

Statement of Environmental Effects

Tamworth Global Gateway Park – All
Stages (excluding Stage 1-3)
Subdivision and Earthworks

PROJ2020-0045-REP03

Regional Services

Project Planning and Delivery

Table of Contents

1	Introduction	6
1.1	Tamworth Global Gateway Park.....	6
1.2	Site Location, Description, Zoning, and Land Ownership	6
1.2.1	Location	6
1.2.2	Description, Topography and Drainage.....	7
1.2.3	Land Zoning and Ownership	8
1.3	Historical Land Use.....	10
2	Proposal.....	11
2.1	Proposed Activities	11
2.2	Staged Construction	11
3	Flora and Fauna	12
3.1	Biodiversity, Vegetation and Landscaping.....	12
3.2	Fauna.....	20
3.3	Sustainability	21
4	Heritage	22
4.1	Non-indigenous Heritage	22
4.1.1	Repurposing of Retreat Bridge.....	22
4.2	Indigenous Heritage.....	25
4.2.1	Cultural Heritage Assessments.....	25
4.2.2	Road naming	27
4.2.3	Artwork	29
4.2.4	Stop-Work Procedure for Unexpected Archaeological Findings	31
5	Land Contamination.....	32
5.1	Farming Land.....	32
5.2	PFAS.....	32
6	Infrastructure Servicing Allotments	34
6.1	Environmental Planning & Assessment Act Part 5 Infrastructure	34
6.2	Servicing Strategy.....	34
6.2.1	Service Allocations	34
6.2.2	Roads	35
6.3	Local Roads	35
6.3.1	Bandaar Drive and Dhulii Drive.....	36
6.3.2	Burrugaabu Avenue.....	36
6.3.3	Driveways	36
6.3.4	Traffic Data for Pavement Design	37
6.3.5	Pavement Summary	37
6.3.6	Roundabouts	38

6.3.7	Intersection Modelling	38
6.3.8	Access into the Development.....	38
6.4	Transportation.....	39
6.5	Stormwater.....	40
6.6	Earthworks	41
6.7	Water	42
6.8	Sewer.....	43
6.9	Communications	44
6.10	Gas	44
6.11	Electricity.....	44
6.12	Street Lighting.....	46
6.13	Infrastructure Designs.....	47
7	Consideration of Environmental Planning Instruments	49
7.1	Tamworth Regional Local Environmental Plan 2010	49
7.1.1	Land Zoning.....	49
7.1.2	Minimum Lot Size	49
7.1.3	Obstacle Height Limitation	50
7.1.4	Sewer Treatment Plant	51
7.1.5	Flight Training Path.....	52
7.1.6	Australian Noise Exposure Forecast.....	52
7.2	Applicable Legislation	53
7.3	Tamworth Regional Development Control Plan 2010	56
7.3.1	Step 2: Type of Development (Industrial) Development Controls	56
7.3.2	Step 2: Type of Development (Subdivision)	56
7.3.3	Step 3: General Development Specifications (Other Types of Development Controls) 57	
7.3.4	Step 3: General Development Specifications (Environmental Controls)	57
8	Conclusion	58
9	Appendices	59
9.1	Appendix A – TGGP Staging Masterplan	59
9.2	Appendix B – TGGP Base Constraints Plan	61
9.3	Appendix C – Guda Street Extension Draft Plan To Be Registered.....	63
9.5	Appendix D – Stage 3 Subdivision Draft Plan To Be Registered (Residual Lot 300)	67
9.6	Appendix E – Stage 4 Onwards Subdivision Draft Plan (Subject of This DA)	70
9.7	Appendix F – Stage 4 Sewer Servicing	84
9.8	Appendix G – Typical Road Cross Sections.....	86
9.9	Appendix H – Allotment Incoming Service Allocations	90
10	Attachments	92

Attachments

- Attachment 1 – Biodiversity Development Assessment Report – Tamworth Global Gateway Park – NGH, June 2023
- Attachment 2 – Aboriginal Cultural Heritage Assessment – Tamworth Global Gateway Park – Area, June 2023
- Attachment 3 – Detailed PFAS Site Investigation Report Enterprise Area Lot 2 DP 816346 and Lot 426 DP 1178998 Marathon Street Westdale NSW – Geo-logix, December 2017
- Attachment 4 – Additional PFAS Site Testing Report – Tamworth Global Gateway Park – Geo-logix, July 2023
- Attachment 5 – Tamworth Enterprise Area Transport Impact Assessment – GTA Consultants, June 2018
- Attachment 6 – Intersection Modelling – Tamworth Global Gateway Park – Tamworth Regional Council, January 2023
- Attachment 7 – DSJN1365 TGGP Landscaping Treatments – Tamworth Regional Council, August 2021
- Attachment 8 – DSJN1263 Eastern Trunk Sewer Main – Tamworth Regional Council, July 2021

Table of Tables

Table 1 - Plant and grass selections	15
Table 2 – Road naming translations.....	28
Table 3 – Stop-work procedure for unexpected archaeological findings	31
Table 4 – Development traffic data.....	37
Table 5 – Summary of adopted pavement designs.....	37
Table 6 – Adopted kVA and A/ph values for decision making (not servicing) (TGGP - Electrical - Lot demand and reticulation, Tamworth Regional Council, August 2020)	46
Table 7 – Lighting arrangements and spacings	47
Table 8 – Applicable environmental licences and approvals.....	53
Table 9 – Author and reviewer certification	58

Table of Figures

Figure 1 – Development overview and feature nomenclature with excluded stages 1-3 noted in red.....	6
Figure 2 – Site context looking north from the upstream extent of Murroon Creek.....	7
Figure 3 – Site context looking north-east from the Oxley Highway	8
Figure 4 – Site context looking west from the downstream extent of Murroon Creek.....	8
Figure 5 – Stage 4 onwards (red) over Tamworth LEP 2010 zoning map	9
Figure 6 – Tamworth LEP 2010 zoning boundaries over TGGP stages and lot layout	9
Figure 7 – Plant community types (PCT 599) condition overview – high (light blue), moderate (dark blue), moderate riparian (purple), heavily disturbed (yellow), infrastructure/building (orange)	13
Figure 8 – Green space, drainage reserves, and landscape plantings.....	14
Figure 9 – Composition of garden beds	15
Figure 10 – Murroon Creek reserve landscape rehabilitation	20
Figure 11 – Result of NSW Heritage Database www.heritage.nsw.gov.au/search-for-heritage/search-for-nsw-heritage/ on 3rd August 2020.	22
Figure 12 - Elevation of TGGP cycleway bridge	23
Figure 13 - Relocated steel truss span for TGGP cycleway bridge	23

Figure 14 – TGGP cycleway pier detail showing existing bridge pier shape and sandstone tiling	24
Figure 15 - TGGP entrance signage furnished with sandstone tiles proposed for TGGP cycleway bridge ...	24
Figure 16 – Proposed interpretation station mock-up for TGGP cycleway bridge	25
Figure 17 – Identified first nations artefacts.....	26
Figure 18 – Retained lot for Global Gateway CMT2	27
Figure 19 – Road naming	28
Figure 20 –The Peel and Wallamore (Simon Munro, 2021-2022)	29
Figure 21 – TGGP entrance sign artists impression	30
Figure 22 –The Peel and Wallamore (Jodie Herden, 2022).....	30
Figure 23 – Sampling sites for PFAS investigations	33
Figure 24 – Overview of road layouts and features – standard road (blue), Bandaar Drive and Dhulii Drive (purple), Burrugaabu Avenue (green), roundabouts (purple dots), potential future Oxley Highway access (gold)	35
Figure 25 – Proposed bus route (dashed blue), bus stops (blue), and shared path cycleway (dark blue).....	39
Figure 26 – Concept bus stop design.....	40
Figure 27 – Channel flooding extent (dark blue) and trunk stormwater network (light blue).....	41
Figure 28 – Indicative lot fill (0-500mm yellow, 500-1000mm orange, 1000-1500mm in red)	42
Figure 29 – Indicative sewer catchments	43
Figure 30 – Tamworth Regional LEP 2010 minimum lot sizes.....	50
Figure 31 – Tamworth Regional LEP 2010 obstacle height limitation.....	51
Figure 32 – Tamworth Regional LEP 2010 sewer treatment plant	52
Figure 33 – Tamworth Regional LEP 2010 Australian noise exposure forecast.....	53

1 Introduction

1.1 Tamworth Global Gateway Park

Tamworth Regional Council (Council) has purchased a 246-hectare parcel of land to the west of the city that is bounded by Goddard Lane to the west, Goonan Street to the north, Marathon Street to the east, and the Oxley Highway to the south. The land has been purchased to allow Council to facilitate the construction of a road/rail intermodal facility and to provide future industrial and commercial lots for Tamworth, collectively named the Tamworth Global Gateway Park (TGGP).

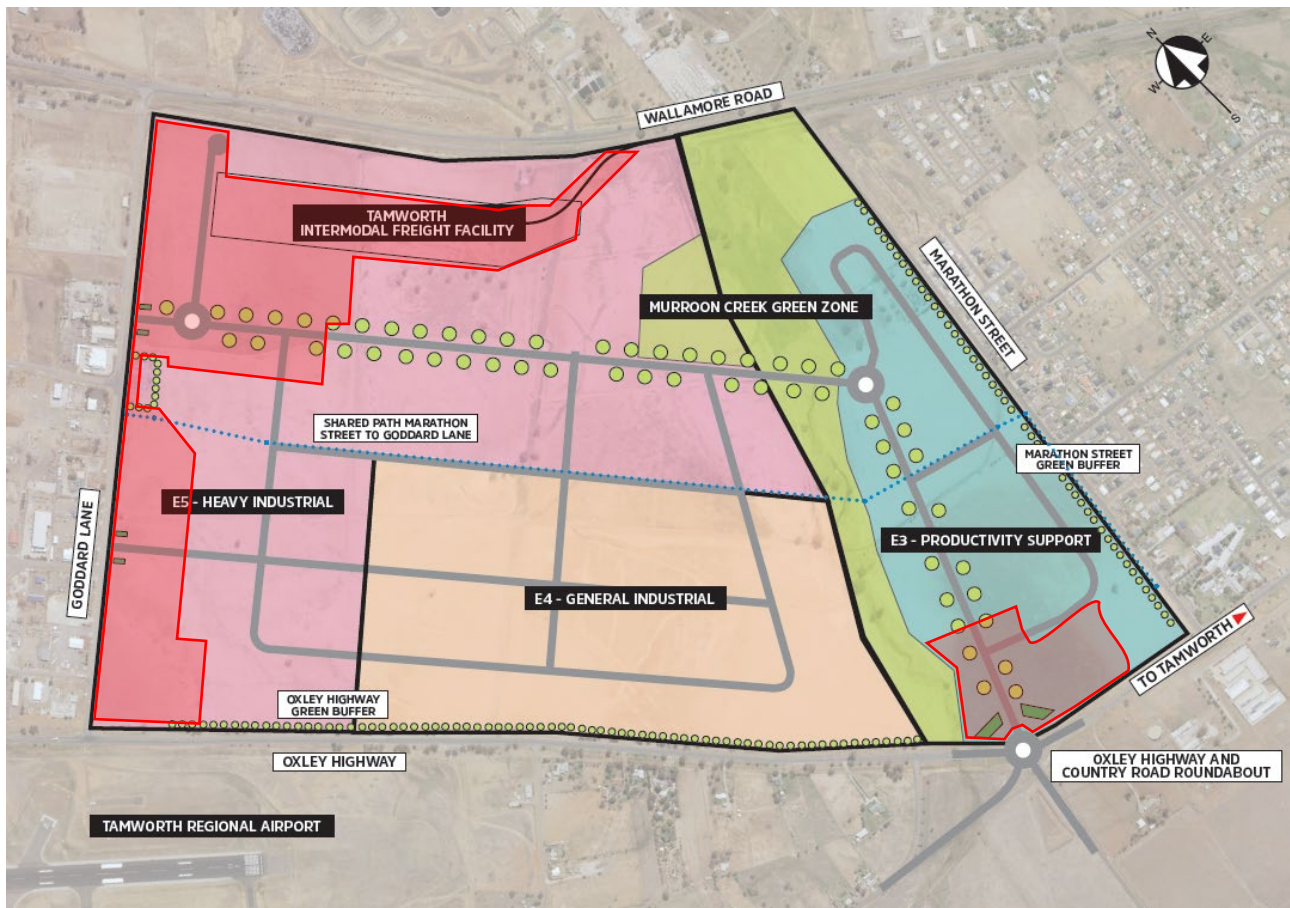


Figure 1 – Development overview and feature nomenclature with excluded stages 1-3 noted in red

This report is intended to accompany a Development Application associated with the subdivision and bulk earthworks within Lot 97 DP 1286236 noting that a pending registration for the extension of Guda Street notes the residue lot as Lot 82 PPN DP1299265 (refer to Section 9.3 for plan to be registered for the extension) and a pending registration after this of Stage 3 notes the residue lot as Lot 300 (refer to Section 9.5 for plan to be registered for Stage 3).

The proponent of this application is Tamworth Regional Council.

1.2 Site Location, Description, Zoning, and Land Ownership

1.2.1 Location

This report relates to all stages (excluding Stage 1-3) of the TGGP.

The site is bounded by industrial developments along Goddard Lane, the Westdale Waste Water Treatment Plant along Wallamore Road, the residential suburb of Westdale along Marathon Street, and the Tamworth Regional Airport along the Oxley Highway,

1.2.2 Description, Topography and Drainage

The site is flat, typically falling north-east towards the downstream extent of Murroon Creek at Goonan Street. Existing drainage structures under Goonan Street, the rail corridor, and Wallamore Road convey surface runoff north-east towards the Peel River. The major waterway Murroon Creek runs through the site within the eastern section, not impacting on Stage 1 and 2. Only a portion of the Intermodal site is within the catchment of Murroon Creek, with the land falling towards the east.



Figure 2 – Site context looking north from the upstream extent of Murroon Creek



Figure 3 – Site context looking north-east from the Oxley Highway



Figure 4 – Site context looking west from the downstream extent of Murroon Creek

1.2.3 Land Zoning and Ownership

The TGGP site consists of E3 Productivity Support, E4 General Industrial, and E5 Heavy Industrial zoned land with stages 4 and onwards of the TGGP are located across all three zones.

