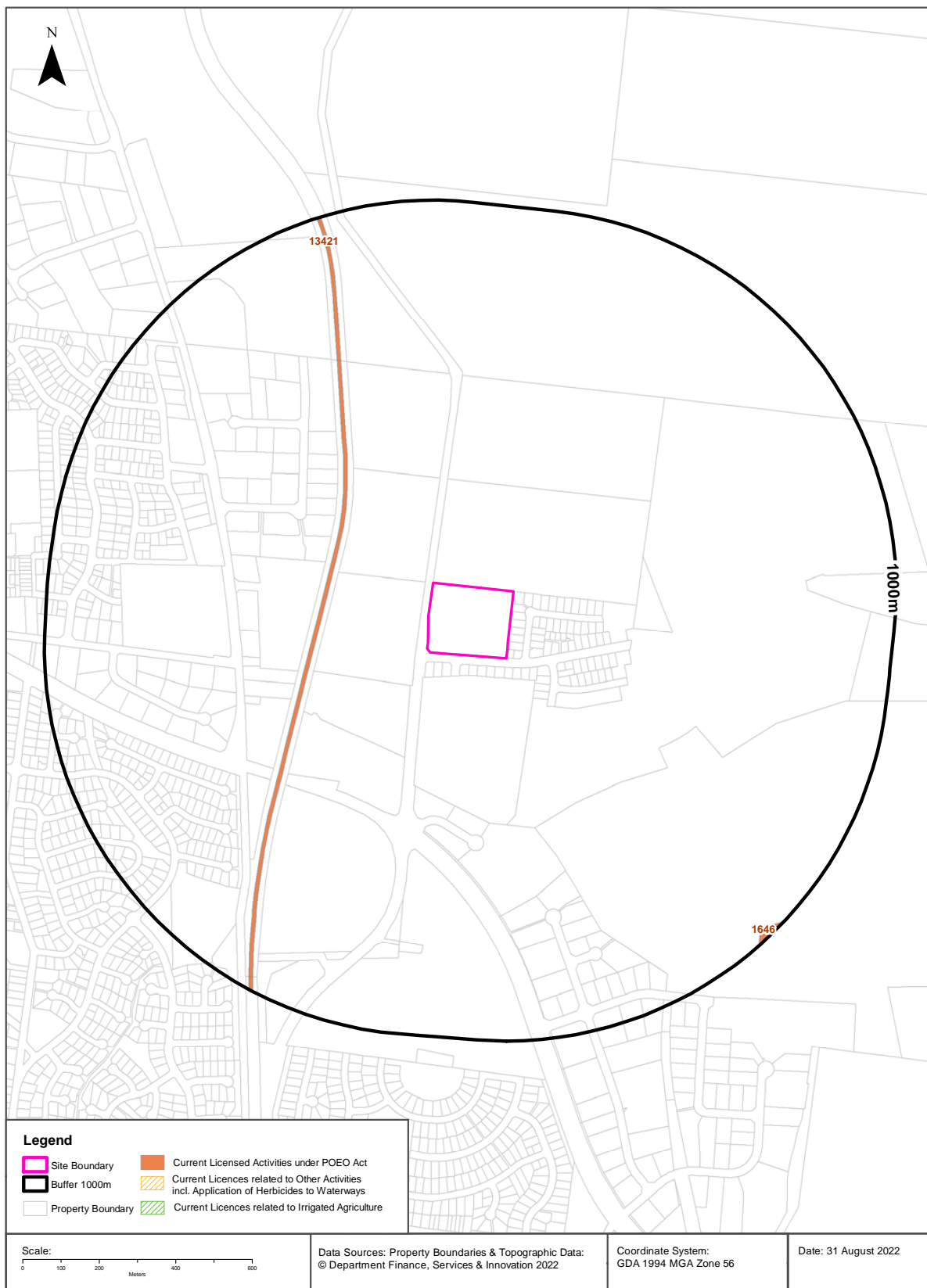
Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
N/A	No records in buffer						

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

274 Leeds Parade, Orange, NSW 2800



EPA Activities

274 Leeds Parade, Orange, NSW 2800

Licensed Activities under the POEO Act 1997

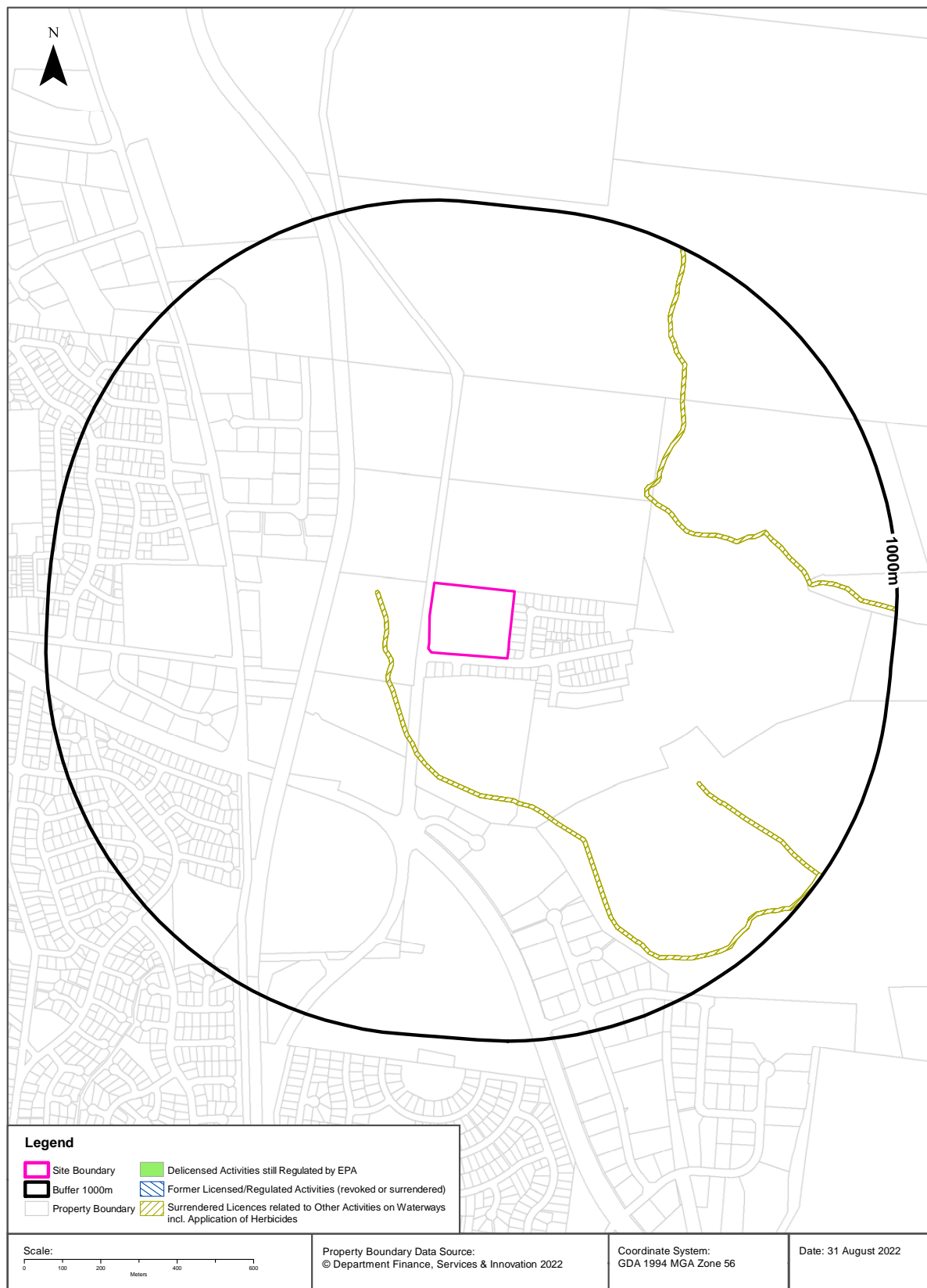
Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
13421	UGL REGIONAL LINX PTY LTD		COUNTRY REGIONAL NETWORK, ORANGE, NSW 2800		Railway systems activities	Network of Features	260m	West
1646	ORANGE CITY COUNCIL	ORANGE SEWAGE TREATMENT SYSTEM	PHILLIP STREET	ORANGE	Sewage treatment processing by small plants	Premise Match	968m	South East

POEO Licence Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Delicensed & Former Licensed EPA Activities

274 Leeds Parade, Orange, NSW 2800



EPA Activities

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Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
N/A	No records in buffer							

Delicensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered	06/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	96m	South East
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered	07/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	96m	South East
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered	09/11/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	96m	South East

Former Licensed Activities Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Historical Business Directories

274 Leeds Parade, Orange, NSW 2800

Business Directory Records 1950-1991 Premise or Road Intersection Matches

Universal Business Directory records from years 1991, 1982, 1970, 1961 & 1950, mapped to a premise or road intersection within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
N/A	No records in buffer						

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Business Directory Records 1950-1991
Road or Area Matches

Universal Business Directory records from years 1991, 1982, 1970, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer					

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Historical Business Directories

274 Leeds Parade, Orange, NSW 2800

Dry Cleaners, Motor Garages & Service Stations Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
N/A	No records in buffer						

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**Dry Cleaners, Motor Garages & Service Stations
Road or Area Matches**

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer					

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Aerial Imagery 2022
274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 2016