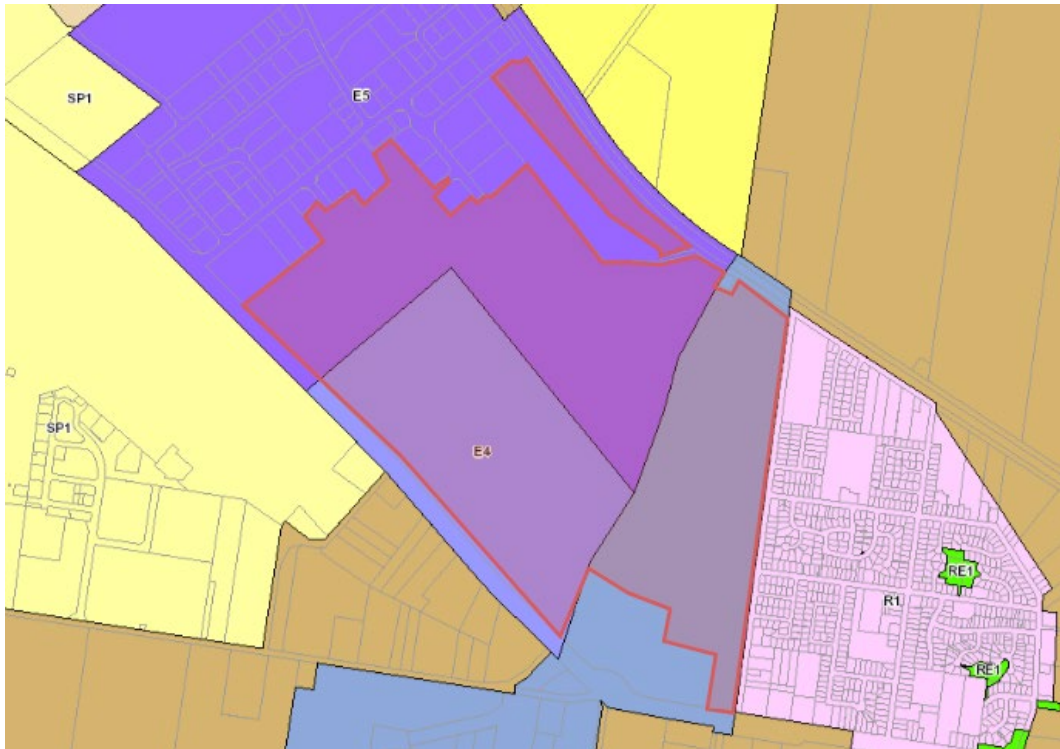


Figure 5 – Stage 4 onwards (red) over Tamworth LEP 2010 zoning map

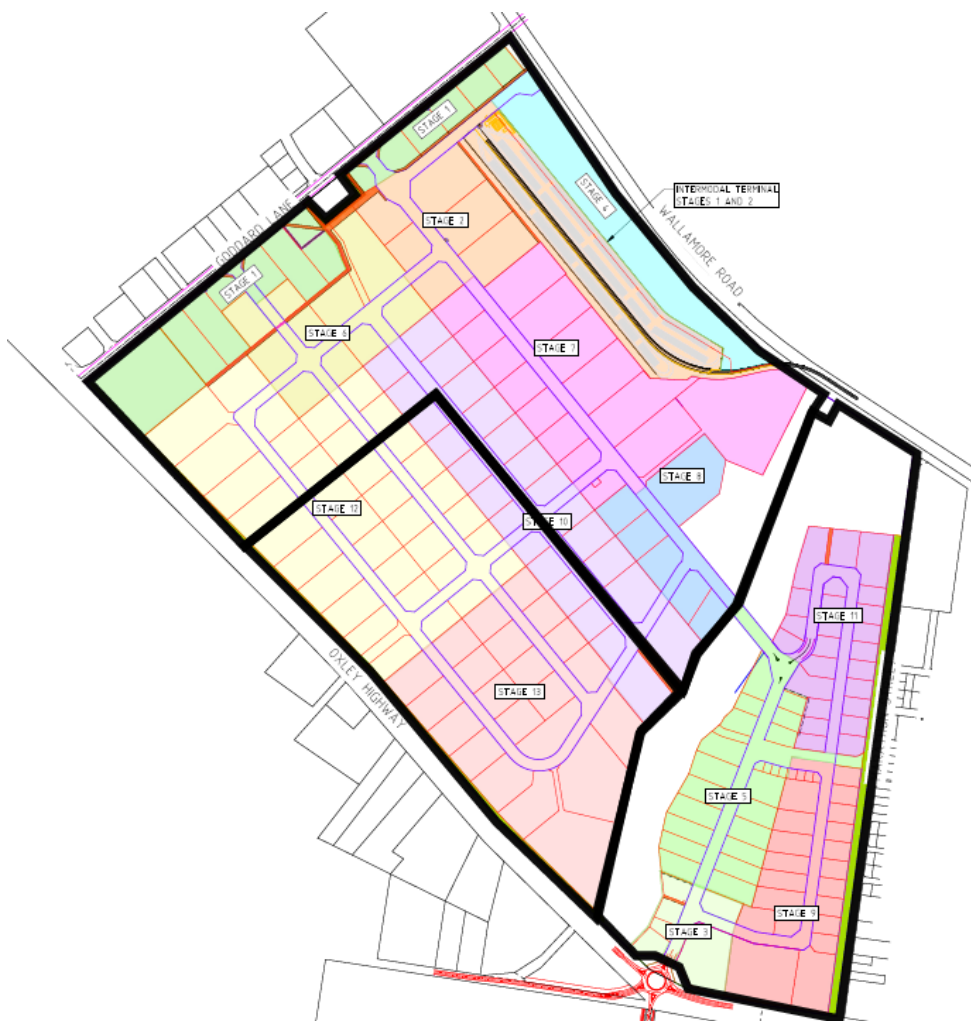



Figure 6 –Tamworth LEP 2010 zoning boundaries over TGGP stages and lot layout



Lot 97 DP 1286236 is owned by Tamworth Regional Council.

1.3 Historical Land Use

The TGGP site was historically used for primary production purposes relating to cropping. The top soil stratum has been extensively disturbed through farming processes. Drainage channels and surface contour banks have been installed throughout the precinct. Two farmsteads were originally located within the precinct – one fire destroyed and subsequently demolished fronting Goonan Street, and one currently occupied on Marathon Street and proposed to be demolished (pending a future DA).

2 Proposal

2.1 Proposed Activities

The proposal involves four activities:

1. Creation of 68 E3 Productivity Support zoned allotments in accordance with Section 9.6, for stages within the development nominated as Stage 5, 9, and 11;
2. Creation of 57 E4 General Industrial zoned allotments in accordance with Section 9.6, for stages within the development nominated as part Stage 10, part Stage 12, and Stage 13;
3. Creation of 57 E5 Heavy Industrial zoned allotments in accordance with Section 9.6, for stages within the development nominated as Stage 6, Stage 7, Stage 8, part Stage 10, and part Stage 12;
4. Creation of 1 E5 Heavy Industrial zoned allotment in accordance with Section 9.6, to be retained as operational land by Tamworth Regional Council for the purposes of retaining an indigenous culturally modified tree;
5. Creation of 1 combined E3 Productivity Support, and E5 Heavy Industrial zoned allotment in accordance with Section 9.6, to be retained as operational land by Tamworth Regional Council for the purposes of the Murroon Creek drainage reserve and associated development basins;
6. Creation of 2 E3 Productivity Support zoned allotments in accordance with Section 9.6, to be retained as operational land by Tamworth Regional Council for the purposes of a drainage reserve from Marathon street and Murroon Creek;
7. Creation of 1 E3 Productivity Support, and 1 E5 Heavy Industrial zoned allotment in accordance with Section 9.6, to be retained as operational land by Tamworth Regional Council for the purposes of the Oxley Highway green zone buffer and Marathon Street green zone buffer;
8. Creation of 1 E5 Heavy Industrial zoned allotment in accordance with Section 9.6, to be retained as operational land by Tamworth Regional Council for the purposes of connecting a shared path between the internal access roads and Goddard Lane;
9. Creation of 1 combined E4 General Industrial, and E5 Heavy Industrial zoned allotment in accordance with Section 9.6, to be retained as operational land by Tamworth Regional Council for the purposes of connecting a shared path between the internal access roads and Murroon Creek;
10. Creation of 1 combined and E4 General Industrial allotment in accordance with Section 9.6, to be retained as operational land by Tamworth Regional Council for the purposes of a future road connection between the internal roads and the Oxley Highway;
11. Bulk earthworks across the full extent of the development (excluding Stage 1-3) to ensure surface runoff is captured by the storm water infrastructure installed as per Section 6 of this report. The extent and depth of these earthworks are not known, however will include two detention basins as per Section 6.5 and be refined in order to achieve cover to services.

2.2 Staged Construction

A staging master plan for the TGGP precinct is provided in Section 9.1.

Public roads and public infrastructure will be installed within the public road reserves currently proposed to be constructed within the TGGP in accordance with Section 6.

A Development Application modification application will be submitted as each stage comes online if any changes to the lot layouts are required (>10% change).

A Subdivision Works Certificate application will be made for each stage prior to construction. The subdivision and earthworks preparation of the allotments nominated within Section 2.1 will be completed in response to a Subdivision Works Certificate issued for each stage.

3 Flora and Fauna

3.1 Biodiversity, Vegetation and Landscaping

A site wide ecological study and biodiversity assessment has been undertaken for the TGGP. While the entire site has generally been classified as poor condition PCT 599 (Blakely's Red Gum – Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South bioregion and Nandewar). Murroon Creek has been identified as sections of reasonable ecological value, along with other sites within the TGGP as shown in Figure 7.

The Murroon Creek corridor is being retained as both a drainage corridor for TGGP and upstream stormwater and flood flows, and also to preserve the ecological value in the corridor. The full extent of retained green areas is shown in Figure 8.

Areas outside of these will be impacted directly by the development and so are considered for the retiring of PCT credit offsets associated with the Biodiversity Conservation Act 2016. The attached Biodiversity Development Assessment Report (BDAR) (Attachment 1) provides an overview of the assessment and the resulting credits. As each stage is developed, the credits associated with that stage will be required to be retired in order to satisfy the requirements of the Act.

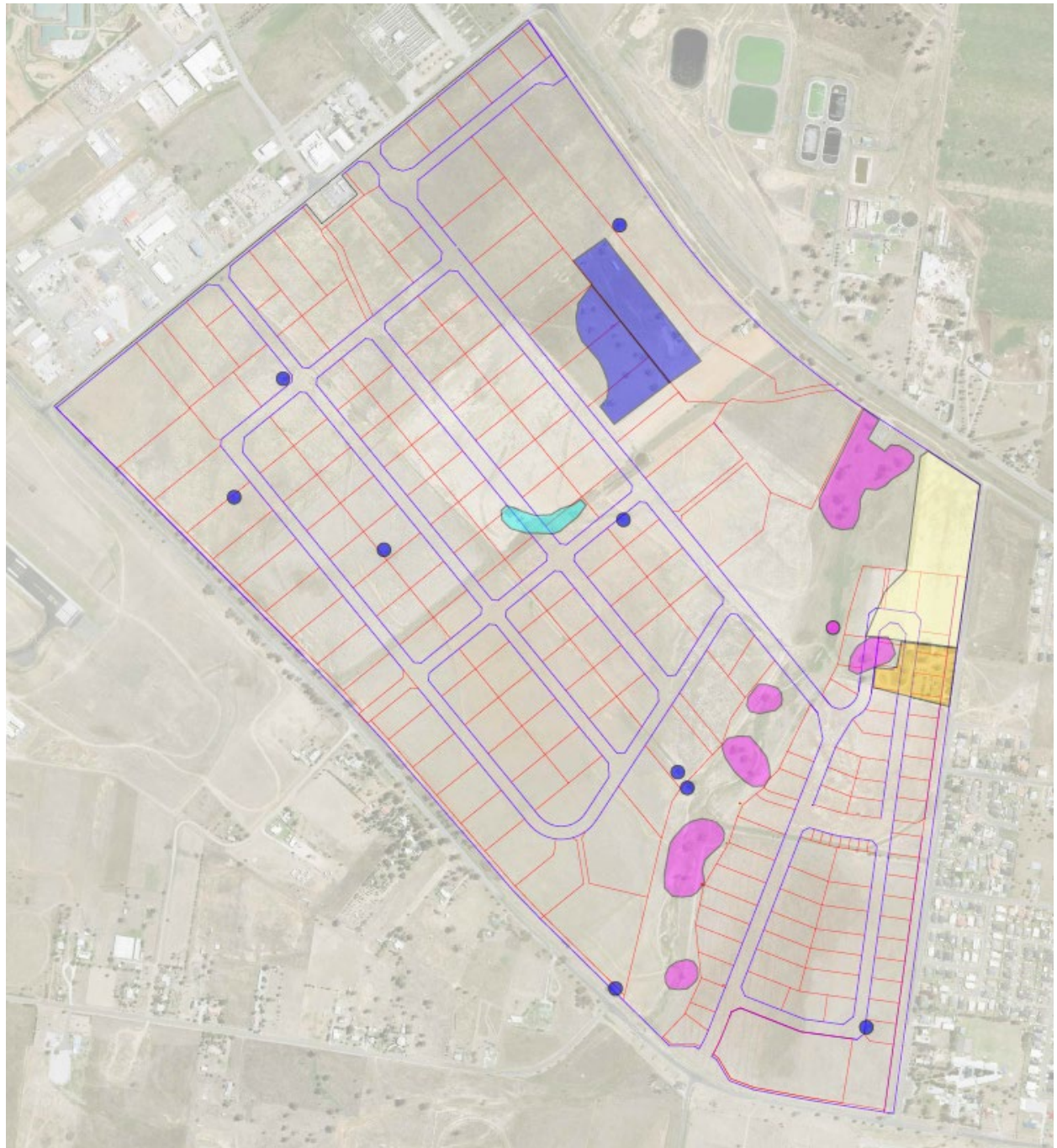


Figure 7 – Plant community types (PCT 599) condition overview – high (light blue), moderate (dark blue), moderate riparian (purple), heavily disturbed (yellow), infrastructure/building (orange)

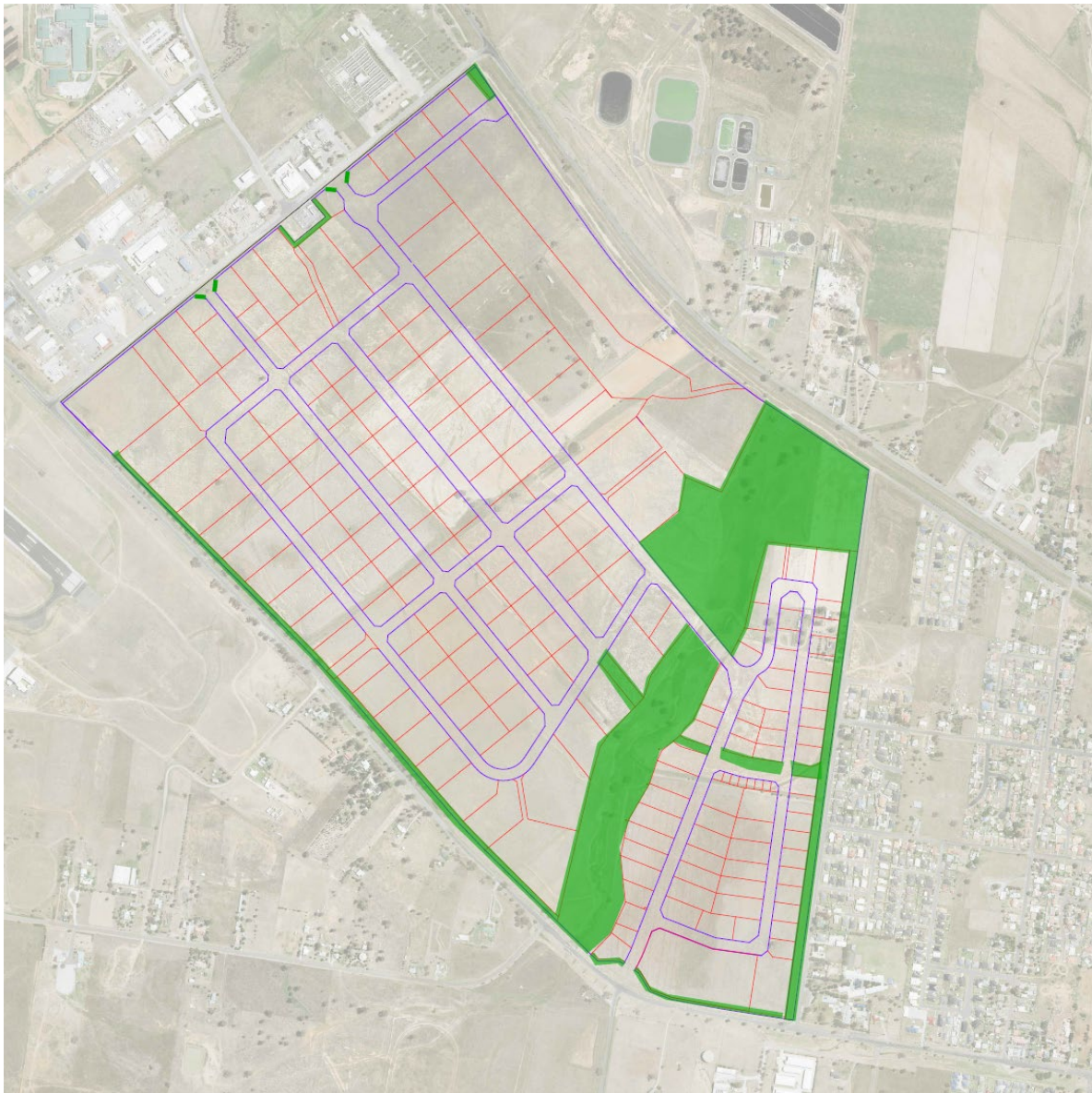


Figure 8 – Green space, drainage reserves, and landscape plantings

Landscaping within the TGGP site shall ensure a consistent appearance is achieved throughout the site. Planting shall incorporate native species within the PCT 599 species list which are hardy and drought tolerant. The selection of vegetation types shall fit within the setting of an industrial area and shall require low maintenance.