274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 2012

274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 2003

274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 1998

274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 1993

274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 1989

274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 1982

274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 1973

274 Leeds Parade, Orange, NSW 2800



Aerial Imagery 1964

274 Leeds Parade, Orange, NSW 2800



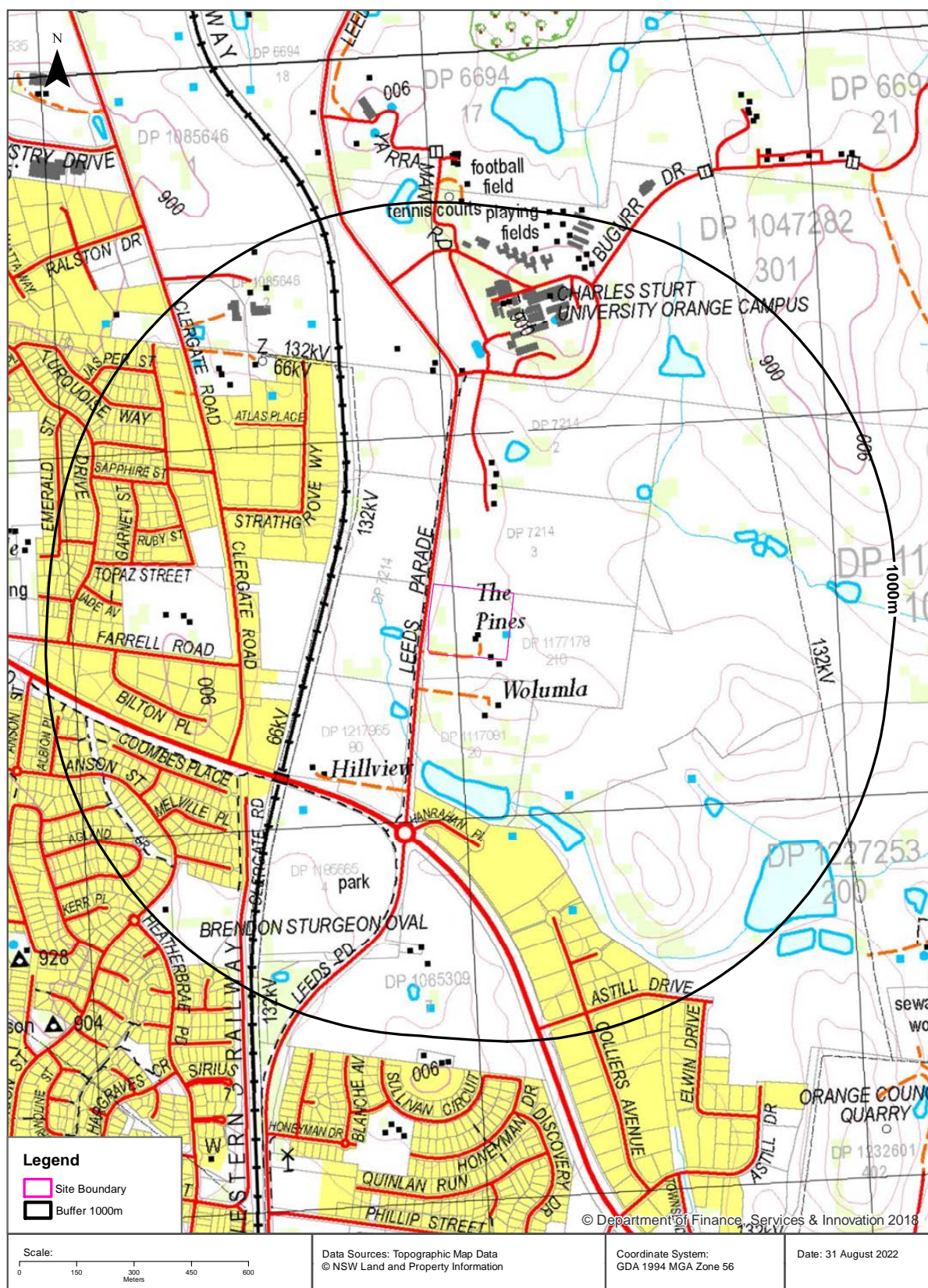
Aerial Imagery 1954

274 Leeds Parade, Orange, NSW 2800



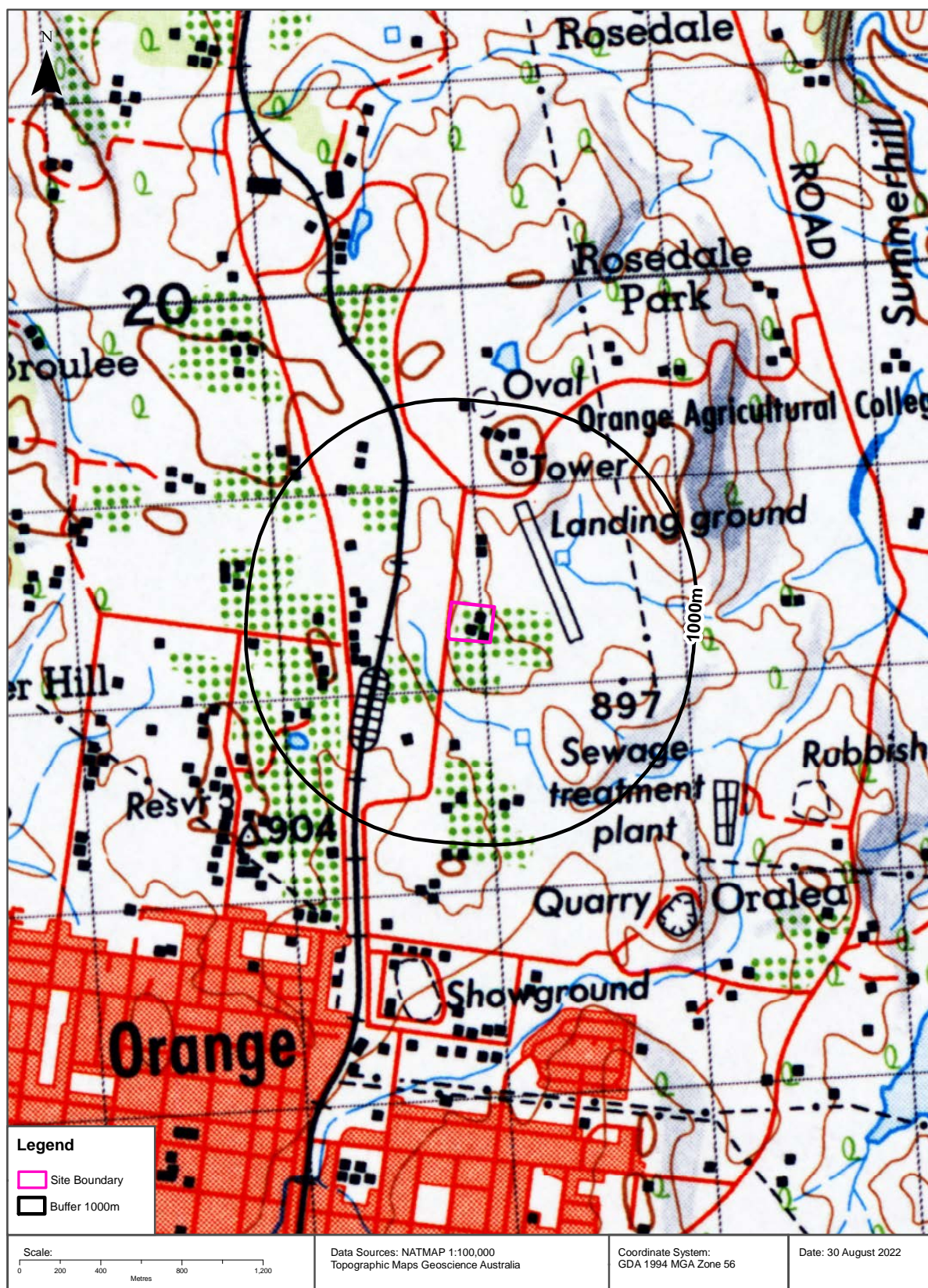
Topographic Map 2015

274 Leeds Parade, Orange, NSW 2800



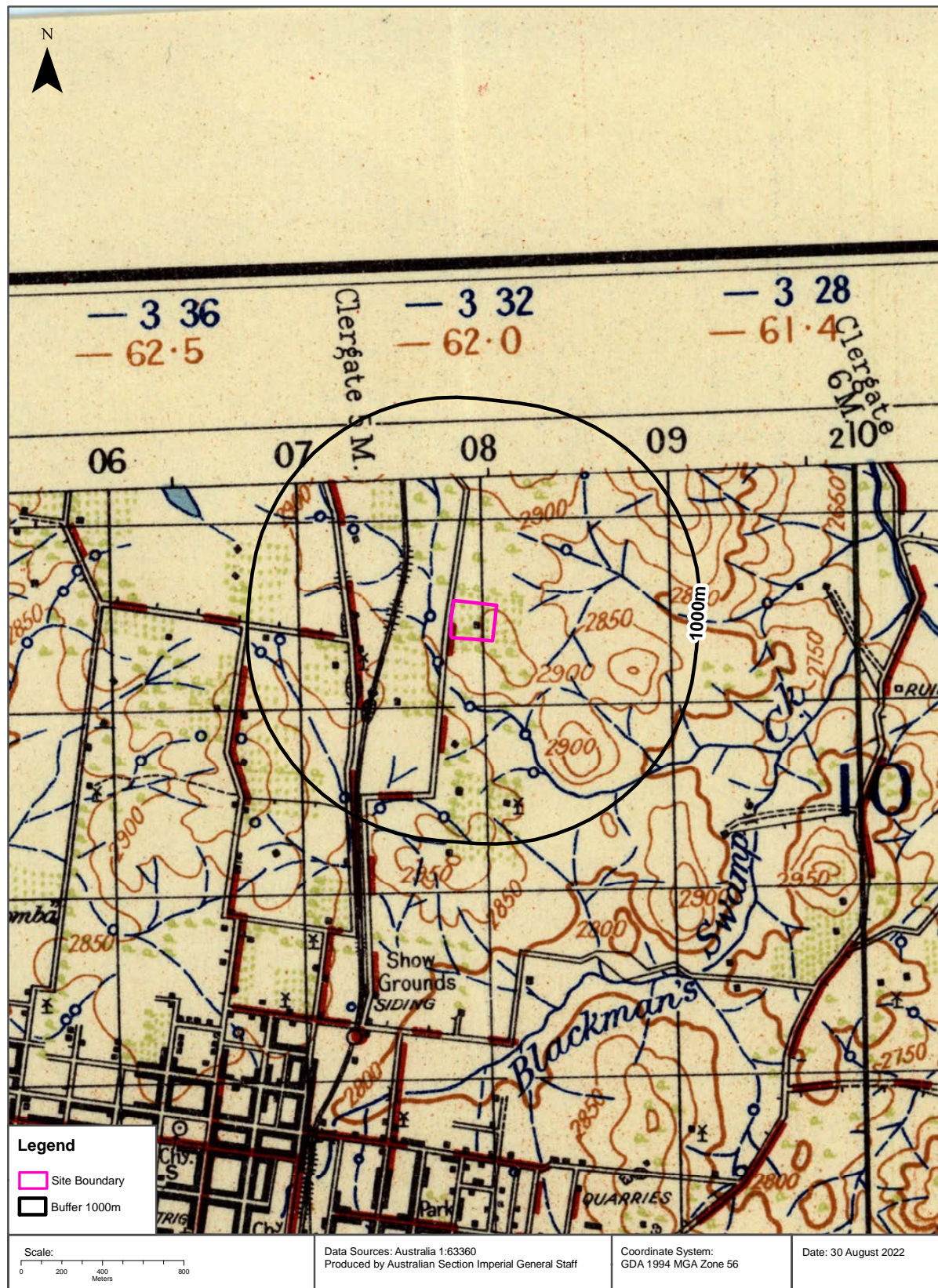
Historical Map 1975

274 Leeds Parade, Orange, NSW 2800



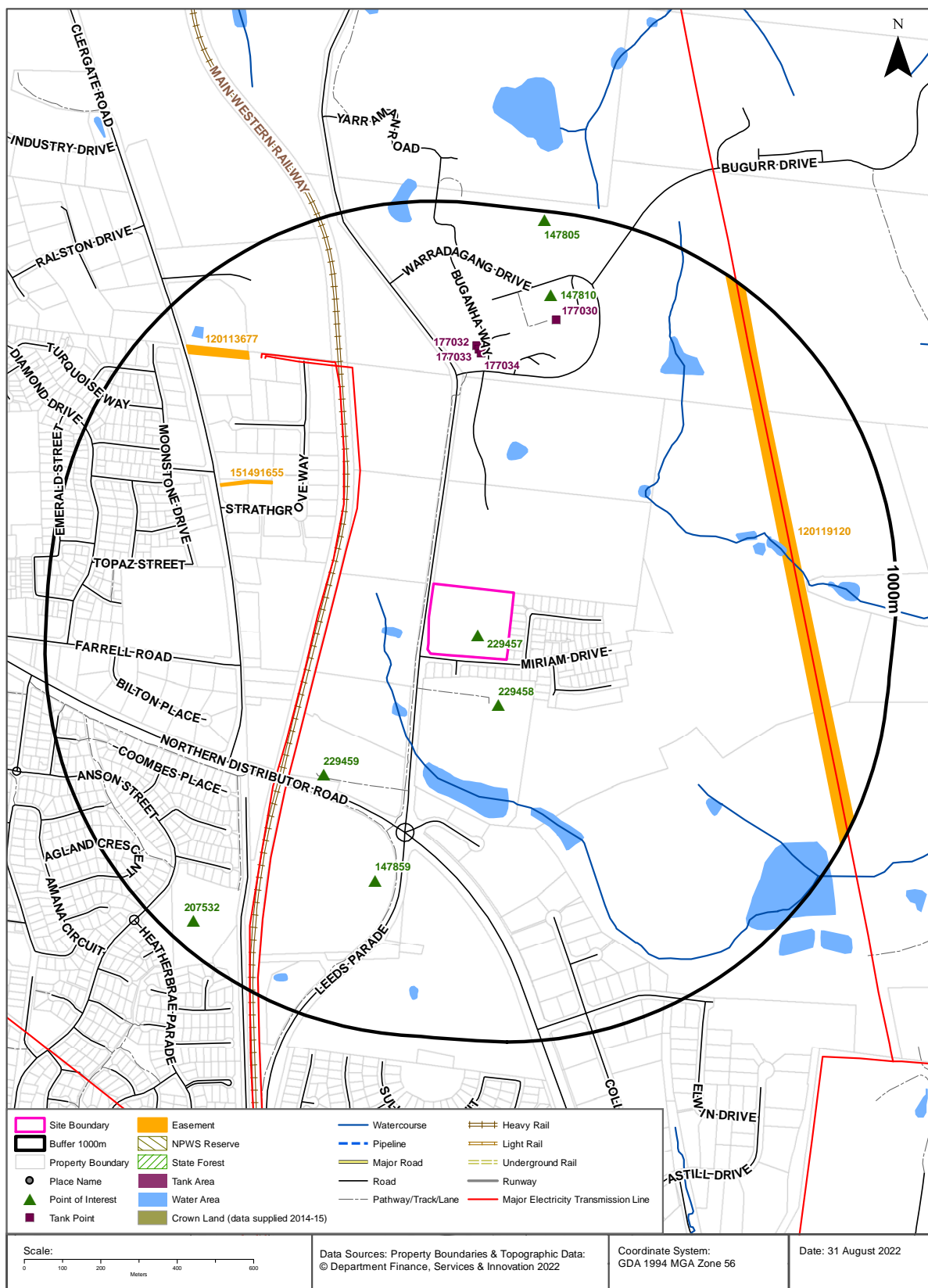
Historical Map c.1938

274 Leeds Parade, Orange, NSW 2800



Topographic Features

274 Leeds Parade, Orange, NSW 2800



Topographic Features

274 Leeds Parade, Orange, NSW 2800

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
229457	Homestead	THE PINES	0m	On-site
229458	Homestead	WOLUMLA	120m	South
229459	Homestead	HILLVIEW	422m	South West
147859	Park	Park	611m	South
147810	University	CHARLES STURT UNIVERSITY ORANGE CAMPUS	783m	North
207532	Sports Field	BRENDON STURGEON OVAL	934m	South West
147805	Sports Field	PLAYING FIELDS	976m	North

Topographic Data Source: © Land and Property Information (2015)
Creative Commons 3.0 © Commonwealth of Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en>

Topographic Features

274 Leeds Parade, Orange, NSW 2800

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?

Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
N/A	No records in buffer					

Tanks (Points)

What are the Tank Points located within the dataset buffer?

Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
177034	Water	Operational		24/10/2012	612m	North
177033	Water	Operational		24/10/2012	622m	North
177032	Water	Operational		24/10/2012	631m	North
177030	Water	Operational		24/10/2012	721m	North

Tanks Data Source: © Land and Property Information (2015)

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Major Easements

What Major Easements exist within the dataset buffer?

Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
151491655	Primary	Right of way	6m	497m	North West
120119120	Primary	Undefined		709m	East
120113677	Primary	Undefined		760m	North West

Easements Data Source: © Land and Property Information (2015)

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Topographic Features

274 Leeds Parade, Orange, NSW 2800

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © NSW Department of Finance, Services & Innovation (2018)
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National Parks and Wildlife Service Reserves

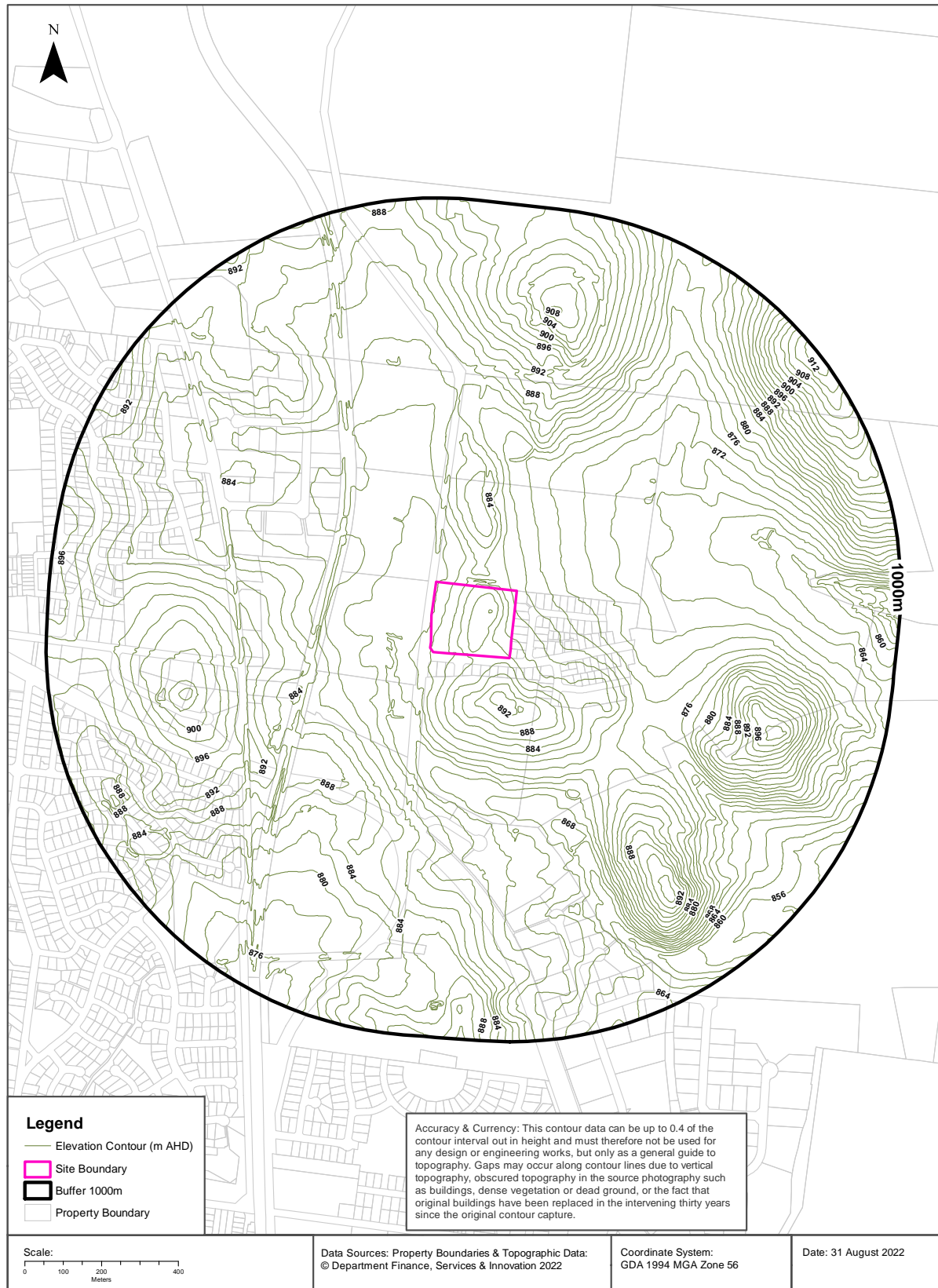
What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © NSW Department of Finance, Services & Innovation (2018)
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Elevation Contours (m AHD)

274 Leeds Parade, Orange, NSW 2800



Hydrogeology & Groundwater

274 Leeds Parade, Orange, NSW 2800

Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Fractured or fissured, extensive aquifers of low to moderate productivity	0m	On-site

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
Creative Commons 3.0 © Commonwealth of Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en>

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018

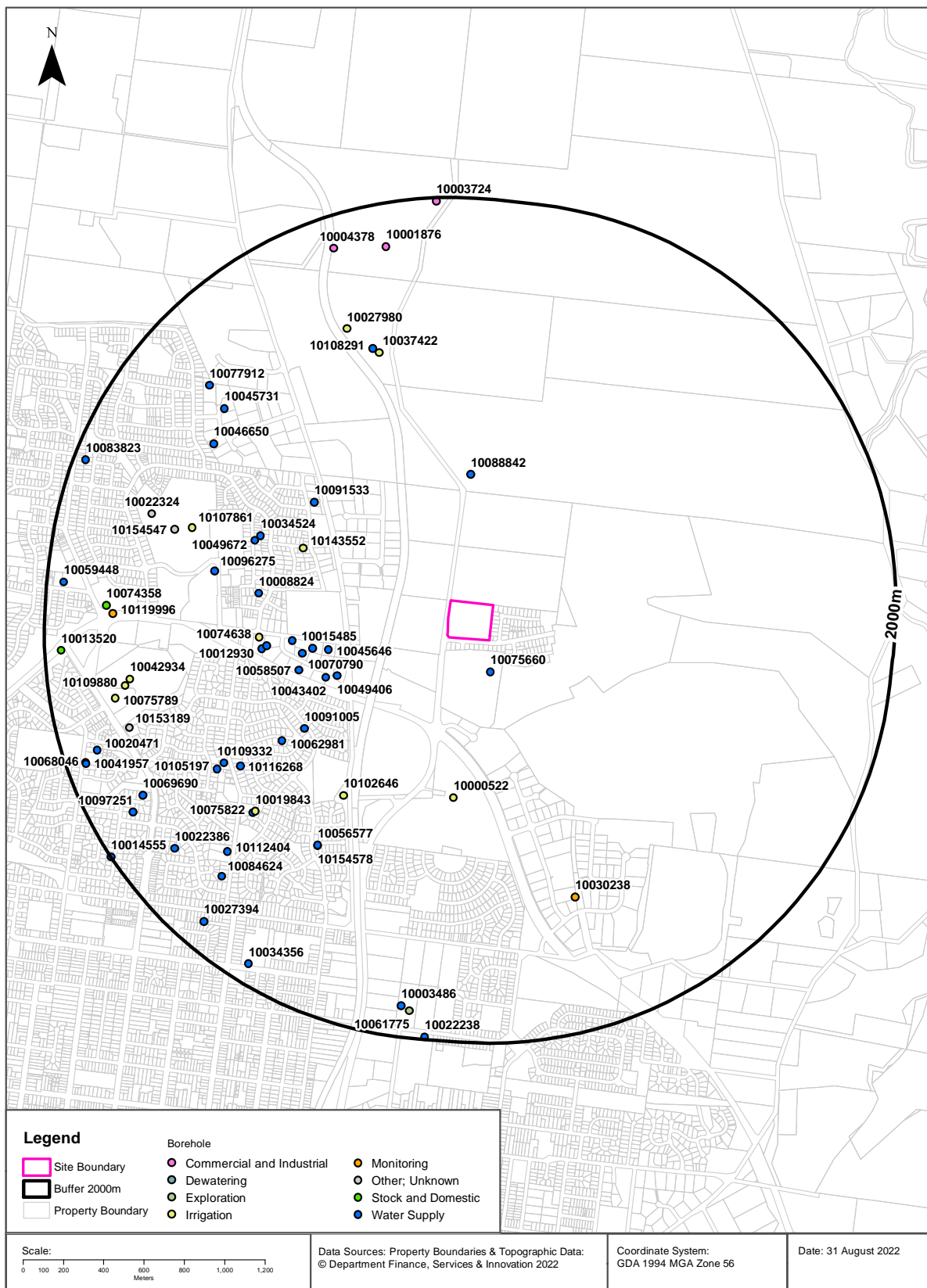
Temporary water restrictions relating to the Botany Sands aquifer within the dataset buffer:

Prohibition Area No.	Prohibition	Distance	Direction
N/A	No records in buffer		

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018 Data Source : NSW Department of Primary Industries

Groundwater Boreholes

274 Leeds Parade, Orange, NSW 2800



Hydrogeology & Groundwater

274 Leeds Parade, Orange, NSW 2800

Groundwater Boreholes

Boreholes within the dataset buffer:

NGIS Bore ID	NSW Bore ID	Bore Type	Status	Drill Date	Bore Depth (m)	Reference Elevation	Height Datum	Salinity (mg/L)	Yield (L/s)	SWL (mbgl)	Distance	Direction
10075660	GW048167	Water Supply	Unknown	01/01/1978	90.60		AHD	0-500 ppm			158m	South
10049406	GW801931	Water Supply	Functioning	26/08/2003	68.00		AHD		1.011		583m	South West
10045646	GW805009	Water Supply	Functioning	06/11/2012	40.00		AHD		1.000		593m	West
10088842	GW021512	Water Supply	Functioning	01/01/1964	21.90		AHD		1.010	4.90	631m	North
10043402	GW802346	Water Supply	Functioning	13/12/2004	54.50		AHD		0.750	24.00	637m	West
10015485	GW800342	Water Supply	Functioning	24/04/1997	48.00		AHD				671m	West
10070790	GW804940	Water Supply	Functioning	15/11/2004	36.00		AHD		1.000	12.00	726m	West
10058507	GW800334	Water Supply	Functioning	26/03/1997	40.00		AHD	Good	0.370	17.00	758m	West
10059978	GW805001	Water Supply	Functioning	07/11/2012	40.00		AHD		0.200		768m	West
10143552	GW016004	Irrigation	Unknown	01/10/1960	24.10		AHD		1.140	7.30	776m	North West
10000522	GW031666	Irrigation	Unknown	01/06/1968	82.30		AHD				793m	South
10091533	GW805430	Water Supply	Functioning	12/08/2014	24.00		AHD		3.000	4.00	832m	North West
10091005	GW016019	Water Supply	Unknown	01/01/1957	24.40		AHD				847m	South West
10091395	GW802140	Water Supply	Functioning	20/01/2003	39.00		AHD		1.011	14.00	897m	West
10012930	GW802674	Water Supply	Functioning	25/03/2003	48.00		AHD		0.821		923m	West
10074638	GW031667	Irrigation	Functioning	01/02/1968	21.50		AHD	Hard	0.380	17.70	932m	West
10102646	GW016015	Irrigation	Unknown	01/01/1940	16.20		AHD				944m	South West
10008824	GW802869	Water Supply	Functioning	31/05/2004	28.00		AHD		0.800	22.00	947m	West
10062981	GW802388	Water Supply	Functioning	11/04/2005	30.00		AHD		1.800	12.00	972m	South West
10034524	GW803474	Water Supply	Functioning	15/12/2007	38.00		AHD		0.834	15.00	996m	West
10049672	GW804222	Water Supply	Functioning	19/01/2010	38.00		AHD	Good	1.260	15.00	1014m	West
10096275	GW801946	Water Supply	Functioning	04/09/2003	38.00		AHD		0.563	14.00	1180m	West
10116268	GW805483	Water Supply	Abandoned	15/12/2014	150.00		AHD		0.018		1215m	South West
10056577	GW805793	Water Supply	Functioning	18/03/2017	60.00		AHD			0.00	1221m	South West
10154578	GW805801	Water Supply	Functioning	18/03/2017	60.00		AHD				1221m	South West
10109332	GW802727	Water Supply	Abandoned	15/12/2003	114.00		AHD				1277m	South West
10037422	GW021545	Irrigation	Unknown	01/12/1963	19.70		AHD				1278m	North
10019843	GW016016	Irrigation	Unknown	01/01/1920	25.30		AHD	Good			1292m	South West
10075822	GW805365	Water Supply	Functioning	03/03/2013	58.00		AHD		0.500		1306m	South West
10108291	GW800811	Water Supply	Functioning	10/10/1994	64.00		AHD	Good	0.880		1307m	North