Verges within the site have an allocation for street trees, refer to TGGP standard drawings 1236-SK01 and 1236-SK02. Street trees must be provided along Bandaar Drive and Dhulii Drive at a spacing of 24m between trees. Trees within the verges shall be as per Table 1.

Landscaping within the central median of the two roundabouts within the site shall be modest to fit within the character of the industrial setting and shall not inhibit driver sight lines. Further setback requirements are noted in Section 6.13 of the Tamworth Regional Council Engineering Design Minimum Standards for Subdivisions and Developments. Roundabout garden beds shall be furnished with 300mm of topsoil and topped with weed mat and 100mm of hardwood bark mulch.

100mm Mulch (Hardwood
Bark)

Weed Mat

300mm Topsoil

Existing Ground

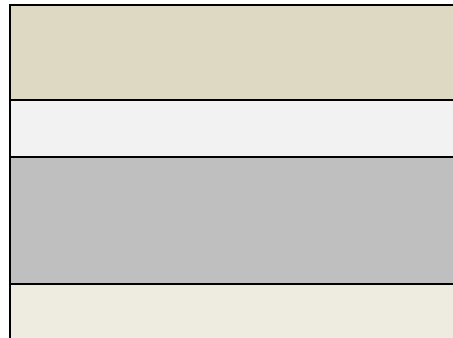













Figure 9 – Composition of garden beds




Table 1 - Plant and grass selections

Location	Common Name / Botanical Name	Number / Density	Size	Mature Height and Spread	Photo
Street Tree and Box Gum EEC Zones	White box / Eucalyptus albens	Street tree spacing as per drawings 1 per 50 m2 for EEC zones	Hikos (40mm)	15 – 25m	
Street Tree and Box Gum EEC Zones	Blakely's Red Gum / Eucalyptus blakelyi	Street tree spacing as per drawings 1 per 50 m2 for EEC zones	Hikos (40mm)	20 – 25m	

Location	Common Name / Botanical Name	Number / Density	Size	Mature Height and Spread	Photo
Street Tree and Box Gum EEC Zones	Yellow Box / <i>Eucalyptus melliodora</i>	Street tree spacing as per drawings 1 per 50 m ² for EEC zones	Hikos (40mm)	30m	
Street Tree under Powerlines and Goddard Lane Zone Substation Buffer	Weeping Bottlebrush / <i>Callistemon viminalis</i>	Street tree spacing as per drawings 2.5m centres offset by 1m for zone substation buffer	Hikos (40mm)	8m	
Box Gum EEC Zones	Dean's Wattle / <i>Acacia deanei</i>	1 per 30 m ²	Hikos (40mm)	1.5 – 7m	

Location	Common Name / Botanical Name	Number / Density	Size	Mature Height and Spread	Photo
Box Gum EEC Zones	Western Silver Wattle / <i>Acacia decora</i>	1 per 30 m ²	Hikos (40mm)	1 – 4m	
Box Gum EEC Zones	Narrow-leaved Bottlebrush / <i>Callistemon linearis</i>	1 per 30 m ²	Hikos (40mm)	3m	
Box Gum EEC Zones	Hop Bush / <i>Dodonaea viscosa</i>	1 per 30 m ²	Hikos (40mm)	1 – 3m	

Location	Common Name / <i>Botanical Name</i>	Number / Density	Size	Mature Height and Spread	Photo
Box Gum EEC Zones	Tucker Bush / <i>Pittosporum angustifolium</i>	1 per 30 m ²	Hikos (40mm)	2 - 6m	
Box Gum EEC Zones	Native Olive / <i>Notelaea macrocarpa</i>	1 per 30 m ²	Hikos (40mm)	10m	
Entry Statement	Red Bottlebrush 'KPS38' / <i>Callistemon viminalis</i>	1m centres	Hikos (40mm)	2m	

Location	Common Name / Botanical Name	Number / Density	Size	Mature Height and Spread	Photo
Entry Statement	Clarity Blue 'DP40' / <i>Dianella hybrid</i>	1m centres	Hikos (40mm)	0.5m	
Entry Statement	Purple Lea 'PA400' / <i>Pennisetum alopecuroides</i>	Clumped planting as shown on drawing	Hikos (40mm)	0.5m	
Roundabout Groundcover	Emu Bush / <i>Eremophila glabra</i>	1 per 4m ²	Hikos (40mm)	0.3m	

A 20-metre-wide buffer zone is required along the full length of the eastern property boundary (fronting Marathon Street) to provide screening of the site for the adjacent residential properties. The landscaping within this buffer zone shall consist of plantings as per Table 1. Permanent irrigation is not required. A 10-metre-wide buffer zone shall be provided along the Oxley Highway.

Existing sections of Murroon Creek shall be revegetated utilising plant species from the PCT 599 species list as per Table 1. New green space adjacent to the downstream sections of Murroon Creek shall be planted in isolated groups of the relevant PCT 599 species.

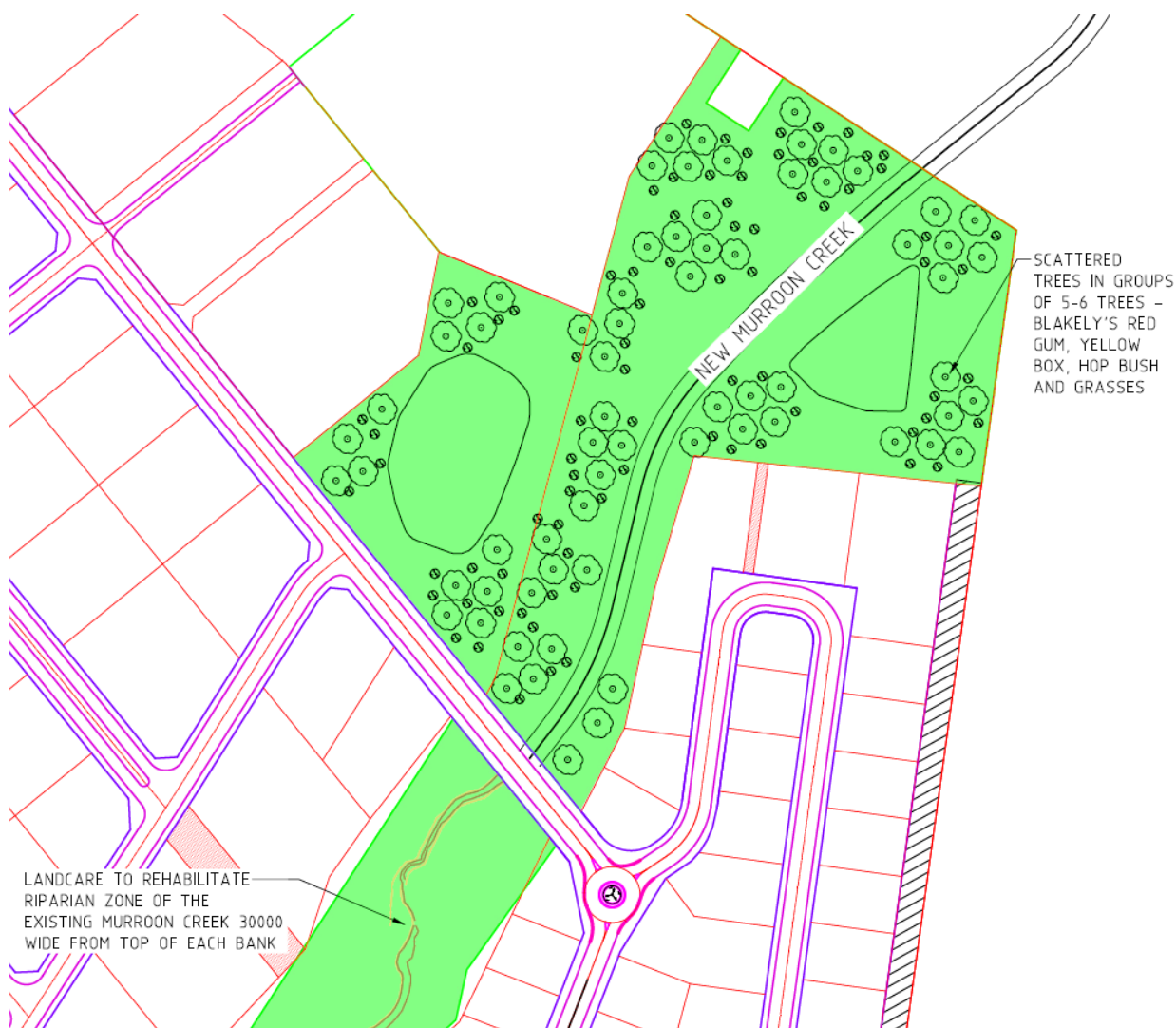


Figure 10 – Murroon Creek reserve landscape rehabilitation

Entry statement signage and landscaping shall be provided within private property at the Oxley Highway Roundabout and on each entrance from Goddard Lane as per previously constructed statement in Figure 15.

The entrance statement planting shall be extended for the full Oxley Highway frontage of E3 zoned land. This planting shall be 5m in width and be maintained to a high standard due to the high visibility location adjacent to the Country Road roundabout.

Site wide landscaping plans are provided as Attachment 7.

3.2 Fauna

The Biodiversity Assessment Method calculator predicted 31 species credits species (candidate species) to occur within the site. A desktop assessment was undertaken for habitat constraints and geographic restrictions to determine which species would be included or excluded for further targeted surveys within the site in relation to potential impacts. 20 of the 31 candidate species were targeted for survey within the site in relation to direct, prescribed and indirect impacts, the remaining 11 were considered very unlikely to occur within the site due to lack of suitable habitat. The BDAR (Attachment 1) concluded that no targeted threatened species were verified to be present through surveys and no species were assumed present due to inappropriate habitat existing on site.

3.3 Sustainability

The TGGP encourages sustainable building practices as outlined within the Tamworth Regional Local Environmental Plan (LEP) 2010 and Development Control Plan (DCP). Allotment developers are also encouraged to implement onsite water reuse initiatives including rainwater capture for irrigation, and grey water capture and treatment for higher water users as well as onsite renewable electricity options.

Further sustainability initiatives are being explored by the TGGP. These initiatives include:

- Provision of recycled water from the adjacent Westdale Waste Water Treatment Plan as a trunk main. This water supply is intended to be supplied to high water users not requiring potable water quality; and
- Establishment of renewable energy services at or nearby the TGGP to increase the electricity supply in the area without additional reliance on traditional coal-powered generation. It is not intended that a renewable source will directly supply multiple customers within the TGGP due to the resulting need for a micro-grid type electrical distribution network. Individual customers are encouraged to implement renewable energy methods within their developments.

4 Heritage

4.1 Non-indigenous Heritage

Nil non-Aboriginal heritage items as listed within the NSW Heritage Database. Note that the below map shows Aboriginal Places in red (nil), State Heritage Register items in green, and Local Environmental Plan register items in brown.

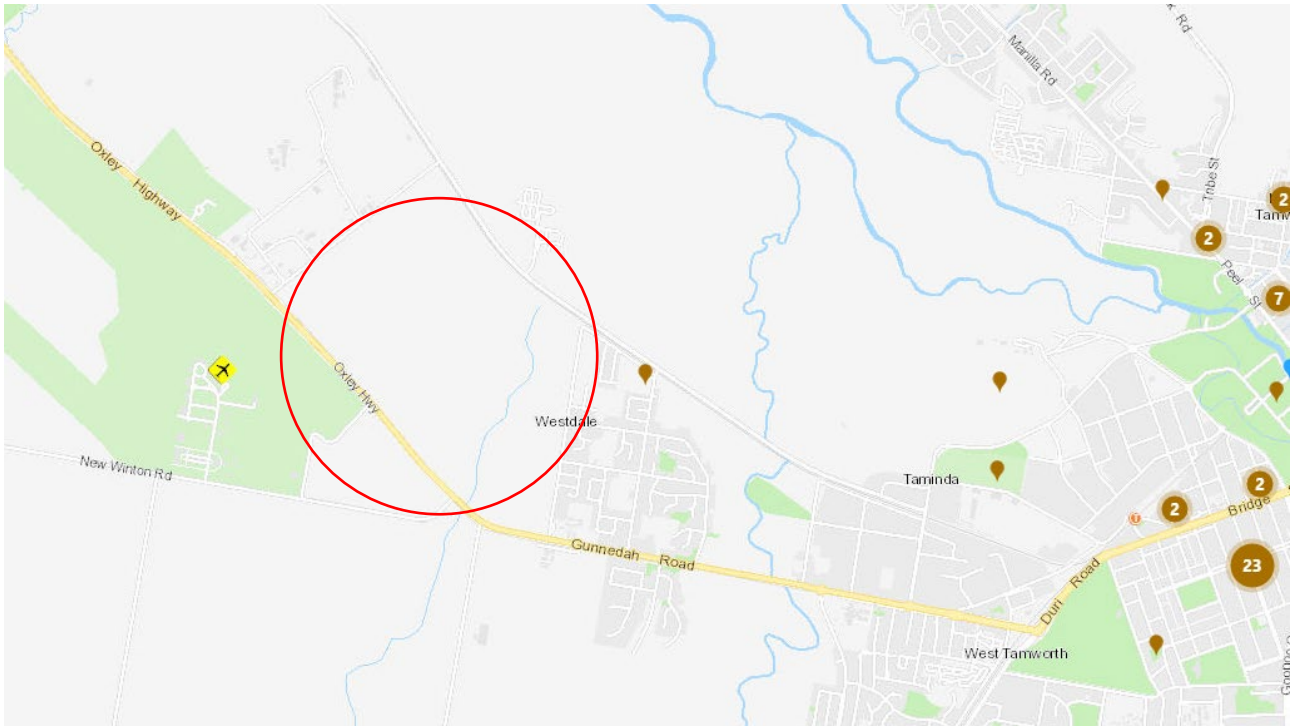


Figure 11 – Result of NSW Heritage Database www.heritage.nsw.gov.au/search-for-heritage/search-for-nsw-heritage/ on 3rd August 2020.

4.1.1 Repurposing of Retreat Bridge

The proposed development includes the reuse of the West Retreat Bridge steel trusses onsite as a shared path crossing of Murroon Creek. This bridge was located offsite, listed on the Local Environment Plan register, and demolished in 2022 as per DA2022-0009 (PAN-117063).

In 2020, Council was successful in obtaining funding to replace the end-of-life West Retreat Bridge (which was subject to load and speed restrictions). As part of the planning activities, it was identified that the structure was listed on Council's local heritage register. As a result, development consent was required to demolish the structure, allowing a new bridge to be constructed. To support the development application, a Statement of Heritage Impact (SOHI) was prepared by Eureka Heritage.

The steel trusses on Retreat Bridge were evaluated for repurposing as a cycleway bridge over Murroon Creek within the TGGP. Figure 12 to Figure 15 below show the final design of the cycleway bridge utilising the repurposed steel trusses. Some comments on the design:

- The trusses will be repaired with protective coatings to preserve their remaining service life, and will be coated with a black topcoat;
- The central pier is shaped to mimic the concrete blade piers of the previous Retreat Bridge;
- The exposed concrete of the abutments and central pier are covered with sandstone tiling to reflect the yellowing concrete colour of the previous Retreat Bridge and to tie in to the other TGGP public structures which have been furnished with similar tiles (refer to Figure 15 below);
- The deck will be fully replaced with new hardwood timber; and

- A galvanised steel handrail will be installed on the inside of the trusses and will potentially include small downlights within the handrail to improve night time lighting without large poles on the structure.

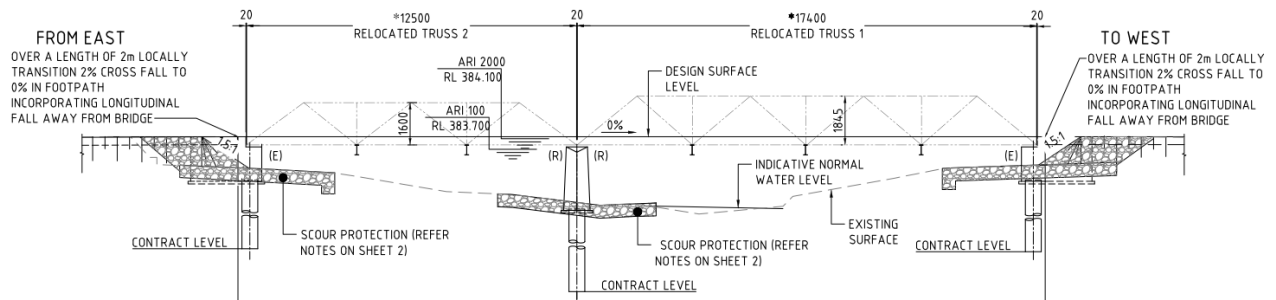


Figure 12 - Elevation of TGGP cycleway bridge

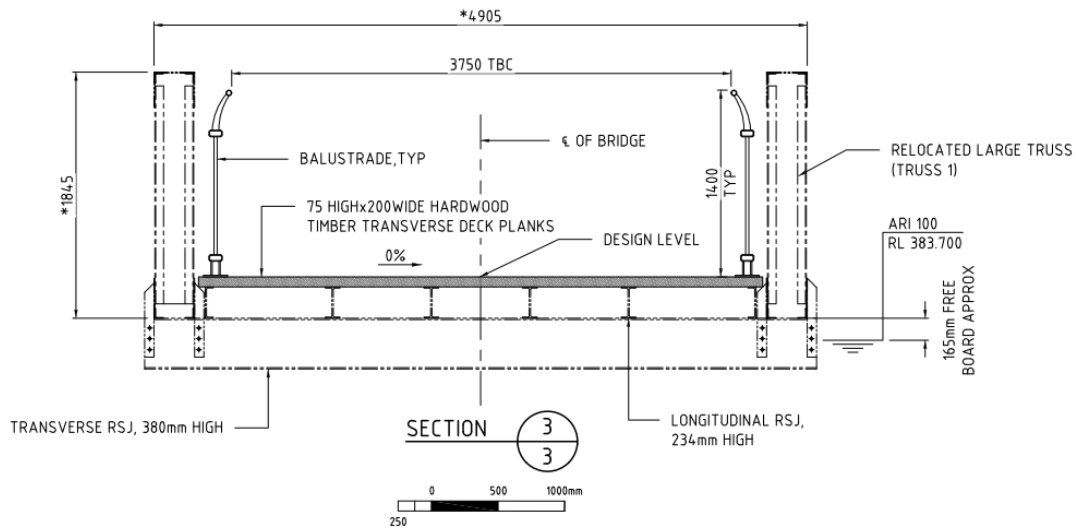


Figure 13 - Relocated steel truss span for TGGP cycleway bridge

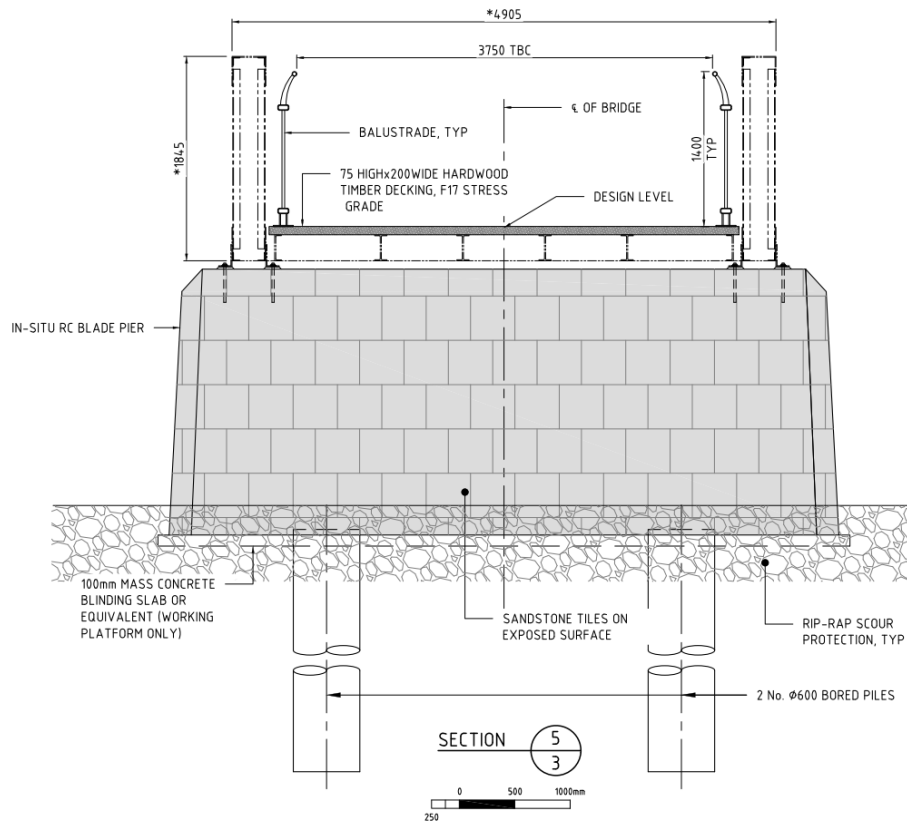


Figure 14 – TGGP cycleway pier detail showing existing bridge pier shape and sandstone tiling



Figure 15 - TGGP entrance signage furnished with sandstone tiles proposed for TGGP cycleway bridge

To provide interested parties and local community members with a sense of acknowledgement for the value of the previous Retreat Bridge, interpretation stations are required to be installed at the proposed relocation site.

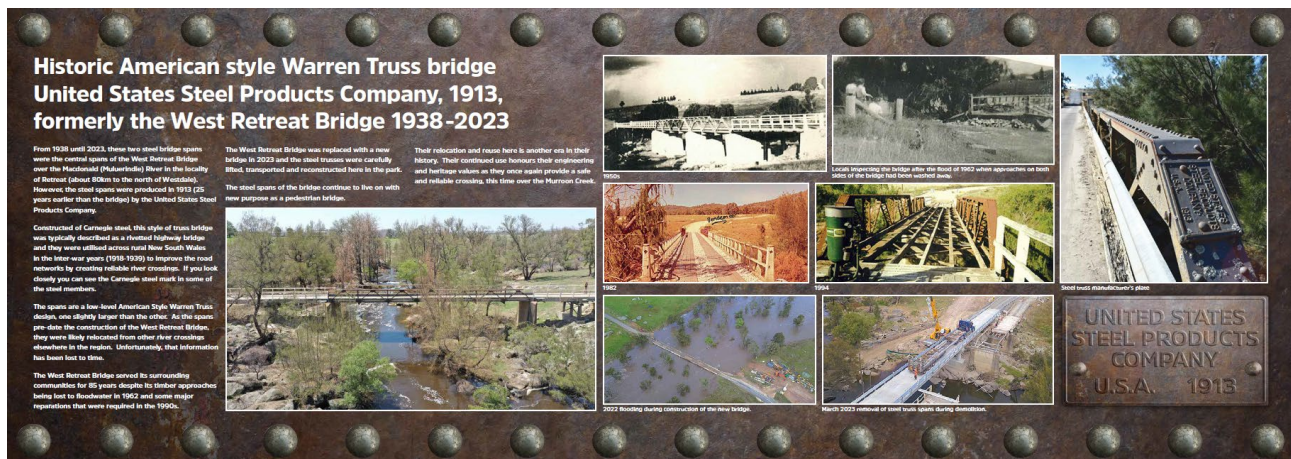


Figure 16 – Proposed interpretation station mock-up for TGGP cycleway bridge

4.2 Indigenous Heritage

4.2.1 Cultural Heritage Assessments

Multiple aboriginal cultural assessments have been undertaken on the TGGP site. A master Aboriginal Cultural Heritage Management Plan has been prepared to collate these assessments (refer to Attachment 2). As part of these assessments, seven Registered Aboriginal Parties (RAPs) were consulted:

- AT Gomilaroi Cultural Consultancy (Aaron Talbott);
- Gomeroi People Registered Native Title Claimants (Steve Talbott);
- Tamworth Local Aboriginal Land Council;
- Corroboree Aboriginal Corporation;
- Cacatua General Services (Donna Sampson);
- Woka Aboriginal Corporation (Steve Johnson); and
- Natasha Rodgers.

There are eleven sites recorded within or adjacent to the TGGP (Figure 17), nine of which (all stone artefact sites) are impacted by the proposal and the two remaining sites, culturally modified trees, will be avoided.



Figure 17 – Identified first nations artefacts

Pending endorsement of an Aboriginal Heritage Impact Permit (application submitted on 16th August 2023) and approval from the NSW Office of Environment and Heritage, the following proposal will be implemented:

- All stone artefacts will be salvaged, stored with the Tamworth Local Aboriginal Land Council, and when available, relocated to a proposed cultural and educational area adjacent to Murroon Creek and the proposed cycleway; and
- Retain the two culturally modified trees noting that Global Gateway CMT2 will be retained within a publicly accessible allotment fronting Nhurray Street as per Figure 18, noting that the size and layout of this allotment may change as the TGGP progresses and that Council monitor the condition of the degraded tree and will undertake further assessments if the condition deteriorates significantly.

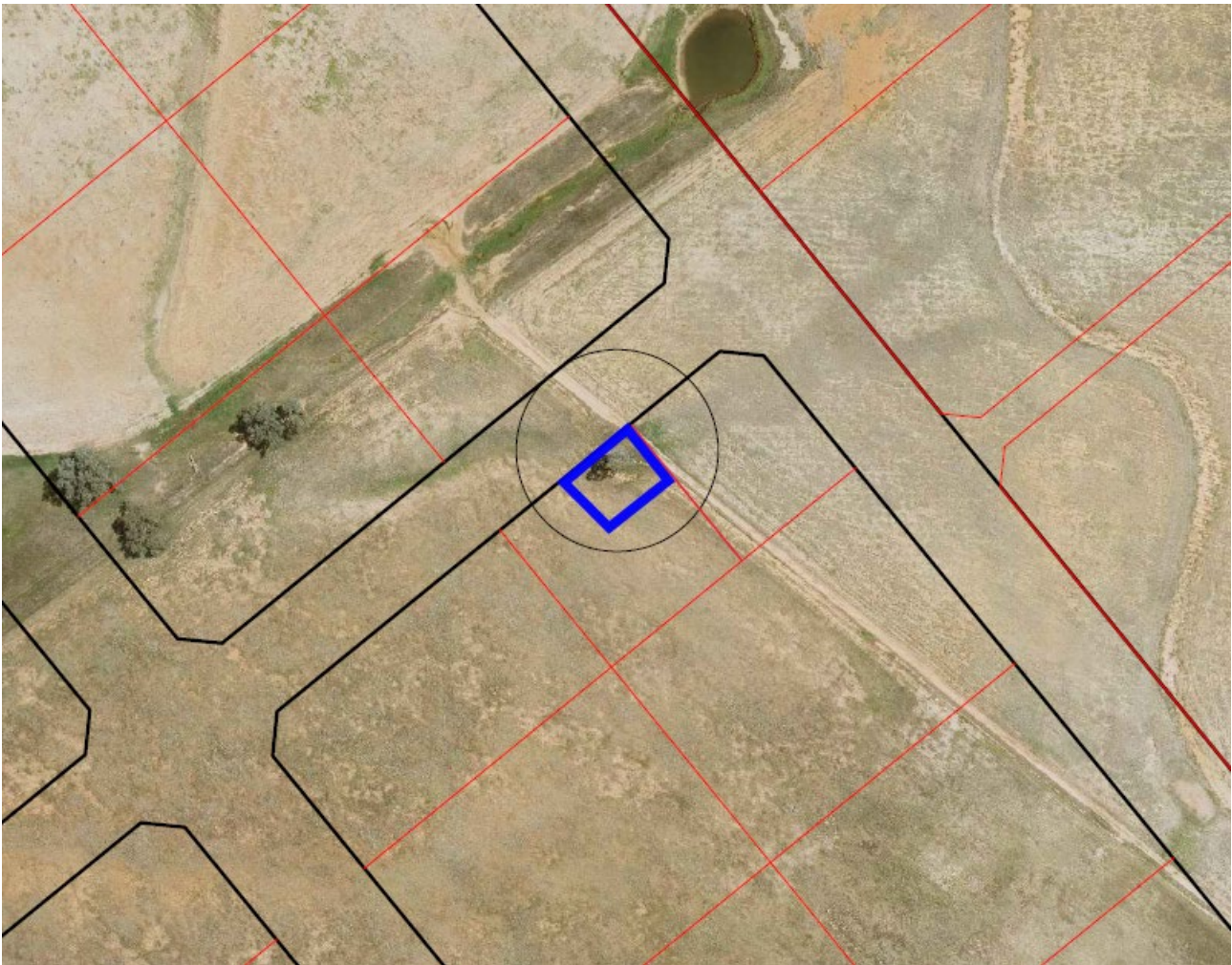


Figure 18 – Retained lot for Global Gateway CMT2

4.2.2 Road naming

The road naming working group comprised of members of Council and the Aboriginal community. Involved in the process from the local First Nations community have been:

- Neville Sampson (Elder);
- Len Walters;
- Marc Sutherland; and
- Simon Taylor.