NGIS Bore ID	NSW Bore ID	Bore Type	Status	Drill Date	Bore Depth (m)	Reference Elevation	Height Datum	Salinity (mg/L)	Yield (L/s)	SWL (mbgl)	Distance	Direction
10105197	GW022336	Water Supply	Unknown	01/04/1964	21.30		AHD				1322m	South West
10107861	GW026040	Irrigation	Unknown	01/04/1966	39.60		AHD		0.380	12.20	1330m	West
10030238	GW805225	Monitoring	Functioning	16/07/2013	42.00		AHD		1.000	6.00	1344m	South
10046650	GW803005	Water Supply	Functioning	17/08/2005	40.00		AHD	Fresh	1.500	24.00	1408m	North West
10154547	GW805683	Other	Functioning	08/02/2016	126.00		AHD				1414m	West
10027980	GW021554	Irrigation	Unknown	01/03/1964	20.70		AHD				1441m	North West
10045731	GW802293	Water Supply	Functioning	14/04/2004	61.00		AHD		1.375	35.00	1469m	North West
10112404	GW804663	Water Supply	Functioning	10/02/2010	57.00		AHD		0.450	9.00	1530m	South West
10022324	GW801669	Other	Functioning	06/12/2002	81.00		AHD		0.820		1542m	West
10042934	GW013781	Irrigation	Unknown	01/10/1958	28.30		AHD				1588m	West
10077912	GW800675	Water Supply	Functioning	25/03/1999	65.00		AHD		1.800	32.00	1602m	North West
10109880	GW015211	Irrigation	Unknown	01/04/1957	17.40		AHD				1617m	West
10084624	GW802974	Water Supply	Functioning	11/04/2005	18.00		AHD		2.000	5.00	1637m	South West
10153189	GW807116	Unknown	Functioning	16/06/2016	41.00		AHD				1642m	West
10119996	GW090102	Monitoring	Functional	17/05/2011	54.00	894.18	AHD			18.37	1662m	West
10075789	GW006955	Irrigation	Unknown	01/08/1958	36.60		AHD				1677m	West
10074358	GW019049	Stock and Domestic	Unknown	01/02/1961	18.60		AHD	Soft			1695m	West
10069690	GW802155	Water Supply	Functioning	30/01/2004	36.00		AHD		0.688	4.00	1707m	South West
10022386	GW804973	Water Supply	Functioning	15/12/2012	54.00		AHD		0.600	10.00	1718m	South West
10001876	GW015886	Commercial and Industrial	Unknown	01/12/1946	20.10		AHD				1784m	North
10097251	GW801916	Water Supply	Functioning	01/08/2003	31.00		AHD		2.000	10.00	1790m	South West
10020471	GW804266	Water Supply	Functioning	22/05/2009	46.00		AHD		1.263	10.00	1828m	West
10004378	GW015885	Commercial and Industrial	Unknown	01/02/1944	19.40		AHD				1839m	North
10003486	GW803930	Water Supply	Unknown	23/09/2008	65.00		AHD		12.300	6.00	1845m	South
10027394	GW802824	Water Supply	Functioning	26/05/2004	42.00		AHD		0.250	15.00	1863m	South West
10061775	GW034202	Exploration	Proposed	01/05/1968	45.70		AHD	Fresh			1865m	South
10068046	GW804223	Water Supply	Functioning	26/04/2010	50.00		AHD	Good	1.220	7.00	1901m	West
10034356	GW804470	Water Supply	Functioning	05/07/2010	30.00		AHD		1.900	12.00	1902m	South West
10041957	GW804280	Water Supply	Functioning	12/05/2010	38.50		AHD		12.200	7.00	1902m	West
10059448	GW070889	Water Supply	Functioning	30/11/1992	40.00	885.00	AHD		2.530	10.00	1914m	West
10013520	GW066747	Stock and Domestic	Functioning	04/01/1991	39.08	883.50	AHD	fresh	1.125	14.15	1917m	West
10083823	GW803662	Water Supply	Functioning	09/05/2008	48.00		AHD		0.631		1939m	North West
10003724	GW019062	Commercial and Industrial	Unknown	01/05/1961	8.20		AHD	Good			1981m	North
10022238	GW804213	Water Supply	Functioning	17/12/2009	76.00		AHD		14.000	10.00	1989m	South
10014555	GW803912	Water Supply	Functioning	26/10/2005	54.00		AHD		0.758		2000m	South West

Borehole Data Source: Bureau of Meteorology; Water NSW. Creative Commons 3.0 © Commonwealth of Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en>

Hydrogeology & Groundwater

274 Leeds Parade, Orange, NSW 2800

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

NGIS Bore ID	Drillers Log	Distance	Direction
10075660	0.00m-0.30m Topsoil 0.30m-2.40m Clay Coloured 2.40m-9.80m Rock Grey Soft Water Supply 9.80m-36.60m Serpentine Green 36.60m-90.60m Granite Coarse	158m	South
10049406	0.00m-0.50m Topsoil 0.50m-7.00m Clay Brown 7.00m-27.00m Shale Coloured 27.00m-32.00m Shale Brown 32.00m-68.00m Basalt	583m	South West
10045646	0.00m-0.30m Topsoil 0.30m-3.00m Clay 3.00m-27.00m Shale 27.00m-40.00m Basalt	593m	West
10088842	0.00m-6.71m Earth 6.71m-21.95m Quartz Seams Rock Soft Water Supply	631m	North
10043402	0.00m-2.00m Topsoil, red 2.00m-12.00m Shale, yellow 12.00m-12.50m Basalt 12.50m-20.00m Shale, yellow & Broken Basalt 20.00m-54.20m Basalt	637m	West
10015485	0.00m-1.00m Red Clay 1.00m-17.00m Orange Clay with Quartz Bands 17.00m-21.00m Blue Basalt 21.00m-24.50m Orange Clay 24.50m-48.00m Blue Basalt	671m	West
10070790	0.00m-0.30m Topsoil 0.30m-6.00m Sandy Clay, tight, brown 6.00m-13.00m Basalt, decomposed 13.00m-27.00m Basalt, hard, blue 27.00m-36.00m Shale, fractured & quartz	726m	West
10058507	0.00m-1.00m Red Clay 1.00m-4.00m Shale With Red Clay 4.00m-8.00m Basalt With Red Clay 8.00m-40.00m Basalt Blue	758m	West
10059978	0.00m-0.30m Topsoil 0.30m-2.00m Clay 2.00m-23.00m Shale 23.00m-40.00m Basalt	768m	West
10143552	0.00m-0.30m Driller 0.30m-15.24m Clay 15.24m-23.47m Slate Water Supply 23.47m-24.08m Basalt	776m	North West
10000522	0.00m-1.83m Topsoil 1.83m-6.10m Shale 6.10m-13.11m Shale Green 13.11m-18.29m Basalt Decomposed Clay 18.29m-43.59m Basalt Water Supply 43.59m-56.39m Serpentine 56.39m-82.30m Basalt Green	793m	South
10091533	0.00m-2.00m Fill; & clay, brown 2.00m-5.00m Clay; yellow 5.00m-16.00m Shale; sandy 16.00m-24.00m Basalt	832m	North West
10091395	0.00m-0.50m Topsoil 0.50m-1.00m Clay 1.00m-15.00m Shale 15.00m-20.00m Basalt, soft 20.00m-39.00m Basalt, hard	897m	West
10012930	0.00m-1.00m Topsoil 1.00m-10.00m Shale, brown 10.00m-26.00m Shale, grey 26.00m-48.00m Basalt	923m	West

NGIS Bore ID	Drillers Log	Distance	Direction
10074638	0.00m-7.62m Clay 7.62m-18.29m Shale 18.29m-21.49m Gravel Hard Formation/strata Water Supply	932m	West
10008824	0.00m-0.50m Topsoil, red 0.50m-20.00m Clay, yellow 20.00m-22.00m Weathered Volcanic, grey 22.00m-28.00m Andesite, fresh, fine, grey	947m	West
10062981	0.00m-3.00m Clay, dark brown, puggy 3.00m-6.00m Clay, light brown 6.00m-12.00m Clay, light brown & Decomposed Basalt 12.00m-14.00m Decomposed basalt 14.00m-30.00m Basalt, blue & Quartz layers	972m	South West
10034524	0.00m-3.00m Topsoil 3.00m-17.00m Clay 17.00m-24.00m Shale 24.00m-38.00m Basalt	996m	West
10049672	0.00m-0.20m Topsoil 0.20m-3.00m Clay 3.00m-18.00m Shale 18.00m-38.00m Basalt	1014m	West
10096275	0.00m-0.50m Top Soil 0.50m-4.00m Clay 4.00m-14.00m Shale - soft yellow 14.00m-24.00m Basalt - frac 24.00m-38.00m Basalt	1180m	West
10116268	0.00m-2.00m Topsoil 2.00m-35.00m Shale; brown 35.00m-150.00m Shale; blue	1215m	South West
10109332	0.00m-3.00m Clay 3.00m-16.00m Weathered Basalt 16.00m-20.00m Basalt, grey 20.00m-21.00m Broken Basalt 21.00m-42.00m Basalt, black 42.00m-50.00m Basalt, grey 50.00m-102.00m Andesite, white & grey seams 102.00m-114.00m Shale, grey	1277m	South West
10037422	0.00m-4.57m Clay 4.57m-7.62m Rock Soft 7.62m-16.15m Rock Medium Hard 16.15m-19.51m Basalt Hard Water Supply 19.51m-19.66m Driller	1278m	North
10075822	0.00m-1.00m Topsoil 1.00m-3.00m Clay 3.00m-25.00m Shale 25.00m-28.20m Basalt; water bearing 28.20m-37.00m Basalt 37.00m-37.10m Basalt; water bearing 37.10m-53.00m Basalt 53.00m-53.20m Basalt; water bearing 53.20m-58.00m Basalt	1306m	South West
10108291	0.00m-1.00m Topsoil 1.00m-4.00m Clay 4.00m-10.00m Shale 10.00m-64.00m Basalt	1307m	North
10105197	0.00m-1.22m Driller 1.22m-7.62m Shale Soft 7.62m-17.68m Shale Medium Soft 17.68m-21.34m Basalt Soak	1322m	South West
10107861	0.00m-18.29m Clay Soak 18.29m-29.26m Shale 29.26m-34.44m Gravel Formation/strata 34.44m-39.62m Seams Gravel Water Supply	1330m	West
10030238	0.00m-2.30m Fill 2.30m-5.00m Shale; weathered 5.00m-42.00m Limestone	1344m	South
10046650	0.00m-0.30m Topsoil 0.30m-8.00m Sandy Clay, brown 8.00m-28.00m Weathered Shale, brown 28.00m-36.00m Shale, brown 36.00m-38.00m Slate, blue 38.00m-40.00m Slate, black	1408m	North West
10027980	0.00m-7.62m Clay 7.62m-20.73m Rock Yellow Soft Gravel Water Supply 7.62m-20.73m Granite Seams	1441m	North West

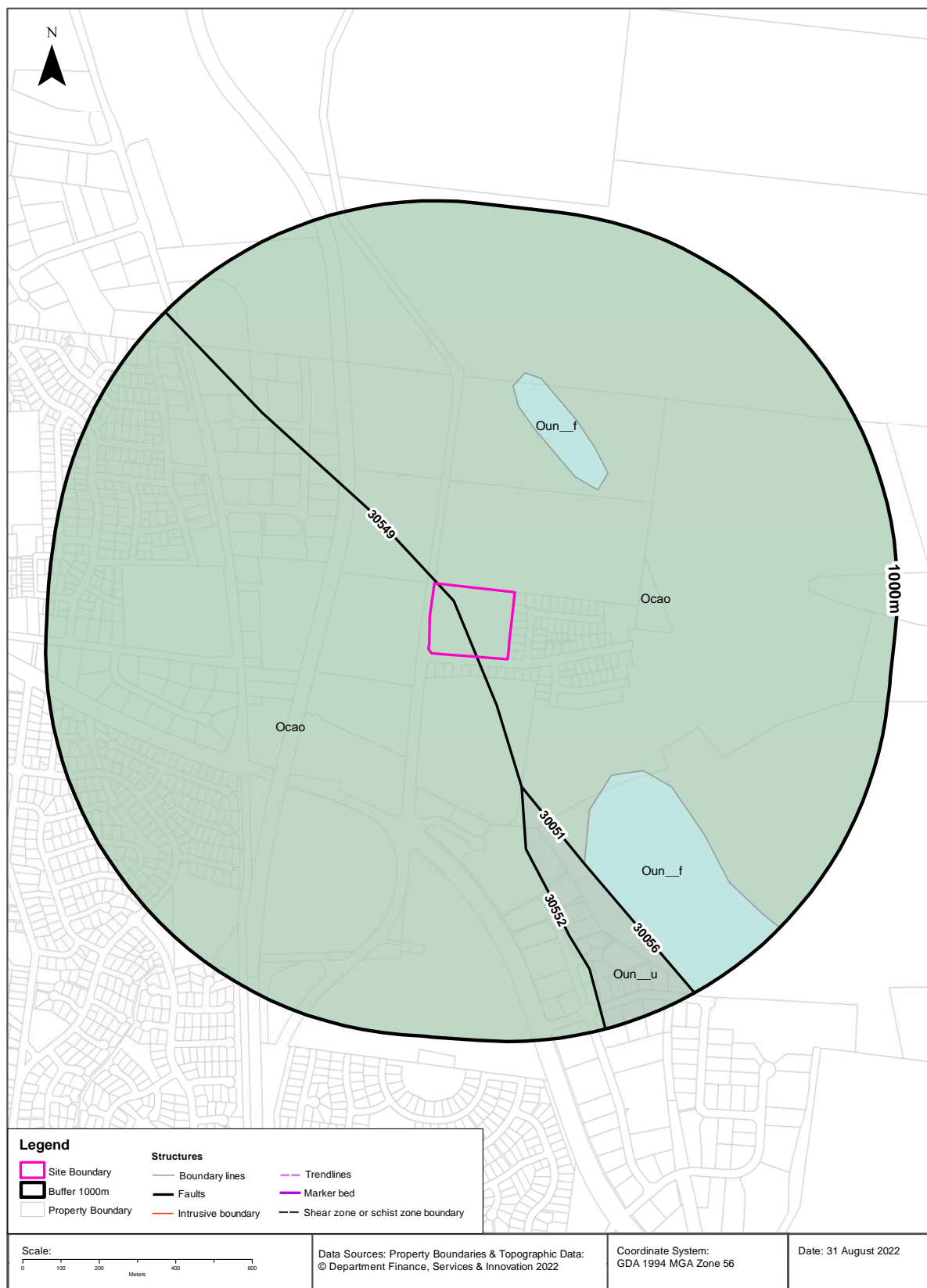
NGIS Bore ID	Drillers Log	Distance	Direction
10045731	0.00m-0.50m Topsoil 0.50m-3.00m Sandy Clay, red 3.00m-20.00m Sandy Clay 20.00m-23.00m Sandy Clay with Basalt 23.00m-31.00m Sandy Clay 31.00m-54.00m Basalt 54.00m-61.00m Basalt, hard	1469m	North West
10112404	0.00m-1.00m Topsoil 1.00m-5.00m Clay, brown 5.00m-8.50m Shale, grey 8.50m-9.00m Shale, broken 9.00m-54.00m Shale, fractured, grey 54.00m-57.00m Shale, green	1530m	South West
10022324	0.00m-10.00m Clay 10.00m-33.00m Rock, soft broken 33.00m-45.00m Broken Basalt 45.00m-81.00m Basalt	1542m	West
10042934	0.00m-14.33m Earth Geologist 14.33m-25.30m Chert Geologist 25.30m-26.82m Basalt Decomposed Water Supply Geologist 26.82m-28.35m Chert Geologist	1588m	West
10077912	0.00m-0.50m Topsoil 0.50m-13.00m Clay, red 13.00m-22.00m Clay, red and quartz bands 22.00m-39.50m Shale, soft 39.50m-42.00m Shale, black 42.00m-65.00m Basalt, black	1602m	North West
10084624	0.00m-0.50m Topsoil 0.50m-18.00m Shale	1637m	South West
10119996	0.00m-12.00m silty, orange 12.00m-23.00m clay, orange with some siltstone 23.00m-39.00m siltstone, weathered 39.00m-40.00m quartzite 40.00m-43.00m siltstone 43.00m-54.00m basalt	1662m	West
10075789	0.00m-2.44m Earth Geologist 2.44m-17.98m Slate Chert Geologist 17.98m-36.58m Chert Very Hard Geologist	1677m	West
10074358	0.00m-6.10m Soft 6.10m-18.59m Shale Water Supply	1695m	West
10069690	0.00m-0.20m Topsoil 0.20m-1.00m Sandy Clay 1.00m-2.00m Clay, puggy 2.00m-8.00m Shale, soft, yellow 8.00m-17.00m Basalt, decomposed 17.00m-25.00m Decomposed Basalt & Clay 25.00m-31.00m Basalt, hard, grey 31.00m-36.00m Shale, grey	1707m	South West
10022386	0.00m-1.00m Topsoil 1.00m-3.00m Shale, decomposed 3.00m-54.00m Shale, dark grey	1718m	South West
10097251	0.00m-0.70m Topsoil 0.70m-15.00m Sandy Clay, coloured with hard broken Clay 15.00m-24.00m Broken Basalt 24.00m-31.00m Basalt, hard	1790m	South West
10020471	0.00m-13.00m Shale 13.00m-46.00m Basalt, with quartz bands	1828m	West
10003486	0.00m-1.00m Topsoil 1.00m-5.50m Clay 5.50m-11.00m Basalt, decomposed 11.00m-19.00m Basalt 19.00m-43.00m Basalt, fractured 43.00m-65.00m Basalt, hard	1845m	South
10027394	0.00m-0.50m Topsoil 0.50m-6.00m Sandy Clay & Oxides 6.00m-7.00m Weathered Basalt 7.00m-12.00m Weathered Basalt & Clay 12.00m-42.00m Basalt, blue with Quartz	1863m	South West
10061775	0.00m-0.91m Topsoil 0.91m-5.48m Clay Yellow 5.48m-10.66m Basalt Decomposed 10.66m-25.29m Basalt Broken Clay Seams 25.29m-28.95m Basalt Black 28.95m-33.52m Basalt Grey Water Supply 33.52m-45.72m Basalt Black Water Supply	1865m	South

NGIS Bore ID	Drillers Log	Distance	Direction
10068046	0.00m-3.00m Rock, weathered, brown grey 3.00m-6.00m Rock, weathered, brown yellow 6.00m-12.00m Rock, broken, yellow brown 12.00m-20.00m Rhyolite, light grey, fine grained, hard 20.00m-23.00m Rhyolite, grey, fine grained, hard 23.00m-50.00m Rhyolite, grey, fine grained, hard	1901m	West
10034356	0.00m-0.10m Topsoil 0.10m-3.00m Clay 3.00m-20.00m Shale, yellow 20.00m-30.00m Basalt	1902m	South West
10041957	0.00m-3.00m Rock, weathered, brown/grey 3.00m-6.00m Rock, weathered, brown/yellow 6.00m-12.00m Rock, broken, yellow/brown 12.00m-20.00m Rhyolite, light grey, fine grained, hard 20.00m-23.00m Rhyolite, grey, fine grained, hard 23.00m-38.50m Rhyolite, grey, fine grained	1902m	West
10059448	0.00m-1.00m Topsoil 1.00m-13.00m Clay, and shale 13.00m-40.00m Basalt	1914m	West
10013520	0.00m-0.30m Topsoil 0.30m-5.50m Clay 5.50m-16.60m Shale, weathered 16.60m-39.08m Slate	1917m	West
10083823	0.00m-1.00m Topsoil 1.00m-3.00m Clay, brown 3.00m-8.00m Shale 8.00m-31.00m Shale with hard bands 31.00m-33.00m Shale, very hard, brown 33.00m-48.00m Basalt & Quartz	1939m	North West
10003724	0.00m-0.91m Topsoil 0.91m-1.52m Clay Yellow 1.52m-2.13m Clay 2.13m-3.05m Clay Yellow 3.05m-4.27m Shale Black 4.27m-4.88m Clay Yellow Shale 4.88m-6.55m Limestone 6.55m-6.71m Shale Soft Water Supply 6.71m-8.23m Diorite Hard	1981m	North
10022238	0.00m-0.30m Topsoil 0.30m-3.00m Clay 3.00m-9.00m Shale, yellow 9.00m-20.00m Basalt, weathered 20.00m-35.00m Basalt, brown 35.00m-56.00m Basalt, blue 56.00m-76.00m Basalt, grey	1989m	South
10014555	0.00m-1.00m Topsoil 1.00m-18.00m Clay, red 18.00m-27.00m Clay, soft with quartz 27.00m-54.00m Andesite	2000m	South West

Drill Log Data Source: Bureau of Meteorology; Water NSW. Creative Commons 3.0 © Commonwealth of Australia <http://creativecommons.org/licenses/by/3.0/au/deed.en>

Geology

274 Leeds Parade, Orange, NSW 2800



Geology

274 Leeds Parade, Orange, NSW 2800

Geological Units

What are the Geological Units within the dataset buffer?

Unit Code	Unit Name	Description	Unit Stratigraphy	Age	Dominant Lithology	Distance
Ocao	Oakdale Formation	Mafic volcanic sandstone; basalt, basaltic andesite, latite and intrusions emplaced as a lava. Volcaniclastic breccia and conglomerate, siltstone, shale, chert. Minor allochthonous limestone and calcareous sedimentary rocks.	/Cabonne Group//Oakdale Formation//	Gi1 (Gisbornian) (base) to Bo2 (Bolindian) (top)	Sandstone	0m
Oun__u	Unassigned Ordovician intrusions - ultramafics	Ultramafic cumulates and lava.	/Unassigned Ordovician intrusions//Unassigned Ordovician intrusions - ultramafics//	Late Ordovician (base) to Late Ordovician (top)	Ultramafic igneous rock	336m
Oun__f	Unassigned Ordovician intrusions - felsic	Monzonite to monzodiorite, monzogabbro, quartz monzonite and minor granite.	/Unassigned Ordovician intrusions//Unassigned Ordovician intrusions - felsic//	Late Ordovician (base) to Late Ordovician (top)	Igneous rock	340m

Linear Geological Structures

What are the Dyke, Sill, Fracture, Lineament and Vein trendlines within the dataset buffer?

Map ID	Feature Description	Map Sheet Name	Distance
No Features			

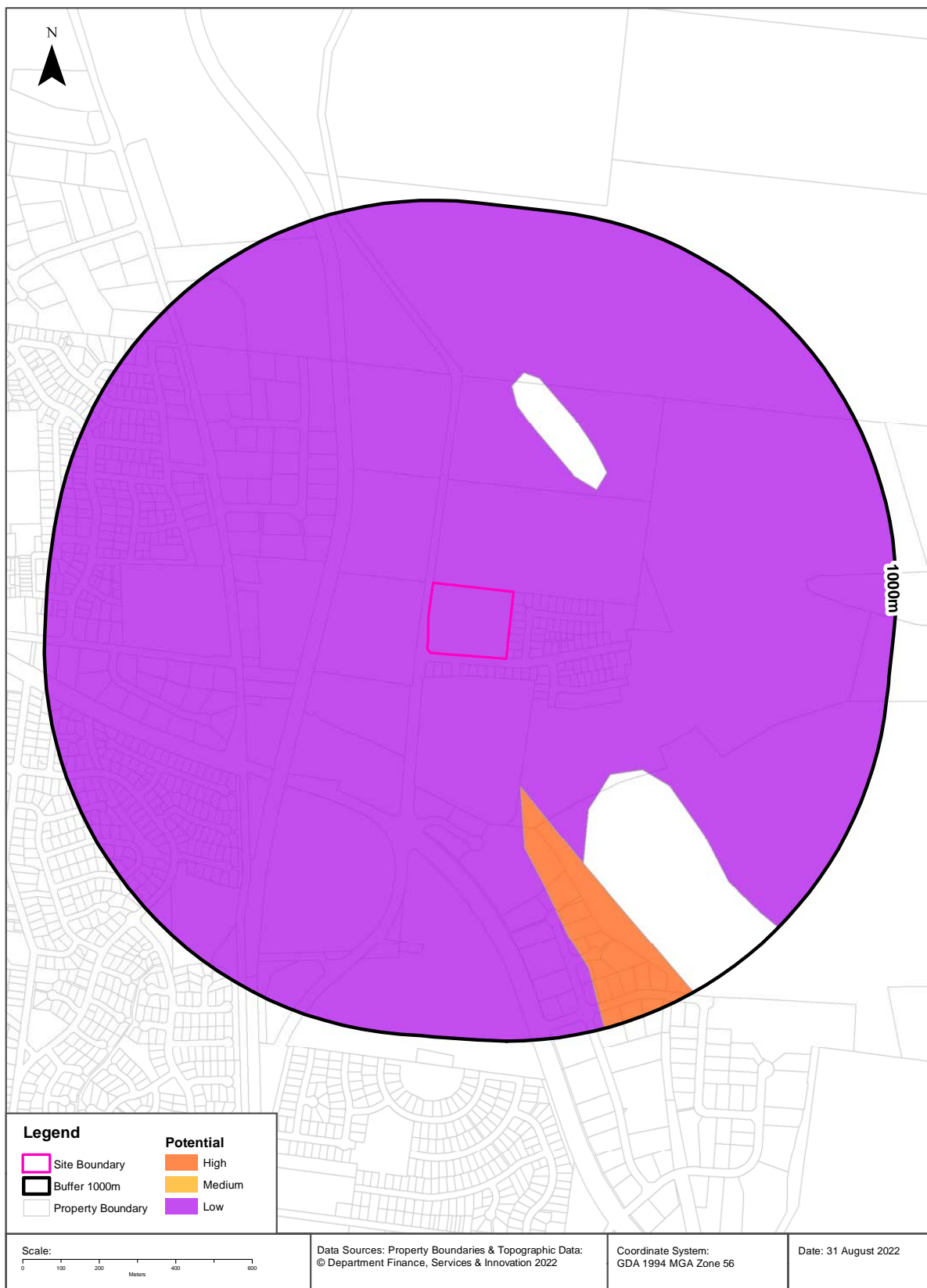
What are the Faults, Shear zones or Schist zones, Intrusive boundaries & Marker beds within the dataset buffer?