The initial objective of the working group was to recommend a road name, significant to the traditional owners of the land, for the main road through the TGGP from the Country Road roundabout through to Goddard Lane. To further build the linkage between the land, the traditional owners and the TGGP development, Council and the working group decided to continue naming the other roads within the TGGP using Kamilaroi/Gomeroi traditional names, with a focus on the flora and fauna that would have originally been present on the land.

The consensus of working group meetings was that the group would support any name adopted/recommended by the Elders. At the 11 March 2021 meeting, Marc Sutherland and Simon Taylor were happy to defer any decision to the preference of elder Neville Sampson. For consistency within the TGGP, it was agreed to select names based only on the flora and fauna that was originally present on the land, with the preferred road names in Table 2 and Figure 19.

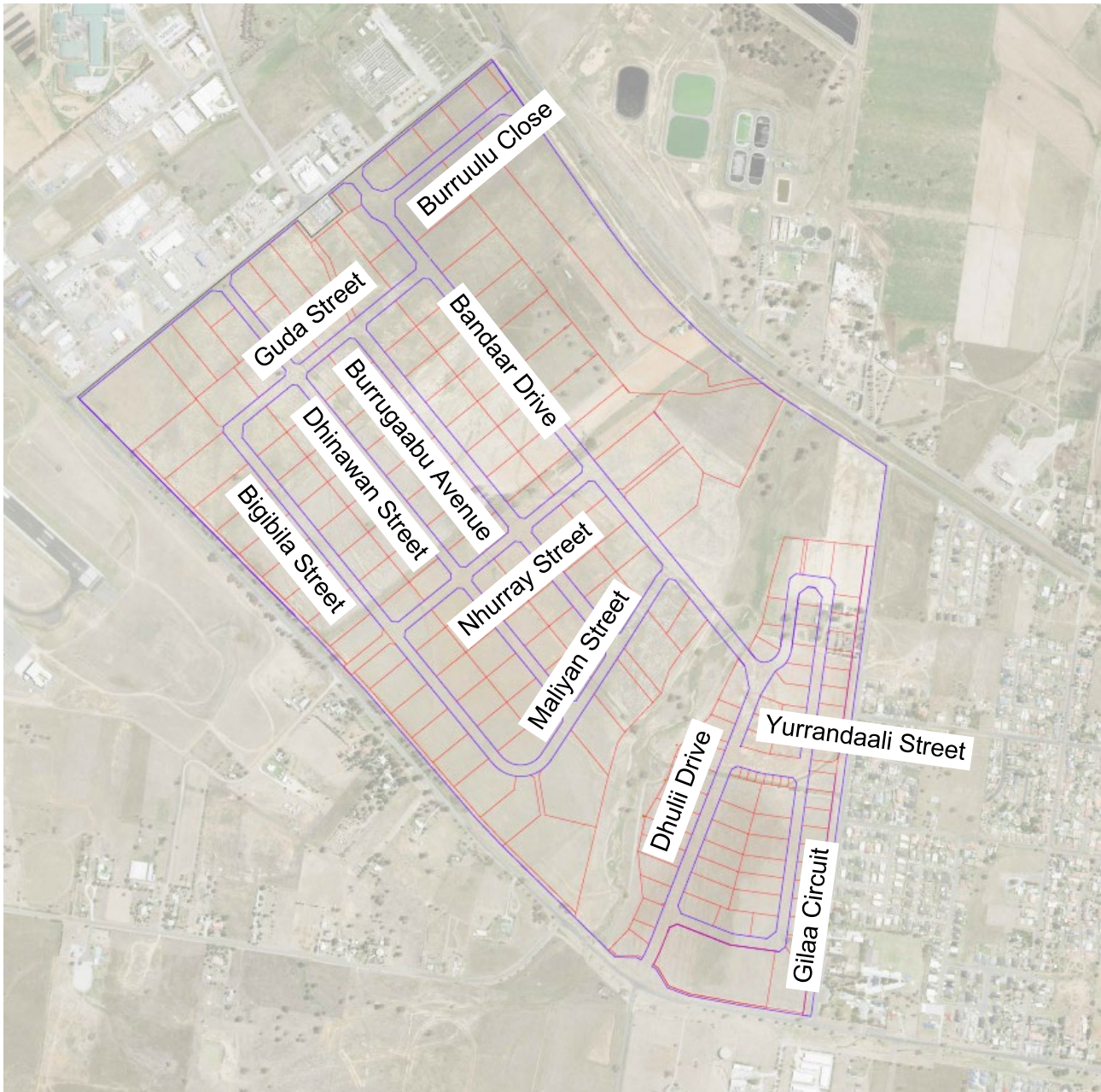


Figure 19 – Road naming

Table 2 – Road naming translations

Gomeroi Name	English Translation
Dhulii	Sand Goanna
Bandaar	Kangaroo (Grey)
Dhinawan	Emu
Bigibila	Echidna
Burrugaabu	Australian Magpie
Nhurray	Snake (Black)

Gomeroi Name	English Translation
Guda	Koala
Gilaa	Galah
Burruulu	Fly
Maliyan	Eagle
Yurrandaali	Tree Goanna

Council requested members of the Yaliwunga Gaay Guwaa-li (Language Reference Group) to review the list and to concur the spelling of the proposed names. Council received feedback and had a follow up conversation with Cathy Waters-Trindall, who is President of the NSW Aboriginal Education Consultative Group.

It is proposed that the road signs in the precinct will have the Gomeroi name in large letters. Initially it was proposed that the sign would have the equivalent English name in smaller letters. Given further consideration, the preference is to use symbols for the animal instead of the English name. It is hoped that this be useful for the Tamworth Community to firstly understand the links and improve the connection with the Indigenous Community.

It is recognised that pronunciation of the Aboriginal words is a key part of the learning for the Community and so Council recommends that the process be extended to ensure correct pronunciation as a further mark of respect for the Gomeroi people.

Council is grateful for the assistant and co-operation of Neville Sampson, Len Waters, Simon Taylor, Marc Sutherland and Cathy Waters-Trindall in this process.

4.2.3 Artwork

Two local First Nations artists were commissioned to create artworks for the TGGP entrance statements and heritage area adjacent Murroon Creek.



Figure 20 –The Peel and Wallamore (Simon Munro, 2021-2022)

The commission from Simon Munro has been selected for incorporation into the TGGP entrance statement signage. The painting captures the joining of the Peel River and Wallamore Anabranch using natural colours to depict the water and surrounding lands. Water Ribbons, Wild Parsnip, and Eucalypt Blossoms are represented to provide floral context for the area.



Figure 21 – TGGP entrance sign artists impression

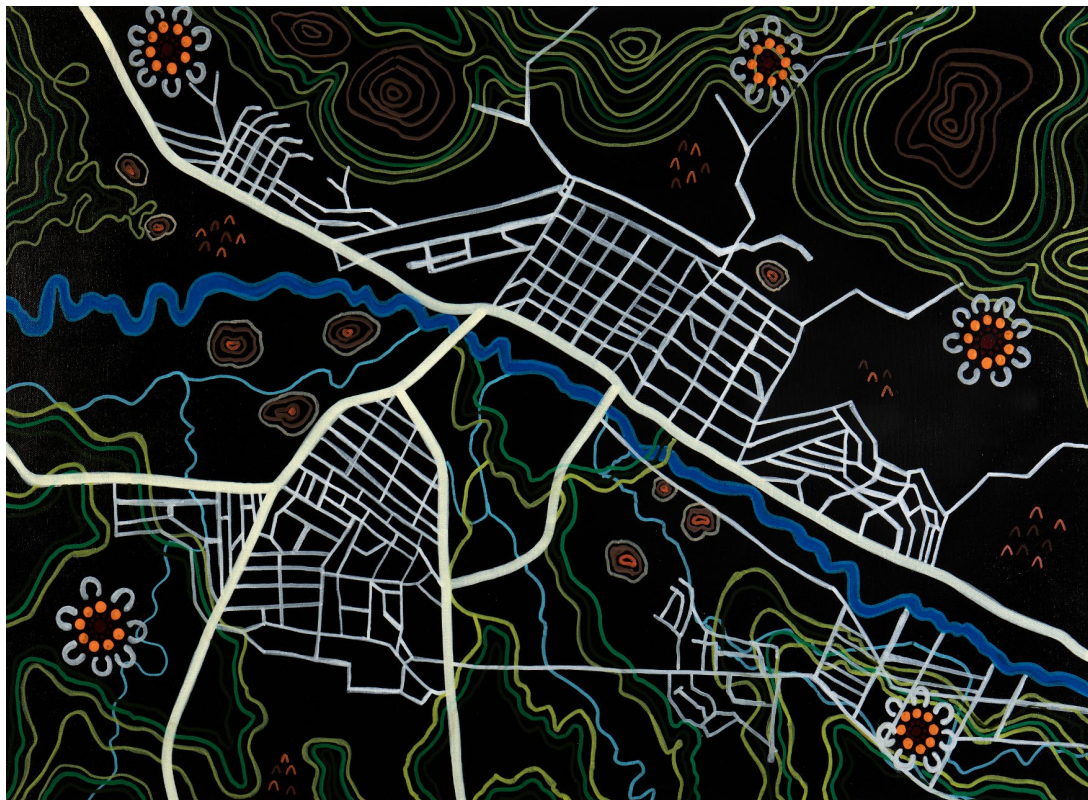


Figure 22 –The Peel and Wallamore (Jodie Herden, 2022)

The commission from Jodie Herden is proposed to be implemented at the cultural area adjacent to Murroon Creek where the relocated stone artefacts will be reburied, as well as bus stop locations. The painting depicts the built Tamworth environment with nearby important and sacred sites referenced in the map.

4.2.4 Stop-Work Procedure for Unexpected Archaeological Findings

Heritage and archaeological assessments may fail to identify a heritage issue and this normally relates to potential (buried) archaeological resources or those that could not be located due to site or survey constraints.

Note that any works which may disturb Aboriginal archaeological resources require an Aboriginal Heritage Impact Permit (AHIP) from Department of Premier and Cabinet (DP&C).

If archaeological resources and/or relics are discovered during works, the following procedure should be followed:

Table 3 – Stop-work procedure for unexpected archaeological findings

Stop Work	Immediately.
Contact	Your field supervisor and/or project officer / Cultural Heritage officer who in turn will contact a qualified archaeologist as soon as possible.
Notify	The archaeologist should notify the Local Aboriginal Land Council (LALC) and DP&C.
Assess	The archaeologist in conjunction with the LALC should assess the significance of the resource and recommend a course of action e.g.: <ul style="list-style-type: none">• Protect and avoid; or• Investigate, record and remove; or• Excavate, record and preserve.
Apply	To DP&C for an AHIP if necessary.
Recommence	When DP&C has approved a course of action.

Contacts:

Archaeologist: Virtus Heritage – Dr Mary Jean Sutton 0439 703 886, or approved alternative.

Local Aboriginal Land Council: Tamworth Local Aboriginal Land Council 02 6766 9028.

5 Land Contamination

5.1 Farming Land

Internal road land utilised for farming. It is possible that the material will be found to have higher quantities of pesticides and fertilisers than other soil material. These levels are generally assumed to be well below health screening levels and trigger values for ENM classification. This material will be utilised within the existing lot or will be disposed of at a licensed facility.

Material taken elsewhere will be tested to confirm ENM status.

5.2 PFAS

PFAS contamination has been identified at the adjacent airport, within an aircraft crash site within the development, and within waterways downstream of the airport. A detailed site investigation report prepared by Geo-Logix in December 2017 (Attachment 3) found that sampled soil near the proposal worksite did not contain amounts of PFAS or associated chemicals (PFOS and PFOA) in laboratory testing above health screening levels.

Further testing was undertaken in 2023 which confirmed no increase in PFAS contamination levels (Attachment 4).

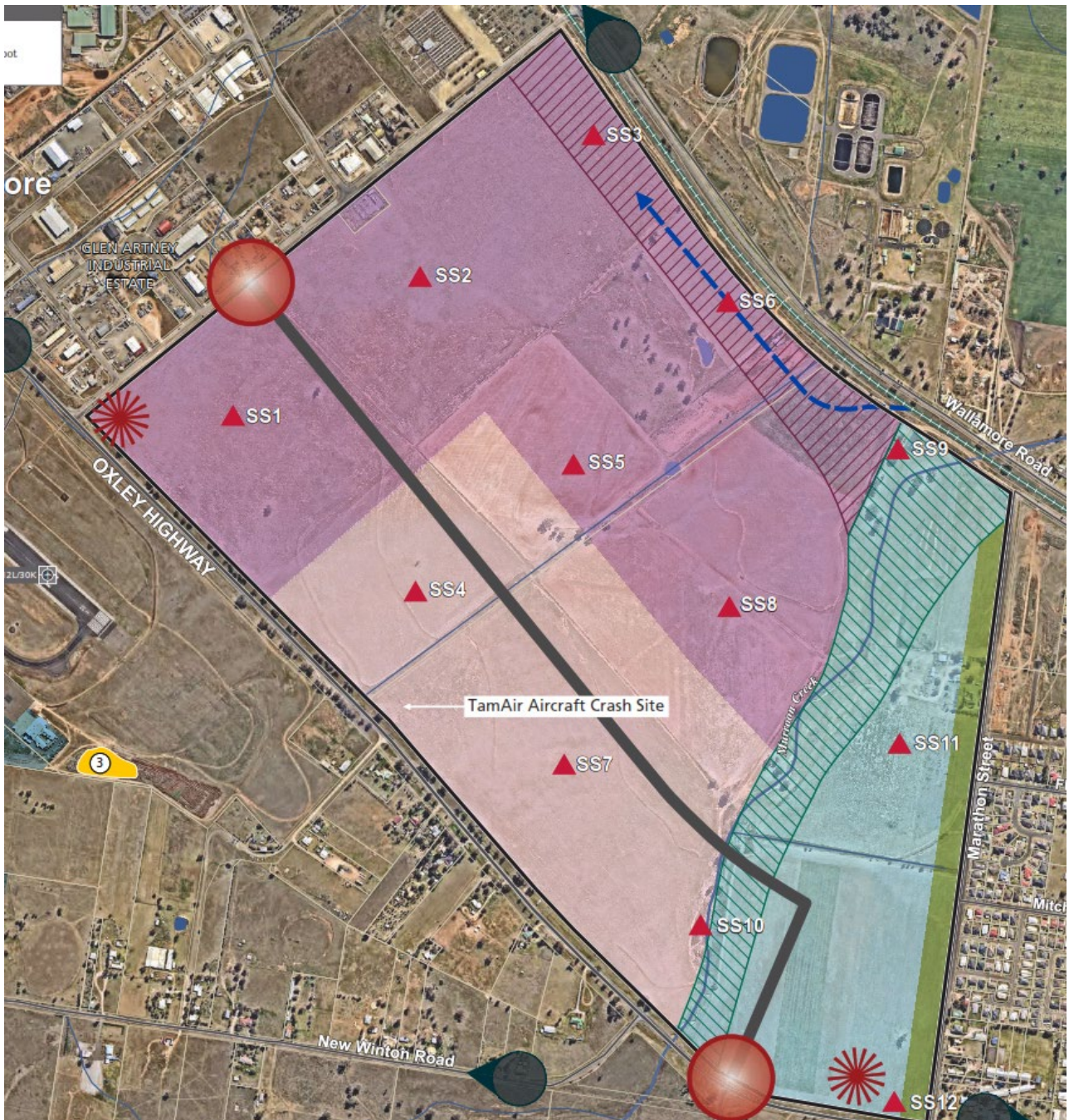


Figure 23 – Sampling sites for PFAS investigations

6 Infrastructure Servicing Allotments

6.1 Environmental Planning & Assessment Act Part 5 Infrastructure

This section is provided as supplementary information for the development application. All infrastructure servicing the TGGP, including the allotments proposed to be created under this development consent have been deemed to be permitted without consent under the provisions of the State Environmental Planning Policy (Infrastructure) 2007 (ISEPP).

ISEPP aims to facilitate the effective delivery of infrastructure across the state. Clause 94 of the ISEPP permits development on any land for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent.

As the services infrastructure is appropriately characterised as development for the purposes of a road or road infrastructure facilities and is to be carried out by or on behalf of Tamworth Regional Council, it can be assessed under Division 5.1 of the EP&A Act. Development consent from Tamworth Regional Council is not required.

The planning pathway permitting works without consent for all of the service infrastructure works are noted as follows;

- Roadworks – ISEPP CI 94 permits public authority works without consent;
- Stormwater – ISEPP CI 111 permits public authority works without consent;
- Water – ISEPP CI 125 permits public authority works without consent;
- Sewer – ISEPP CI 106 permits public authority works without consent;
- Communications – ISEPP CI 114 permits public authority works without consent;
- Gas – ISEPP CI 66A permits public authority works without consent; and
- Electricity – ISEPP CI 41 permits public authority works without consent.

6.2 Servicing Strategy

6.2.1 Service Allocations

The design has provided service allocations on all internal roads to ensure a co-ordinated design with consistent allocation widths and offsets from property boundaries are adopted. Refer to Section 9 for the typical allocations. These allocations will be available for future augmentation of the service infrastructure to meet future growth in demand.

6.2.2 Roads

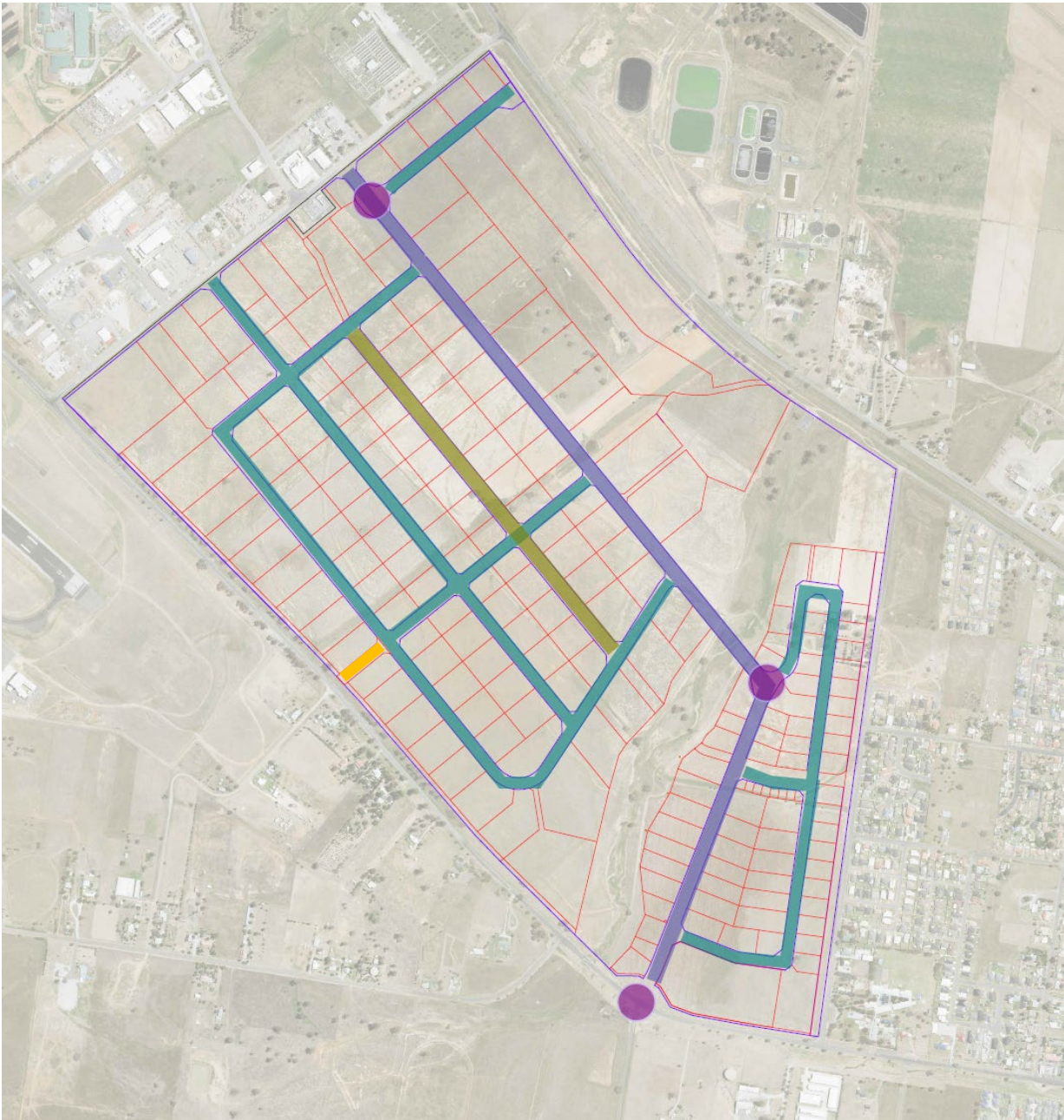


Figure 24 – Overview of road layouts and features – standard road (blue), Bandaar Drive and Dhulii Drive (purple), Burrugaabu Avenue (green), roundabouts (purple dots), potential future Oxley Highway access (gold)

6.3 Local Roads

The local access roads shall be located within a 28-metre-wide road reserve. The pavement width shall be 18 metres and consists of two 3.5m wide travel lanes and two 5.5m wide parking lanes both with 3% cross fall. This conforms with Table 2-B of the Tamworth Regional Council Engineering Design Minimum Standards for Subdivisions and Developments for Local Roads within IN1, IN3, and B7 zoned land (E3, E4, and E5). The verge width shall be 5 metres wide with allocation for underground services, street lighting and a street tree within each verge. Refer to Section 9 for the typical access road cross section. Integral kerb and gutters shall be provided on both sides of the carriageway and footpaths are not provided.

The pavement width of 18m allows for the future provision of four 3.5m travel lanes and two 2m shoulders which can be used for emergency vehicle parking or cyclist lanes.

6.3.1 Bandaar Drive and Dhulii Drive

Bandaar Drive and Dhulii Drive are the main collector roads within the TGGP site and convey traffic to the entry and exit locations at the Oxley Highway and Goddard Lane. These roads shall be located within a 32-metre-wide road reserve. The pavement width shall be 18 metres and consists of two 3.5m wide travel lanes and two 5.5-metre-wide parking lanes both with 3% cross fall. This conforms with Table 2-B of the Tamworth Regional Council Engineering Design Minimum Standards for Subdivisions and Developments for Local Roads within IN1 and IN3 zoned land (E4 and E5). The Ring Road within B7 zoned land (E3) has the ability to be converted to four 3.5m travel lanes and two 2m parking lanes when demand dictates. Bandaar Drive and Dhulii Drive within IN1 and IN3 zoned land (E4 and E5) can be converted to four 3.5m travel lanes and two 2m shoulders or cyclist lanes. The verge width shall be 7 metres wide with allocation for underground services, street lighting and a street tree within each verge. Refer to Section 9 for the typical cross section. Integral kerb and gutters shall be provided on both sides of the carriageway and footpaths are not provided.

6.3.2 Burrugaabu Avenue

The relocation of the existing 66kV overhead electrical infrastructure shall only progress if deemed a requirement by the project control group.

If applicable, Burrugaabu Avenue shall be located within a 36-metre-wide road reserve. The pavement width shall be 18 metres and consists of two 3.5m wide travel lanes and two 5.5m wide parking lanes both with 3% cross fall. The two carriageways are separated by an 8-metre-wide median that contains the relocated 66 kV overhead power lines. The verge width shall be 5 metres wide with allocation for underground services, street lighting and a street tree within each verge. Refer to Section 9 for the typical road cross section. Integral kerb and gutters shall be provided on both nearside kerbs and a semi mountable median shall be provided on both offside kerbs. A central shared path is provided.

The pavement width of 18m allows for the future provision of four 3.5m travel lanes and two 2m shoulders (in addition to the central median) which can be used for emergency vehicle parking or cyclist lanes.

6.3.3 Driveways

Driveway locations and details shall be designed and documented by the lot developer through the Development Application process for the site. Driveways are expected to incorporate industrial driveway laybacks in accordance with TRC standard drawing RD009 and shall avoid water, sewer and stormwater infrastructure within the verges. Where appropriate, through driveways that extend the length of the lot and provide access to the front and rear of the lot are acceptable within the development subject to approval being granted through the Development Application process.

Driveways shall not be located within the footprint of any intersection to not constrain future intersection upgrades.

Driveways shall not be located within the footprint of any intersection to not constrain future intersection upgrades. Where physical constraints prevent this from being achieved, driveways may be permitted to be located within intersection extents, pending Development Application processes. Where driveways are provided at t-intersections they may be upgraded to become a leg of a roundabout should the t-intersection be upgraded as such. Where driveways are located nearby crossroad intersections, access into the driveways may become limited to left-in and left-out due to potential traffic calming and control devices installed within the roadway. Relocation of driveways will be avoided if possible, but may be required as a result of intersection and road upgrades.

Allotment developers will be required to make themselves aware of any restrictions on driveway locations i.e., overhead power clearances, underground power depths, pits, pillars, poles, and other obstructions.

6.3.4 Traffic Data for Pavement Design

The following traffic data has been adopted for the project utilising information from the Tamworth Enterprise Area Transport Impact Assessment conducted by GTA Consultants in 2018 (N145540) (Attachment 5).

Table 4 – Development traffic data

	Road Type		
	Goddard Lane	Bandaar Drive and Dhulii Drive	Access Roads
Road Classification	Collector (Industrial)	Collector (Industrial)	Local (Industrial)
AADT	3,800 (existing) 27,000 (year 2060)	15,000 (year 2060)	5,000
Design Life	40 years	40 years	40 years
% Heavy Vehicles (Class 3 and above)	20%	25%	25%
Assumed Growth Rate	5%	5%	5%
NHVAG	2.8	2.8	2.8
ESA/HVAG	1.054	1.054	1.054

6.3.5 Pavement Summary

CBR testing has been completed on subgrade within the TGGP. Where required CBRs are not achieved from Table 5, alternate pavement designs are to be developed by a suitably qualified geotechnical engineer, to the approval of the project team.

Slag/lime stabilisation testing shall be completed on DGS40 pavement material to determine dosage within roundabout pavement to achieve USC of 3MPa.

Table 5 – Summary of adopted pavement designs

	Pavement Type			
	Type 1 – Bandaar Drive and Dhulii Drive	Type 2 – General Roads	Type 3 – Western Roundabout	Type 4 – Eastern Roundabout
Wearing Surface	45mm DG10 A15E Asphalt		45mm DG14 A15E Asphalt	
Base	200mm DGB20	170mm DGB20	140mm DG20 AR450 Asphalt	150mm DG20 AR450 Asphalt

	Pavement Type			
	Type 1 – Bandaar Drive and Dhulii Drive	Type 2 – General Roads	Type 3 – Western Roundabout	Type 4 – Eastern Roundabout
Sub-base	150mm DGS40	150mm DGS40	190mm DGS40 Slag/Lime Stabilised to 3MPa	200mm DGS40 Slag/Lime Stabilised to 3MPa
Select	270mm 3.5% Hydrated Lime Stabilised Residual Clay	250mm 3.5% Hydrated Lime Stabilised Residual Clay	250mm 3.5% Hydrated Lime Stabilised Residual Clay	250mm 3.5% Hydrated Lime Stabilised Residual Clay
Subgrade	Residual Clay CBR 3.5	Residual Clay CBR 3.5	Residual Clay CBR 3.5	Residual Clay CBR 3.5

6.3.6 Roundabouts

There are two roundabouts located on Bandaar Drive and Dhulii Drive. The western roundabout is in close proximity to Goddard Lane and provides a safe intersection for the road accessing the TIFF. The eastern roundabout is adjacent to Murroon Creek and provides a safe intersection for the traffic from the commercially zoned allotments to enter and exit Bandaar Drive and Dhulii Drive. Painted chevrons shall be used on the roundabout approaches where required to accommodate the swept path of the check vehicle.

Roundabouts shall incorporate landscaping, irrigation and subsoil drainage within their central island. A consistent, hardy and drought tolerant landscaping treatment shall be incorporated at both roundabouts.

6.3.7 Intersection Modelling

Traffic modelling for the ultimate development traffic has been completed based on assumed average trip generation densities across the development (Attachment 6). Using these assumptions, two intersections have been identified as potentially requiring upgrades in the future. These include the intersection of Dhulii Drive and Gilaa Circuit, and Bandaar Drive and Maliyan Street.

The typical treatment for intersection upgrade is a small diameter concrete drive-over roundabout, with the pavement upgraded to a deep lift asphalt construction, amendments to parking and line marking, with no change in the existing kerb alignments. Large articulated vehicles will be able to negotiate left and right turns, but will be required to utilise one of the two large landscaped roundabouts, or the Country Road roundabout to do full turn around movements.

6.3.8 Access into the Development

Two T-intersection accesses off Goddard Lane and one roundabout access off the Oxley Highway are currently proposed for the development. Any additional access from the Oxley Highway between Country Road and Goddard Lane would be a 'left in left out' T-intersection and require a deceleration lane as per discussions with Transport for NSW. This access is represented in Figure 24 in gold.

A Transport for NSW project in 2021 upgraded the intersection of Goddard Lane and the Oxley Highway to a 'seagull' treatment with channelised turning lanes and a northbound acceleration lane.

Channelised turn lanes aren't currently required for the intersections on Goddard Lane however, there is sufficient pavement width for these lanes to be incorporated as required provided the adjacent parking is removed immediately adjacent to the intersection.