Map ID	Boundary Type	Description	Map Sheet Name	Distance
30549	Faulted boundary	Thrust-fault, approximate	Orange 1:100,000 Geological Sheet	0m
30051	Faulted boundary	Thrust-fault, accurate.	Orange 1:100,000 Geological Sheet	336m
30552	Faulted boundary	Thrust-fault, approximate	Orange 1:100,000 Geological Sheet	336m
30056	Faulted boundary	Thrust-fault, accurate.	Orange 1:100,000 Geological Sheet	572m

Geological Data Source: Statewide Seamless Geology v2.1, Department of Regional NSW
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Naturally Occurring Asbestos Potential

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Naturally Occurring Asbestos Potential

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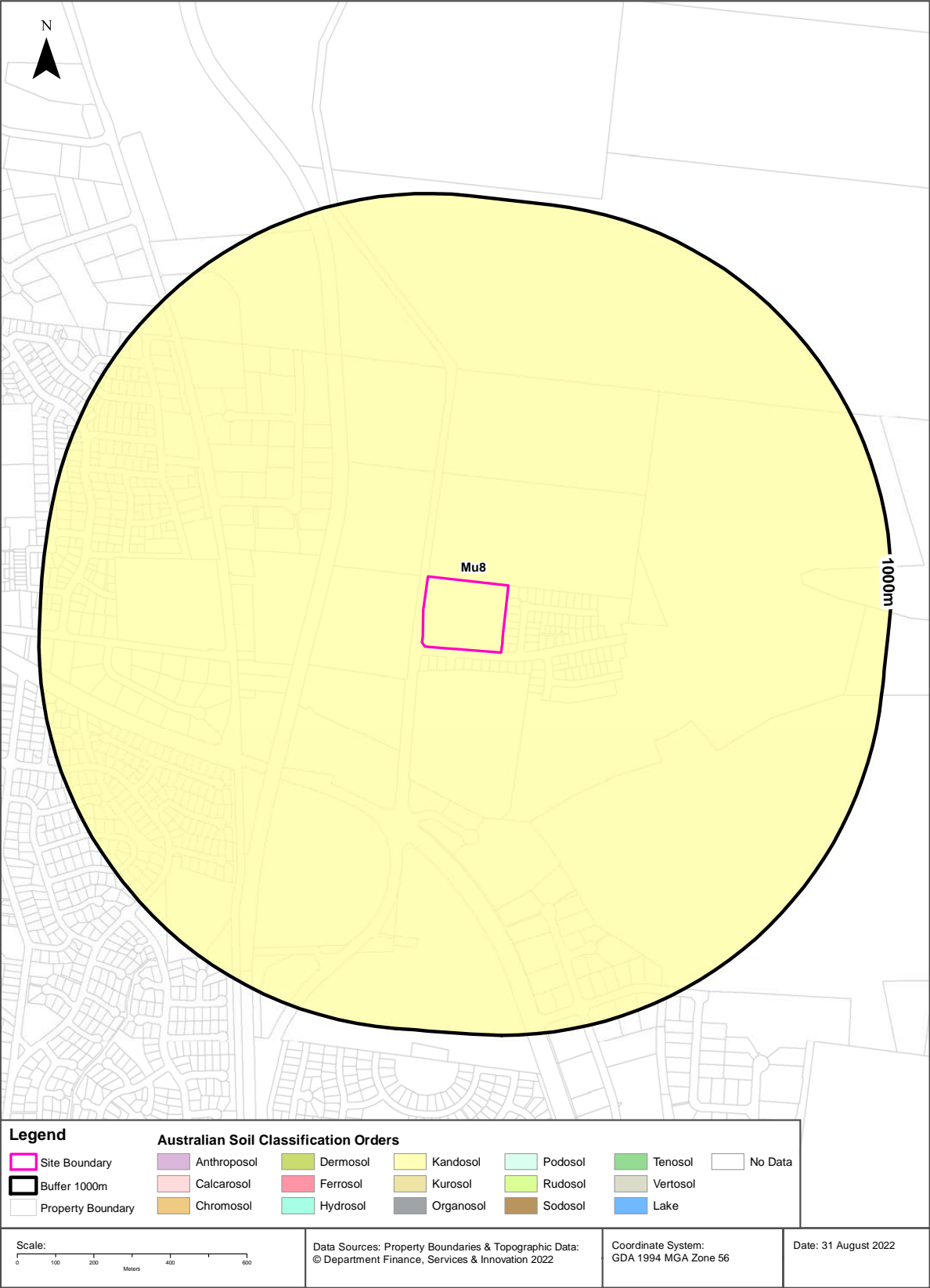
Naturally Occurring Asbestos Potential

Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
Low	Oco	Oakdale Formation	Cabonne Group	Oakdale Formation	250000	Early Silurian	Late Ordovician	clastic sediment	sandstone, basalt, siltstone, shale, chert, breccia, conglomerate	Mafic volcanic sandstone, basalt, siltstone, black shale, chert, breccia, conglomerate	0m	On-site
High	Ou	undifferentiated	unknown		250000	Early Silurian	Late Ordovician	volcaniclastic	ultramafic	Ultramafic cumulates and lava	336 m	South East

Naturally Occurring Asbestos Potential Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Atlas of Australian Soils
274 Leeds Parade, Orange, NSW 2800



Soils

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Atlas of Australian Soils

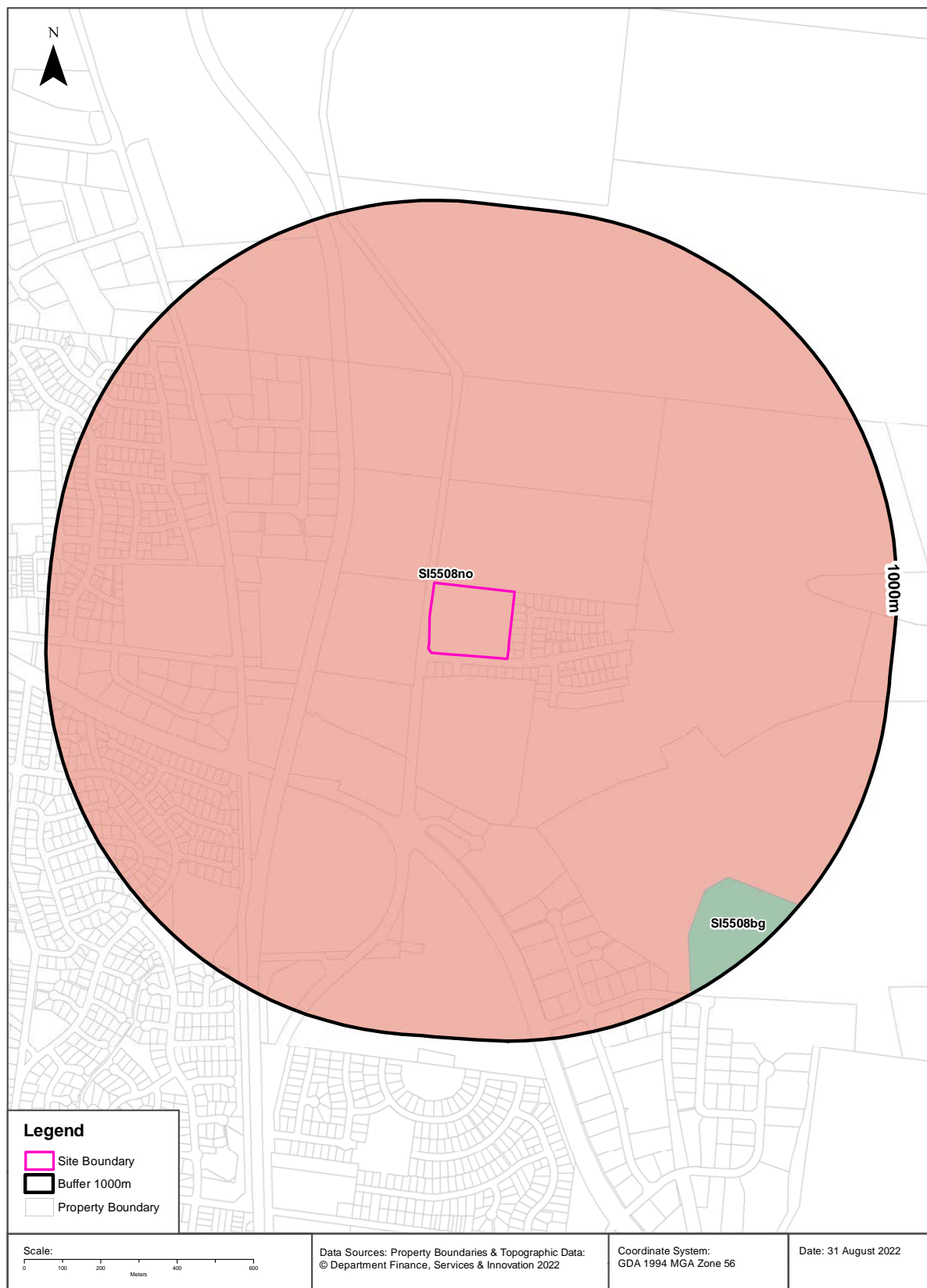
Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
Mu8	Kandosol	Dissected and stepped plateau generally of a rolling to rounded hilly terrain with some ranges and steep valley side slopes: chief soils are neutral and acid leached red earths (Gn2.15 and Gn2.14) on the rolling to rounded hilly areas with yellow earths, such as (Gn2.25, Gn2.35, Gn2.34), some containing ironstone gravels, on rolling areas and benched slopes, and hard neutral yellow mottled soils (Dy3.42) and sometimes other (D) soils, such as (Dd1.43), in the flatter, often seasonally wet, areas. Associated are: narrow ranges, also steep side slopes flanking some transit streams (compare unit Tb31), of various (D) soils, including (Dr2.41) and (Dy3.41), and (Um4.1) soils and rock outcrops; some flat hill tops; some terrace-like remnants of (Dr2.42) soils in the broader flatter valleys (?remnants of unit Qd1); and areas of other soils, such as (Dr4. 13) and (Um6.43). The area is complex and data are limited.	0m	On-site

Atlas of Australian Soils Data Source: CSIRO
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Soil Landscapes of Central and Eastern NSW

274 Leeds Parade, Orange, NSW 2800



Soils

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Soil Landscapes of Central and Eastern NSW

Soil Landscapes of Central and Eastern NSW within the dataset buffer:

Soil Code	Name	Distance	Direction
SI5508no	North Orange	0m	On-site
SI5508bg	Byng	796m	South East

Soil Landscapes of Central and Eastern NSW: NSW Department of Planning, Industry and Environment
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Acid Sulfate Soils

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Environmental Planning Instrument - Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

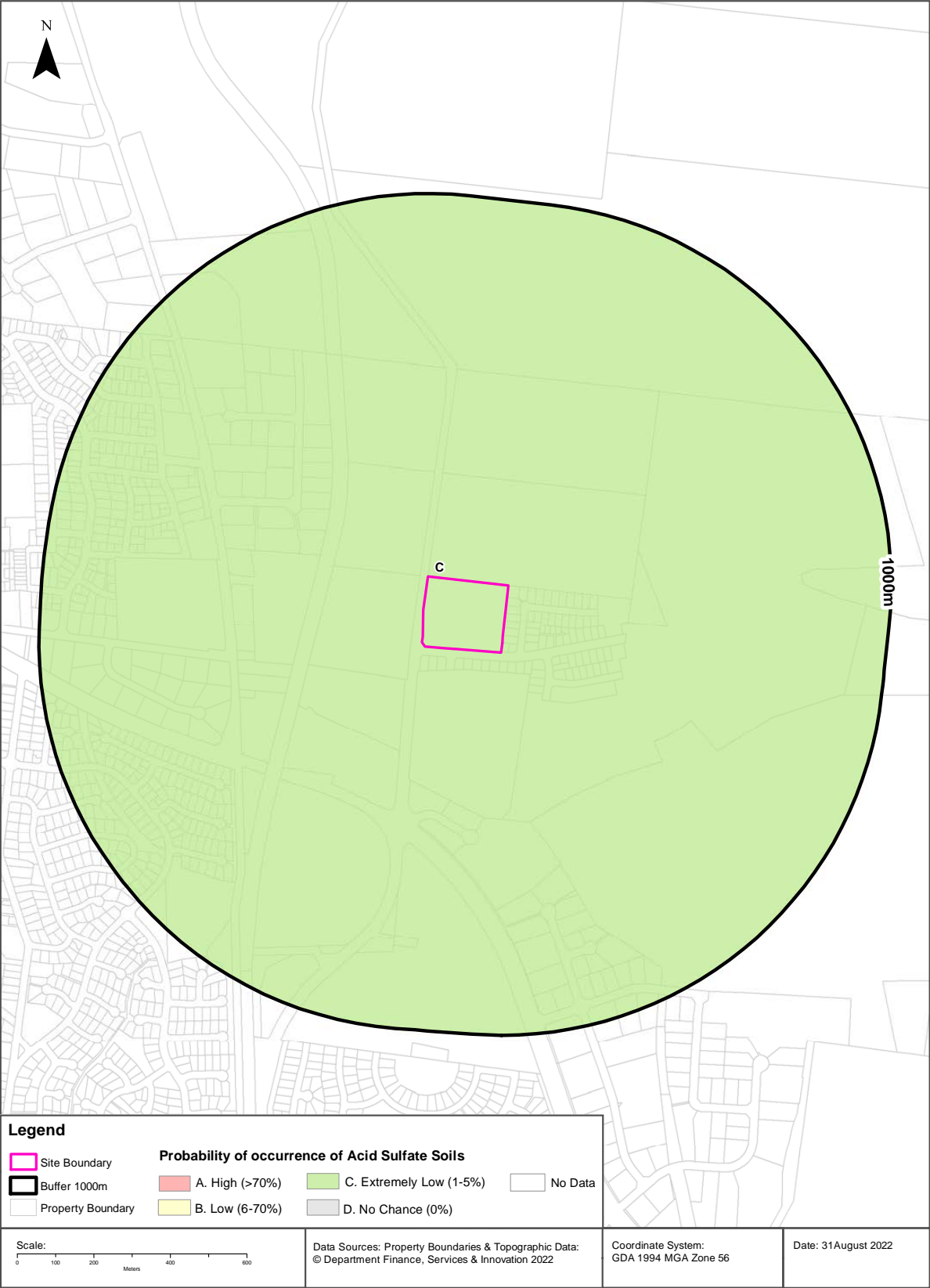
Soil Class	Description	EPI Name
N/A		

If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	EPI Name	Distance	Direction
N/A				