6.4 Transportation

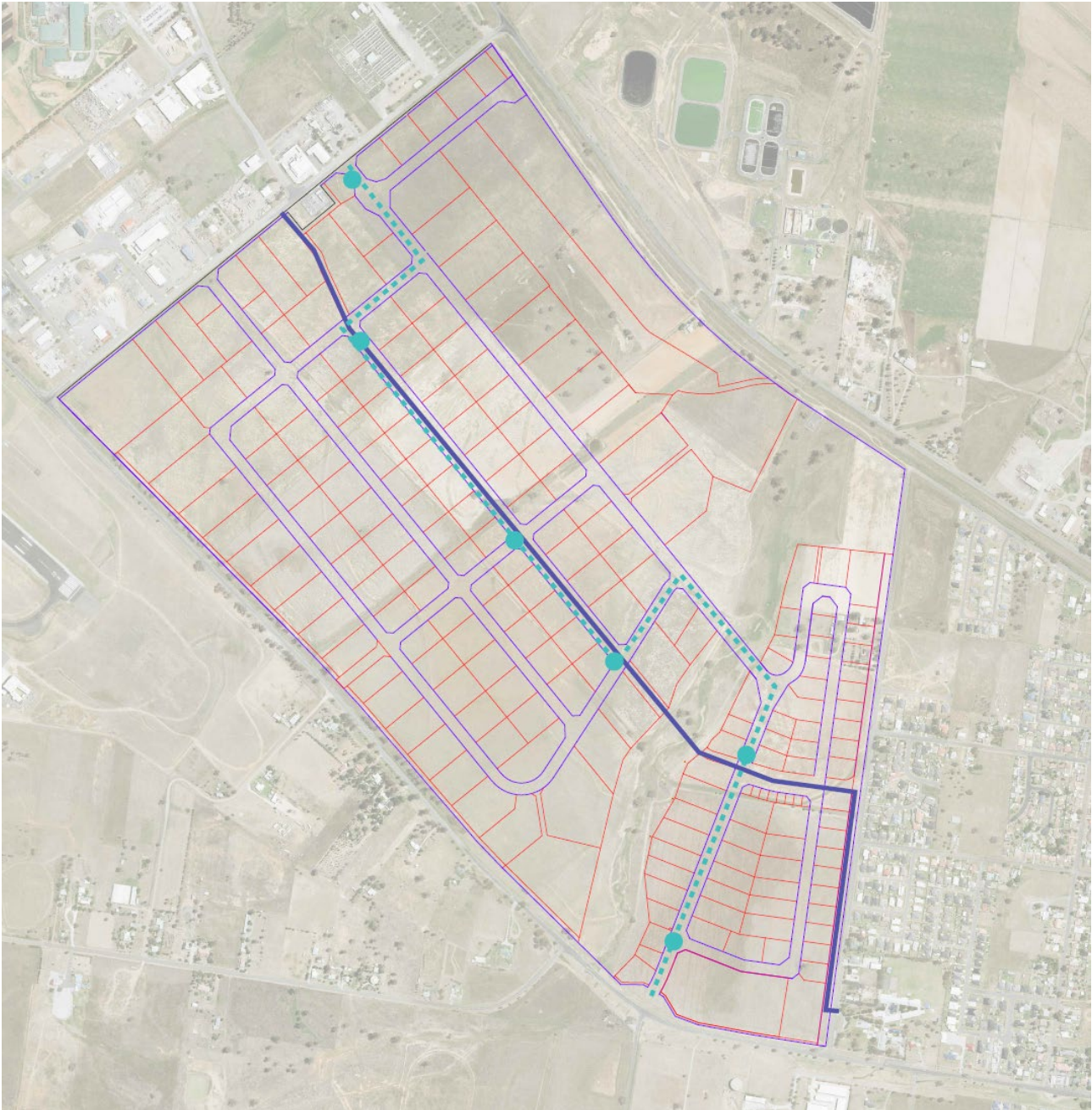


Figure 25 – Proposed bus route (dashed blue), bus stops (blue), and shared path cycleway (dark blue)

A shared path cycleway will be provided to connect the Glen Artney Industrial Area and the TGGP with the residential areas to the east.

Bus stops within the TGGP are proposed to be provided with a concept design provided below. This design incorporates design elements of the TGGP entrance statements and roundabout road signs, as well as the TGGP logo, a map of the TGGP, and decorative artwork commissioned for the TGGP as per Section 4.2.3. The assignment of bus stops and bus routes will be the responsibility of Transport for NSW. The TGGP will construct the infrastructure once adopted.

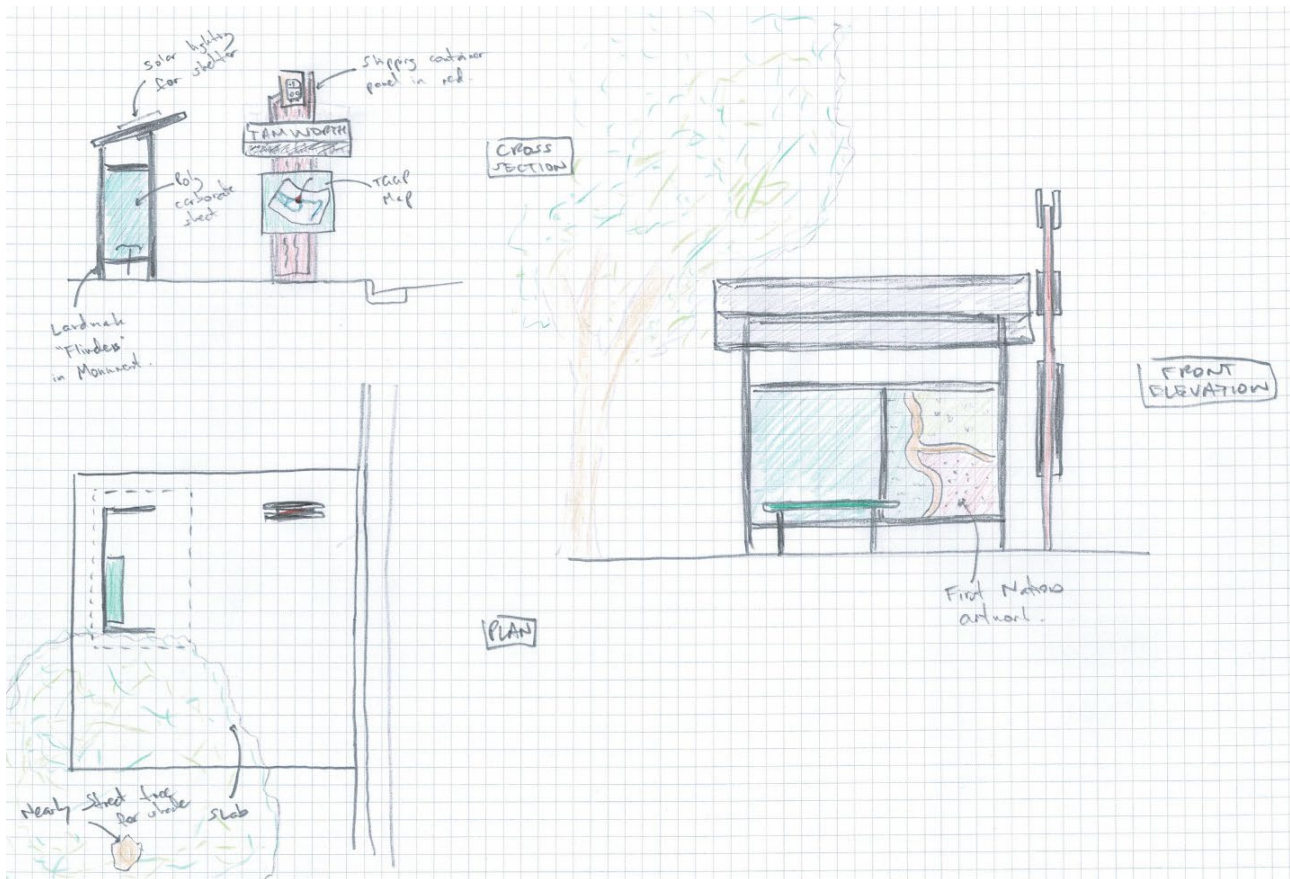


Figure 26 – Concept bus stop design

6.5 Stormwater

The storm water network within the site consists of Major (trunk) storm water paths and Minor storm water paths. The trunk storm water lines shall be designed for the 1% AEP event and shall consider the ultimate development of the site. The minor storm water infrastructure consists of underground pipes and shall be designed for the worst case of a 10% AEP event or the 1% AEP event when the overflow capacity of the road, contained between the kerbs, is also considered. Inter-allotment drainage consisting of underground pipes for the 10% AEP event and an earth bund for events up to the 1% AEP shall be provided as the topography requires to prevent nuisance flooding of neighbouring lots.

The hydrologic and hydraulic modelling of the storm water network shall be designed in accordance with the ARR2019 methods. No climate change factors are to be incorporated. The fraction impervious for industrial zoned land has been adopted as 90% and 95% for business park zoned land.

Murroon Creek works and the drainage channel from Marathon Street have been designed as engineered channels catering for the full 1% AEP flows plus an additional 25% as per Council's minimum standards.

The current flood planning area for planning approvals is defined as allotments affected by 1% AEP peak flood depths of greater than 0.15m over greater than 10% of the allotment. Based on the channels fully containing these flows, it is expected that no saleable allotments are within the flood planning area.

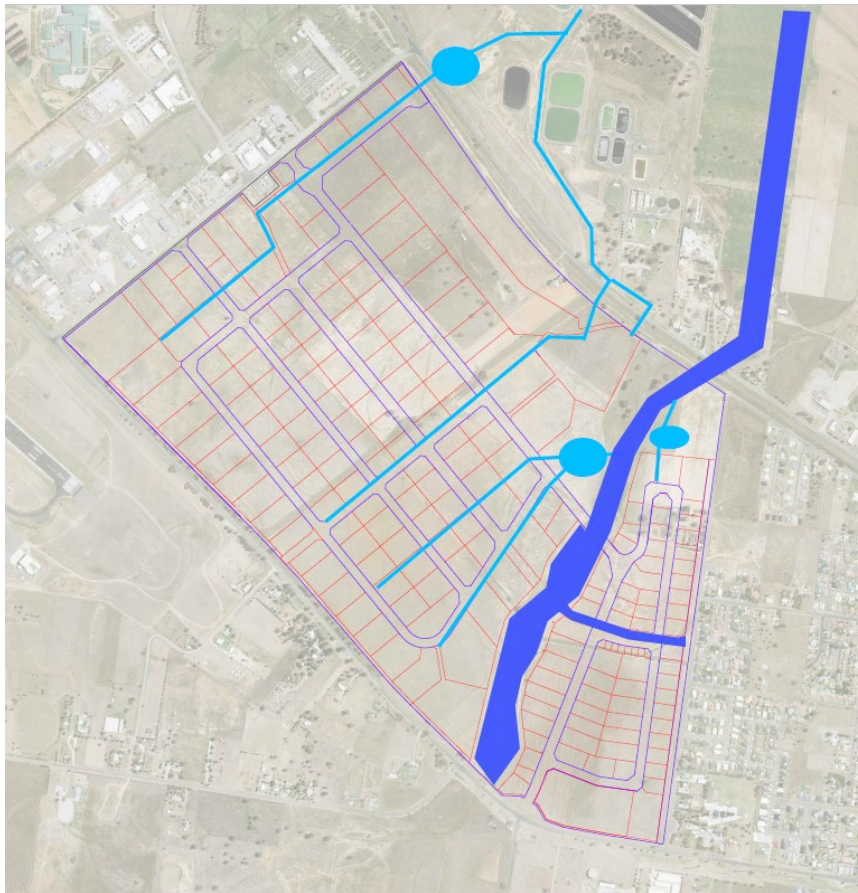


Figure 27 – Channel flooding extent (dark blue) and trunk stormwater network (light blue)

Three trunk storm water lines have been identified for the TGGP site and have been labelled the Western, Central and Eastern trunk lines. The Western trunk line and Central trunk lines consists of Reinforced Concrete Pipe and Reinforced Concrete Box Culverts. The Eastern trunk line consists of a continuation of the Murroon Creek watercourse with Reinforced Concrete Box Culverts at the road and rail crossings. All trunk storm water infrastructure north of Wallamore Road is expected to be grass seeded with intermediate turf strips and rock or concrete protection over underground services.

The allotment developer shall cut-in appropriate pipework to the existing pits. Where the stormwater connection points are located on the road frontage and there is insufficient pit depth to install lead-in pipework beneath other services, this pipework may be required to be located above the electrical, communications, and gas services trenches which commence approximately 750mm below the existing ground level. The allotment developer shall provide the correct pipe for the resulting cover.

6.6 Earthworks

Generally, lot fill will be limited to the following occasions:

- 1:20 batter cut or fill from the verge boundary tie in until the batter reaches natural ground level and to allow surface water to runoff as per stormwater strategy;
- Fill up to 500mm in isolated locations to allow surface runoff in accordance with the above verge batters; and
- Fill up to 1500mm for the purposes of obtaining cover to the central stormwater trunk line as per Figure 28.

Earthworks will be completed in accordance with AS3798-2007 Guidelines on earthworks for commercial and residential developments

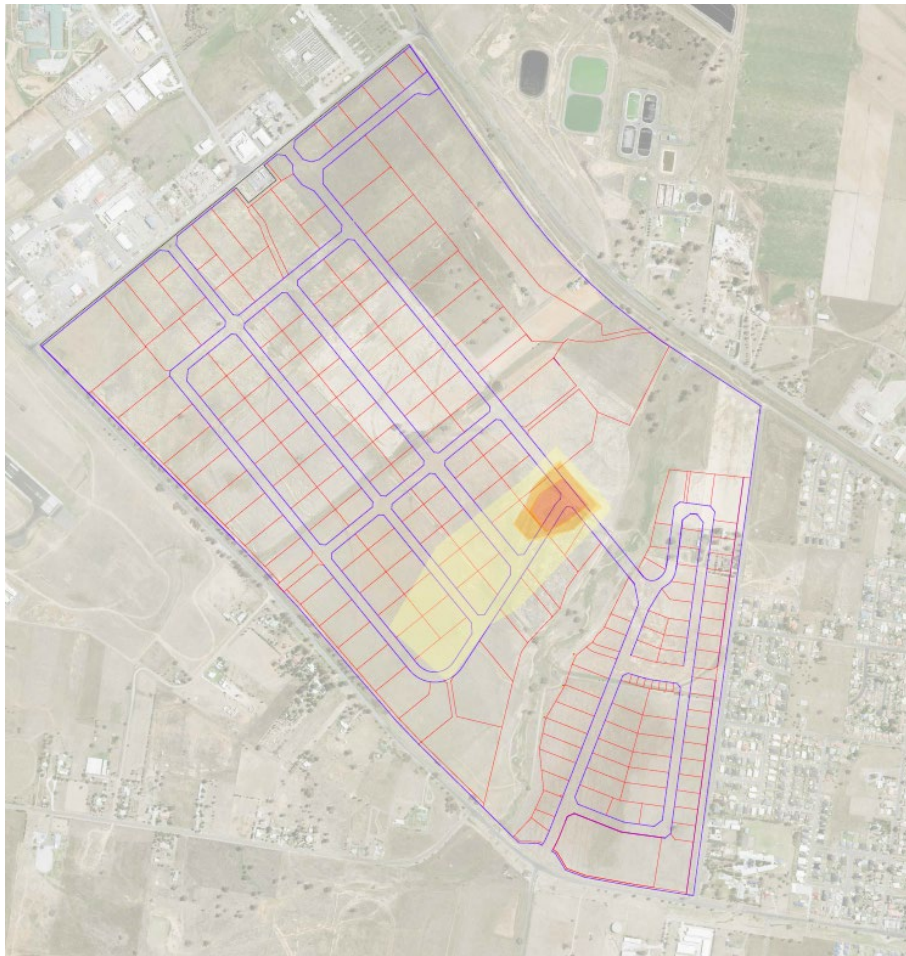


Figure 28 – Indicative lot fill (0-500mm yellow, 500-1000mm orange, 1000-1500mm in red)

6.7 Water

A potable DN250 DICL PN35 distribution water main will be provided along Bandaar Drive and Dhulii Drive and will be connected into the existing DN375 DICL main at the Country Road roundabout and Goddard Lane, and the DN200 DICL main at Goonan Street (Goddard Lane). Potable DN150 DICL PN35 reticulation water mains will be provided throughout all streets. Individual allotment developers are to determine the appropriate water service based on water use. By default, allotments will be provided with a 50mm service, with larger allotments provided with a 100mm or 150mm tee service if identified by the project team. Upgrades of these service provisions will be completed by the allotment developer.