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Atlas of Australian Acid Sulfate Soils
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Acid Sulfate Soils

274 Leeds Parade, Orange, NSW 2800

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance	Direction
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	0m	On-site

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
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Dryland Salinity

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Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A		

Dryland Salinity Data Source : National Land and Water Resources Audit

The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.

In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Mining

274 Leeds Parade, Orange, NSW 2800

Mining Subsidence Districts

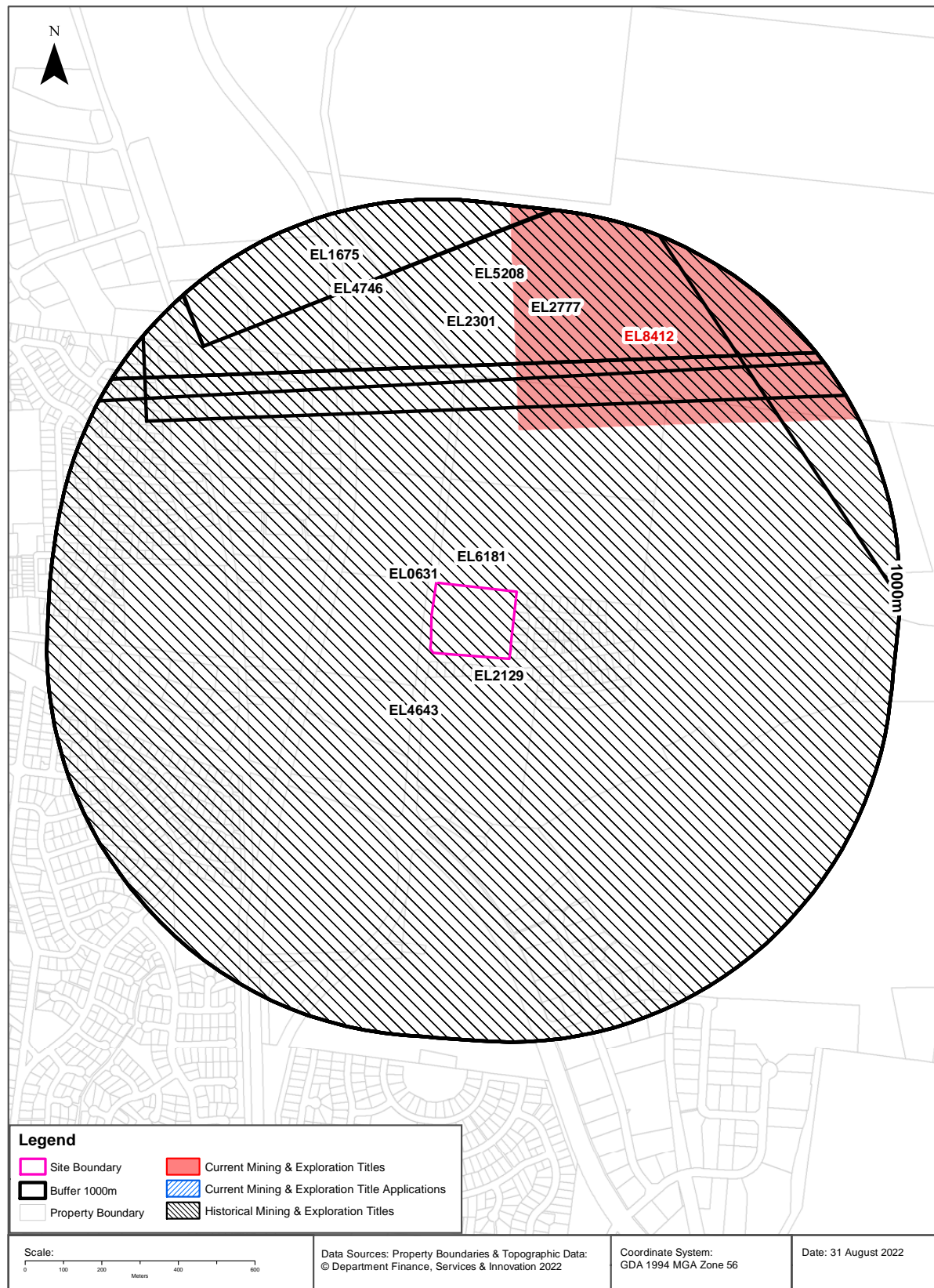
Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
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Mining & Exploration Titles

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Mining

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Current Mining & Exploration Titles

Current Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Grant Date	Expiry Date	Last Renewed	Operation	Resource	Minerals	Dist	Dir
EL8412	GOLD AND COPPER RESOURCES PTY LIMITED	02/12/2015	02/12/2024	23 Apr 2019	EXPLORING	MINERALS	Group 1	419m	North East

Current Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

Current Mining & Exploration Title Applications

Current Mining & Exploration Title Applications within the dataset buffer:

Application Ref	Applicant	Application Date	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer						

Current Mining & Exploration Title Applications Data Source: © State of New South Wales through NSW Department of Industry

Mining

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Historical Mining & Exploration Titles

Historical Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Start Date	End Date	Resource	Minerals	Dist	Dir
EL6181	CLANCY EXPLORATION LIMITED	19 Jan 2004	18 Jan 2016	MINERALS	Au Cu Zn	0m	On-site
EL4643	HARGRAVES RESOURCES NL	15 Mar 1994	14 Mar 1996	MINERALS	Au	0m	On-site
EL0631	UNION CORPORATION (AUSTRALIA) PTY LIMITED	01 Sep 1973	01 Sep 1974	MINERALS	Cu Zn Au	0m	On-site
EL2129	DOWMILL PTY LIMITED	01 Jul 1983	01 Jul 1984	MINERALS	Au	0m	On-site
EL2301	PLACER PACIFIC PTY LIMITED	01 Nov 1984	01 May 1986	MINERALS	Au	449m	North
EL2777	BHP GOLD MINES LIMITED	01 Nov 1986	01 Sep 1989	MINERALS	Au	520m	North
EL5208	MICHELAGO RESOURCES NL	05 Feb 1997	04 Feb 1999	MINERALS		562m	North
EL4746	CRA EXPLORATION PTY LIMITED	09 Dec 1994	08 Dec 1996	MINERALS	Au Cu	562m	North
EL1675	TECK EXPLORATIONS LIMITED	01 Jul 1981	01 Jul 1983	MINERALS	Cu Pb Zn	796m	North

Historical Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

State Environmental Planning Policy

274 Leeds Parade, Orange, NSW 2800

State Significant Precincts

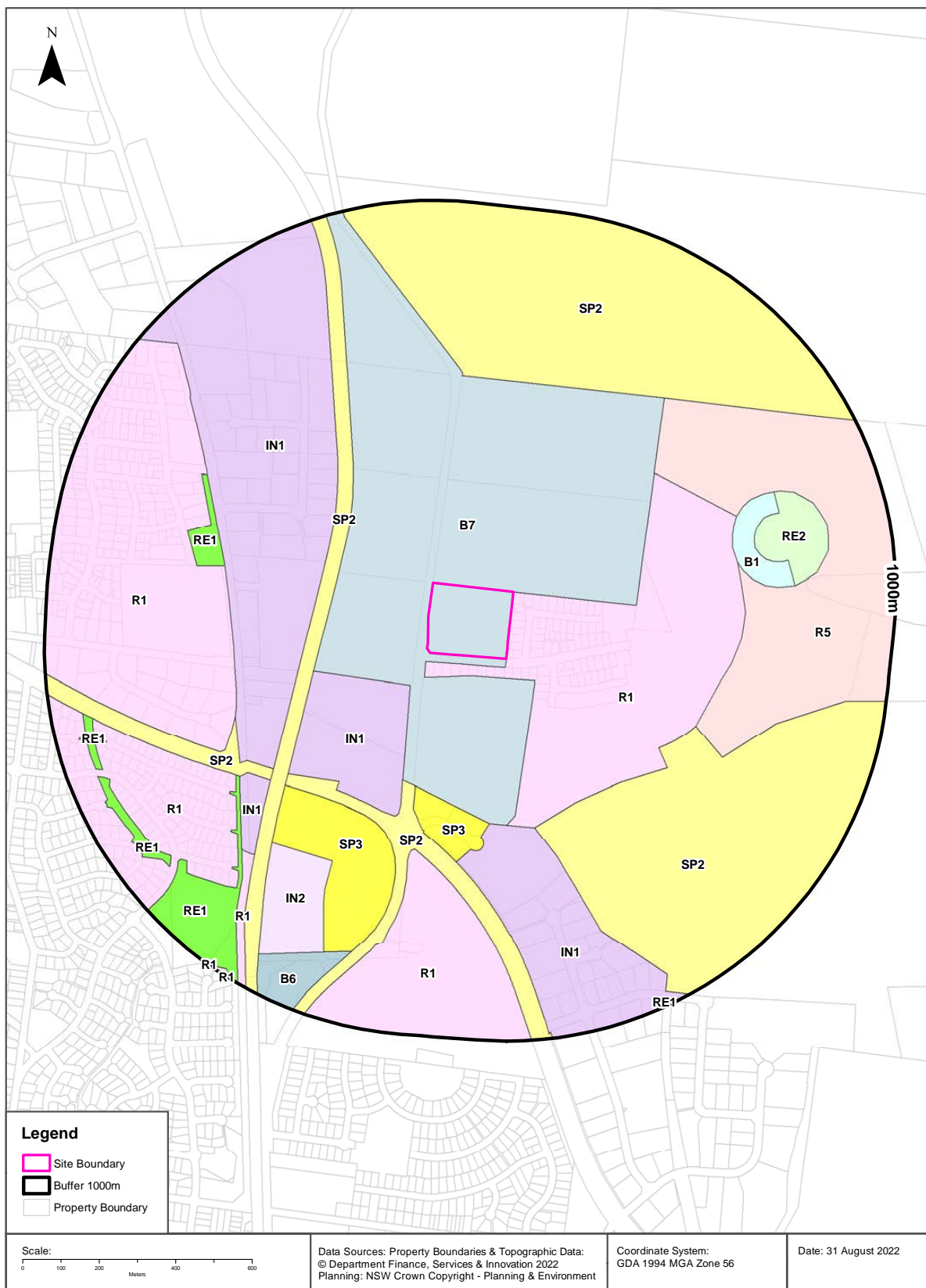
What SEPP State Significant Precincts exist within the dataset buffer?

Map Id	Precinct	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
N/A	No records in buffer							

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EPI Planning Zones

274 Leeds Parade, Orange, NSW 2800



Environmental Planning Instrument

274 Leeds Parade, Orange, NSW 2800

Land Zoning

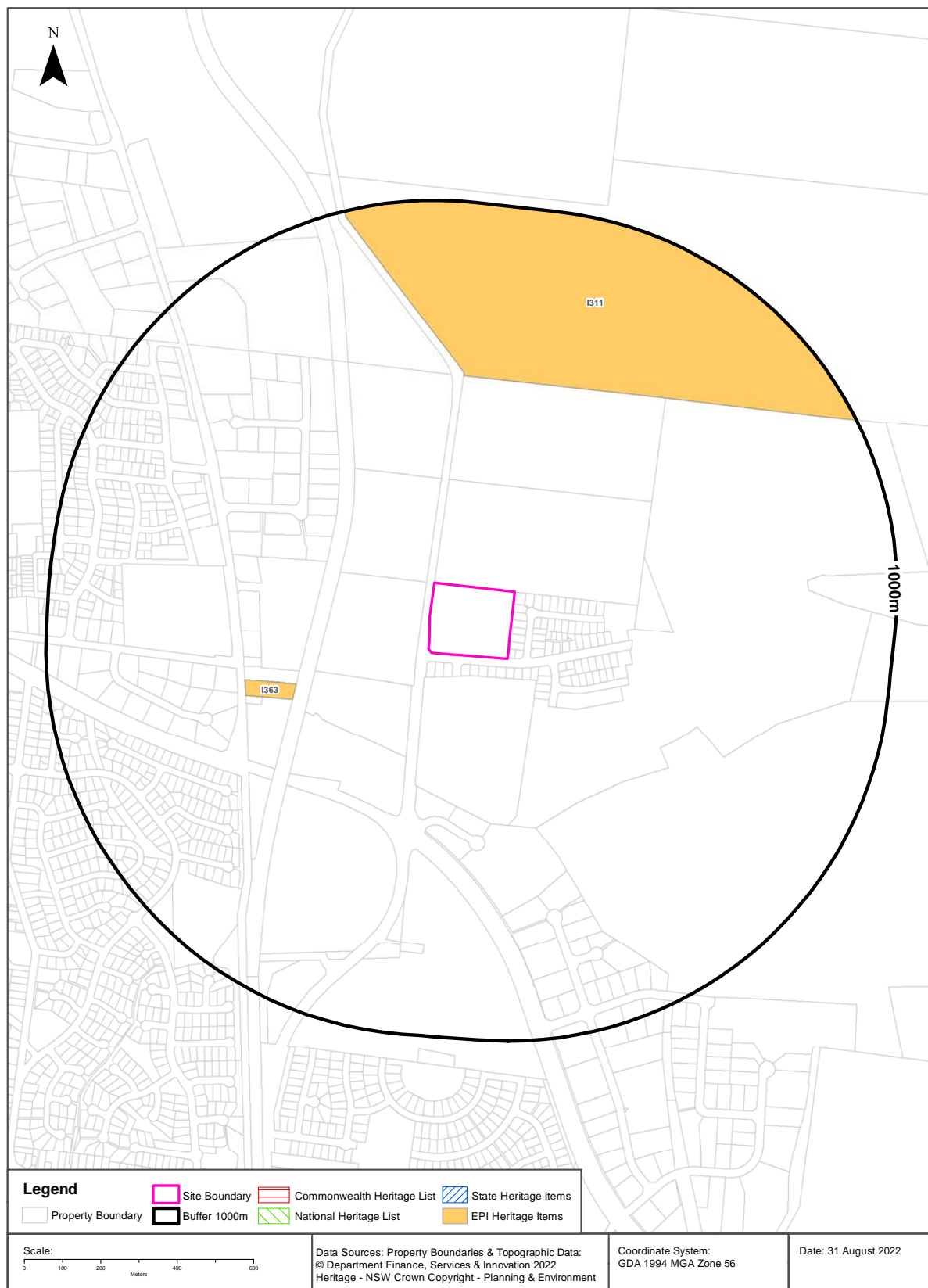
What EPI Land Zones exist within the dataset buffer?

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
B7	Business Park		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		0m	On-site
R1	General Residential		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		0m	East
IN1	General Industrial		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		100m	South West
SP2	Infrastructure	Rail Infrastructure Facility	Orange Local Environmental Plan 2011	05/03/2021	05/03/2021	03/09/2021	Amendment No 24	246m	West
IN1	General Industrial		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		286m	North West
SP2	Infrastructure	Classified Road	Orange Local Environmental Plan 2011	05/03/2021	05/03/2021	03/09/2021	Amendment No 24	340m	South
SP3	Tourist		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		351m	South
SP2	Infrastructure	Sewage Treatment Plant	Orange Local Environmental Plan 2011	05/03/2021	05/03/2021	03/09/2021	Amendment No 24	418m	South East
IN1	General Industrial		Orange Local Environmental Plan 2011	05/03/2021	05/03/2021	03/09/2021	Amendment No 24	432m	South
SP3	Tourist		Orange Local Environmental Plan 2011	02/07/2021	02/07/2021	03/09/2021	Map Amendment No 1	456m	South West
R5	Large Lot Residential		Orange Local Environmental Plan 2011	05/03/2021	05/03/2021	03/09/2021	Amendment No 24	480m	East
R1	General Residential		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		503m	West
SP2	Infrastructure	Classified Road	Orange Local Environmental Plan 2011	05/03/2021	05/03/2021	03/09/2021	Amendment No 24	510m	West
R1	General Residential		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		515m	South
IN1	General Industrial		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		534m	South West
RE1	Public Recreation		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		545m	West
SP2	Infrastructure	Educational Establishment	Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		548m	North
B1	Neighbourhood Centre		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		583m	East
RE1	Public Recreation		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		593m	South West
R1	General Residential		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		599m	South West
IN2	Light Industrial		Orange Local Environmental Plan 2011	02/07/2021	02/07/2021	03/09/2021	Map Amendment No 1	602m	South West
RE2	Private Recreation		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		642m	East
B6	Enterprise Corridor		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		807m	South West
RE1	Public Recreation		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		860m	South West
RE1	Public Recreation		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		871m	West
RE1	Public Recreation		Orange Local Environmental Plan 2011	24/02/2012	24/02/2012	03/09/2021		981m	South East

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Heritage Items

274 Leeds Parade, Orange, NSW 2800



Heritage

274 Leeds Parade, Orange, NSW 2800

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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National Heritage List

What are the National Heritage List Items located within the dataset buffer?

Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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State Heritage Register - Curtilages

What are the State Heritage Register Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: NSW Crown Copyright - Office of Environment & Heritage
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Environmental Planning Instrument - Heritage

What are the EPI Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
I363	Cottage and brickworks	Item - General	Local	Orange Local Environmental Plan 2011	14/03/2014	14/03/2014	29/10/2021	357m	West
I311	Charles Sturt University water tower	Item - General	Local	Orange Local Environmental Plan 2011	29/10/2021	29/10/2021	29/10/2021	548m	North

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Natural Hazards

274 Leeds Parade, Orange, NSW 2800

Bush Fire Prone Land

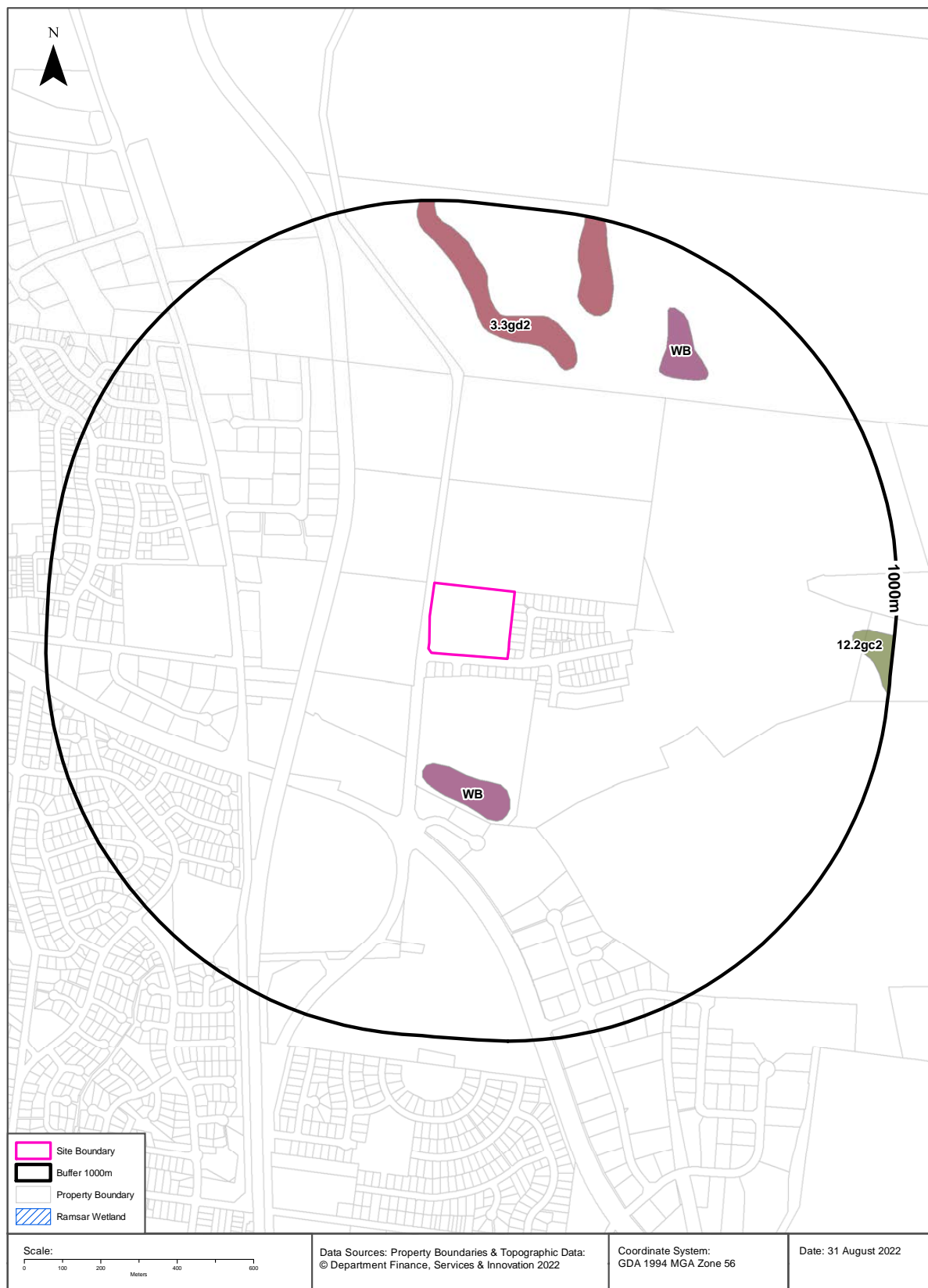
What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
No records in buffer		

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & Ramsar Wetlands

274 Leeds Parade, Orange, NSW 2800



Ecological Constraints

274 Leeds Parade, Orange, NSW 2800

Vegetation of the Central Tablelands

What Vegetation of the Central Tablelands exists within the dataset buffer?

Vegetation Code	Vegetation Type	Description	Class	Formation	Crown Cover	Disturbance	Confidence	Distance	Direction
WB	Water	Water Bodies						289m	South
3.3gd2	Mountain Gum - Peppermint forest at high altitudes	Eucalyptus dives, E. dalrympleana/E. viminalis, E. radiata (E. bridgesiana); shrubby/grassy understorey; basalt hills; Tablelands	Southern Tableland Wet Sclerophyll Forests	Wet sclerophyll forests (Grassy subformation)	20-50%	Disturbed	Relatively confident on typing	594m	North
12.2gc2	Apple Box - Yellow Box - Mountain Gum open-woodland on flats and low hills of the central tablelands	Eucalyptus bridgesiana, E. melliodora, E. rubida/E. viminalis, E. dalrympleana; grassy/herb understorey; alluvial or basalt creek flats & slopes; well drained deep soil; Tablelands	Southern Tableland Grassy Woodlands	Grassy woodlands	10-20%	Cleared/ logged	Relatively confident on typing	890m	East

Vegetation of the Central Tablelands Data Source: NSW Office of Environment and Heritage
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Ramsar Wetlands

What Ramsar Wetland areas exist within the dataset buffer?

Map Id	Ramsar Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Agriculture, Water and the Environment

Ecological Constraints

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Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
N/A	No records in buffer					

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
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Ecological Constraints

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Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
N/A	No records in buffer					

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology
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Ecological Constraints

274 Leeds Parade, Orange, NSW 2800

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Certhionyx variegatus	Pied Honeyeater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Chthonicola sagittata	Speckled Warbler	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Melanodryas cucullata cucullata	Hooded Robin (south-eastern form)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Melithreptus gularis gularis	Black-chinned Honeyeater (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica boodang	Scarlet Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Stagonopleura guttata	Diamond Firetail	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Miniopterus orianae oceanensis	Large Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Nyctophilus bifax	Eastern Long-eared Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Endangered	
Animalia	Mammalia	Petaurus norfolcensis	Squirrel Glider	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascogale carolinensis	Koala	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus aggregata	Black Gum	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus canobolensis	Silver-Leaf Candlebark	Vulnerable	Not Sensitive	Endangered	
Plantae	Flora	Swainsona sericea	Silky Swainson-pea	Vulnerable	Not Sensitive	Not Listed	

Data does not include NSW category 1 sensitive species.

NSW BioNet: © State of NSW and Office of Environment and Heritage

Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced to an approximate or general area
Road Match	Georeferenced to a road or rail corridor
Road Intersection	Georeferenced to a road intersection
Buffered Point	A point feature buffered to x metres
Adjacent Match	Land adjacent to a georeferenced feature
Network of Features	Georeferenced to a network of features
Suburb Match	Georeferenced to a suburb boundary
As Supplied	Spatial data supplied by provider

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