Provision for a non-potable recycled water main from the adjacent waste water treatment plant will be allowed for in the design drawings, as an irrigation source for green spaces and potential lot developers. Until confirmed otherwise, the design packages will incorporate a DN450 welded mild steel carrier pipe across the road and rail corridors adjacent to Burruulu Close and the Central Ranges gas substation with a DN250 main (material type to be confirmed) along Bandaar Drive. There will be no commitment for construction of this infrastructure until a greater understanding of the cost, upgrade works at the treatment plant, demand for usage and health and safety aspects of the use of this main are known.

The allotment developer is required to confirm the water pressure requirements for the lot usage and firefighting requirements, noting that the provided mains have been installed in accordance with the Tamworth Regional Council Engineering Design Minimum Standards for Subdivisions and Developments and may not be sufficient for these purposes

6.8 Sewer

The TGGP is divided into two sewer catchments, western (blue) and eastern (red) as per Figure 29. The developer of an upstream industrial subdivision (south of the Oxley Highway) is providing the design and construction of the trunk sewer main on the eastern side of the TGGP. TRC will be required to extend this trunk sewer main from the proposed culvert on Bandaar Drive over Murroon Creek to the Westdale waste water treatment plant. This design is completed and is provided as Attachment 8. All other trunk sewer mains will typically be located within the proposed road reserves and shall be DN150 uPVC SN8, or larger where required. In some instances, easements will be required. Consideration will be given to implementing these easements adjacent to roads or allotment boundaries.

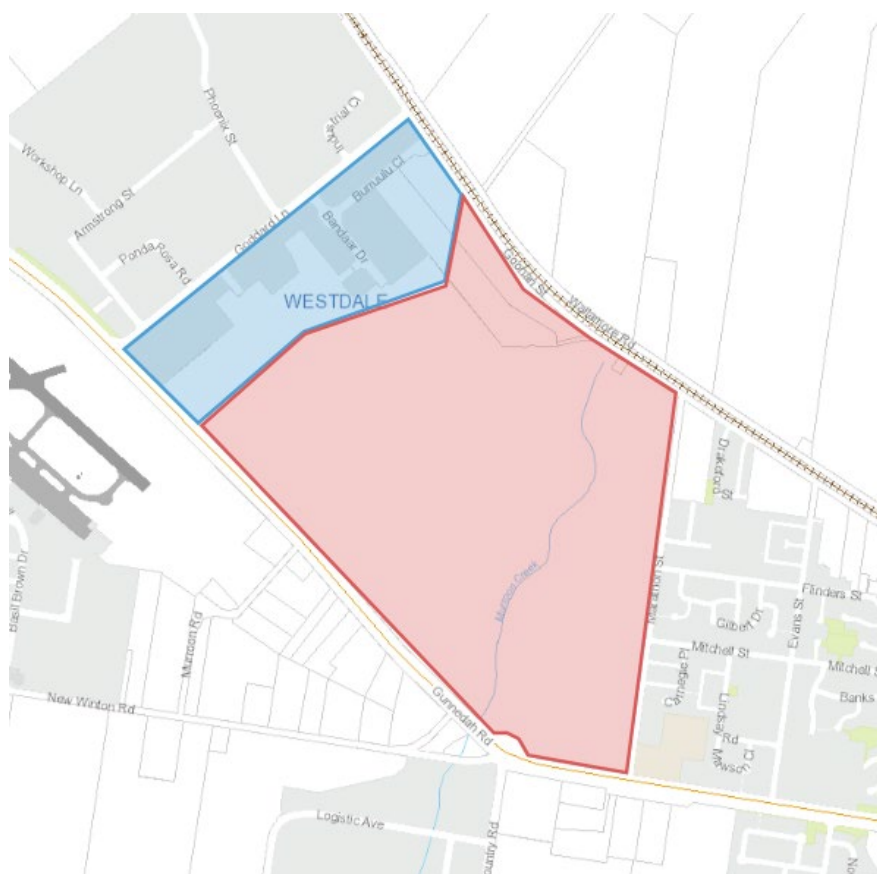


Figure 29 – Indicative sewer catchments

Without land uses being known, 5 equivalent tenements (ETs) have been adopted for each hectare of developable land.

Connecting sewer infrastructure will be provided throughout all streets and at the rear of lots requiring inter-allotment sewer connection. Manholes are to be located at no greater than 80m centres. Where lot boundaries are known, junctions will be placed at the downstream corner of the lot, otherwise, they will be located at 40m centres. Individual lot developers will gain access to the sewer infrastructure through these provided junctions.

The sewer main shall be located at a sufficient depth to service the entirety of all lots in accordance with Tamworth Regional Council Engineering Design Minimum Standards for Subdivisions and Developments, unless otherwise noted. This excludes the Stage 4 lot which is proposed to be partially serviced by sewer with a building envelope utilised. If required, additional sewer main and lot fill will be undertaken (under a Subdivision Works Certificate) to extend the sewer serviceability

and subsequently the building envelope. Refer to Section 9.7 for the minimum extent of sewer serviceability (Option 1).

6.9 Communications

Council will engage a consultant to design the communications network (pit and conduits) throughout all streets. This network will be constructed to NBN Co's specifications.

NBN Co have advised that they will provide FTTP Type 3 MT-LFN with no backhaul charges. The staging of the infrastructure delivery is;

- Council to engage accredited designer to design and seek NBN Co's design approval for a pit and conduit network to NBN requirements throughout all public roads, including roads crossings, and boundary pits;
- Council to engage a contractor to construct a pit and conduit network to NBN requirements throughout all public roads, including roads crossings, and boundary pits;
- NBN Co to install fibre infrastructure through supplied pit and conduit network through to the boundary pits;
- Lot developer completes facility construction, making allowance for physical works within the lot (outside of Council's scope);
- NBN Co complete fibre connection to new facility utilising any lot developer installed infrastructure, including the installation of a standard network terminating device (NTD); and
- Lot developer enters into an agreement with NBN Co or other service provider (as appropriate) for the provision of fibre telecommunications services (outside of Council's scope).

Where a lot is sold with the intention being that the lot will be developed and later sub-divided, the lot developer is required to enter into a separate developer agreement with NBN Co to provide the infrastructure within the public roads. This lot arrangement is referred to as a super lot.

For tenants with a higher level of communications demand than the standard fibre provisions by NBN Co, the individual lot developers may seek Enterprise Ethernet products from the service provider at their cost. This involves replacing the standard NTD with switching gear to enable much higher bandwidth usage and potentially the installation of additional fibre through the public pit and conduit network to cater for a high number of users.

6.10 Gas

Discussions with APA Group have resulted in the proposal to provide a 110mm PE main along Bandaar Drive and Dhulii Drive connecting Goddard Lane and the Oxley Highway. Other roads will be furnished with a 63mm PE main with each alternate allotment shared boundary receiving a 100mm conduit under the road. This will be constructed by APA Group with a contribution from Council.

It is unclear whether there will be any gas demand for the site, however if required, individual allotment developers will source gas from these mains. High demand users may require a dedicated main to be sourced from outside the development. Additional road crossings will be required to be under-bored.

The Central Ranges Pipeline extends from Dubbo to Tamworth and has an average throughput of up to 5.3 TJ/day. The transfer station for this pipeline is within the TGGP.

6.11 Electricity

Through Council's major connection enquiry MNC000100, Essential Energy have confirmed that several network upgrades are required to service the full extent of the TGGP:

- Installation of additional 11kV switchboard within the Goddard Lane zone substation;
- Installation of additional 11kV transformer within the Goddard lane zone substation;
- Upgrade of conductors on the 806 feeder 66kV line, including the relocation of the feeder through the TGGP to suite the lot layout; and
- Upgrade of conductors on the 80C feeder 66kV line.

During construction of the roadway and other services, Council will install the following;

- Kiosk sub-stations to provide LV power to street lights and nearby low demand lots (if identified);
- Street lights, pits and associated LV street light cabling from the installed kiosks;
- HV cabling from zone sub-station to installed kiosks;
- HV switching stations and switchgear as required;
- Conduits for future HV cabling; and
- Conduits for future LV cabling.

Main infrastructure to be installed on one side of the roads only with strategically located road crossings. Both sides of the road to have electrical allocations furnished with spare HV and LV conduits.

The kiosk substations should be sized to supply the street lights and nearby low demand lots. It is proposed that these low demand lots are defined at this stage and LV cabling and connection pillar installed to allow the lot to be powered very quickly upon sale. The power provided to these lots is in the order of 120-180 kVA 3-phase 415V which has a maximum current draw of 150A per phase. For reference, a maximum of 200A per phase under ideal conditions is permitted by Essential Energy before a dedicated HV connection is required.

HV cabling will be extended into new areas from the nearest installed kiosk, using the existing conduits and future direct buried allocations i.e., conduits required in previously developed areas and direct buried possible in new development areas.

HV cabling to be sized to allow for future kiosk installations. Additional HV cables can be installed within the conduits to form a new kiosk network. The Business Park is expected to be fed from the overhead HV network adjacent to the Country Road Roundabout, with a HV connection between the Business Park and the Industrial Park provided along Bandaar Drive over Murroon Creek.

HV switching stations may be provided to allow sections to be isolated safely for maintenance or construction purposes.

Tenants requiring dedicated kiosks can obtain a HV supply from the nearest kiosk, using either existing conduits or direct buried cabling between them. Existing HV cables cannot be cut and connected into the kiosk to ensure that in-line joints don't become fault locations.

All lots will be provided with underground HV and LV conduits for the full extent of road frontages. Unless noted otherwise:

- Lots less than 7,000m² will typically be provided with an LV commercial pillar providing in the order of 120-180 kVA 3-phase 415V which has a maximum current draw of 150A per phase. For reference, a maximum of 200A per phase under ideal conditions is permitted by Essential Energy before a dedicated HV connection is required; and
- Larger lots may require a dedicated HV feed and so shall be fed by a direct HV cable from the nearest pad-mounted substation kiosk. All new kiosks shall be installed with 4-way switches to allow the kiosks to be connected in a ring main and provide HV connection points for adjacent lots.

Indicative timeframe for a tenant to obtain a LV connection from an existing public kiosk is 16 weeks. Indicative timeframe for a tenant to obtain a HV connection and new private kiosk from a nearby kiosk is 38 weeks.

Due to the lack of knowledge at this stage regarding electrical demand for each lot, justification for not providing LV to all lots will be based on assumed diversified lot demand calculated in *TGGP – Electrical – Lot demand and reticulation* (Tamworth Regional Council, January 2023).

Table 6 – Adopted kVA and A/ph values for decision making (not servicing) (TGGP - Electrical - Lot demand and reticulation, Tamworth Regional Council, August 2020)

Zoning	kVA/Ha		A/ph @ 3ph 415V
	Adopted value	Adopted value with 20% growth allowance	
General Industrial	160	190	150
Heavy Industrial	240	290	230
Business Park	220	260	210

Electrical designs shall allow for all HV and LV network requirements, obtaining EE concurrence for the designs.

For tenants with a higher level of electricity demand than the assumed demand density, the individual lot developers will need to procure a new HV connection from the existing HV network (if a previous developer has not already done so). This will include a new pad mounted substation adjacent to their lot frontage or across the road from their frontage and associated HV cabling to their property. Essential Energy's pioneer scheme allows the first developer to install a pad mounted substation to be refunded a portion of the construction costs for each new user using the substation. This scheme is administered directly between the developer and Essential Energy.

If Council is still actively involved in the construction of the development after lot sales have commenced, Council may install the LV network for these sold lots where the demand is known and it differs to the standard LV supply provided. This may also include the provisioning of a private kiosk substation and associated HV cable feed from an adjacent substation.

6.12 Street Lighting

The street lighting category shall be PR3 in accordance with AS 1158.1-2020.

Council (or the developer if large sections of land are sold) will design and construction street lighting throughout all streets.

Lighting shall be staggered along both sides of the Ring Road and otherwise located along one side of the road. They shall be connected to mains electricity and utilise LED type luminaires.

The indicative lighting arrangements and spacings are provided below.

Table 7 – Lighting arrangements and spacings

Element	Pole Arrangement		Wattage	Spacing	Comment
	Height	Outreach			
Ring Road (Straight)	10.5	3	80	60	Both sides, staggered.
Ring Road (Roundabout)	10.5	3	80	-	3-light centre pole, one light each approach splay.
Ring Road (T-Intersection)	10.5	3	80	-	3 lights – two staggered at TPs on through road, one on minor road at opposite TP i.e., one each corner.
Access Roads (Straight)	9	3	80	70	Single side.
Access Road (T-Intersections)	9	3	80	-	3 lights – two at TPs on through road, one on minor road.
Access Road (Crossroad Intersection)	9	3	80	-	4 lights – two at opposite TPs on each road.
Spine Road (Median)	9	3	80	-	Designed similar to Access Roads assuming each side of the median is a separate road.

6.13 Infrastructure Designs

Design drawings for the above infrastructure are developed for each stage. These designs are reviewed and approved by representatives from Council's Regional Services directorate (asset owner for roads, and stormwater), Council's Water & Waste directorate (asset owner for sewer and water), Essential Energy (asset owner for electrical and street lighting), APA Group (asset owner for gas), and NBN Co (asset owner for communications).

The drawings for each stage, including detailed servicing strategies, will be provided to Council's Development Engineering division once at a 90% design stage, for comment.

Road, stormwater, water, and sewer assets designed and constructed as part of the development are funded by Council under the development with ongoing maintenance liabilities also the liability of Council. This is unlike other developers where the maintenance liability transfers on completion or at the end of a liability period.



The following design sketches have been provided as appendices to the report within Section 9:

- DSJN1236-SK01 Typical Cross Sections Sheet 1;
- DSJN1236-SK02 Typical Cross Sections Sheet 2; and
- DSJN1236-SK14 Indicative Incoming Service Allocations for Lots.

7 Consideration of Environmental Planning Instruments

7.1 Tamworth Regional Local Environmental Plan 2010

7.1.1 Land Zoning

The subject site is located within E3 Productivity Support, E4 General Industrial, and E5 Heavy Industrial as per Figure 5. The objectives of these zoning types are:

- E3 Productivity Support
 - To provide a range of facilities and services, light industries, warehouses and offices;
 - To provide for land uses that are compatible with, but do not compete with, land uses in surrounding local and commercial centres;
 - To maintain the economic viability of local and commercial centres by limiting certain retail and commercial activity;
 - To provide for land uses that meet the needs of the community, businesses and industries but that are not suited to locations in other employment zones;
 - To provide opportunities for new and emerging light industries and
 - To enable other land uses that provide facilities and services to meet the day to day needs of workers, to sell goods of a large size, weight or quantity or to sell goods manufactured on-site.
- E4 General Industrial
 - To provide a range of industrial, warehouse, logistics and related land uses;
 - To ensure the efficient and viable use of land for industrial uses;
 - To minimise any adverse effect of industry on other land uses;
 - To encourage employment opportunities; and
 - To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers.
- E5 Heavy Industrial
 - To provide areas for industries that need to be separated from other land uses;
 - To ensure the efficient and viable use of land for industrial uses;
 - To minimise any adverse effect of industry on other land uses; and
 - To encourage employment opportunities.

7.1.2 Minimum Lot Size

No minimum lot size relates to the subject site.

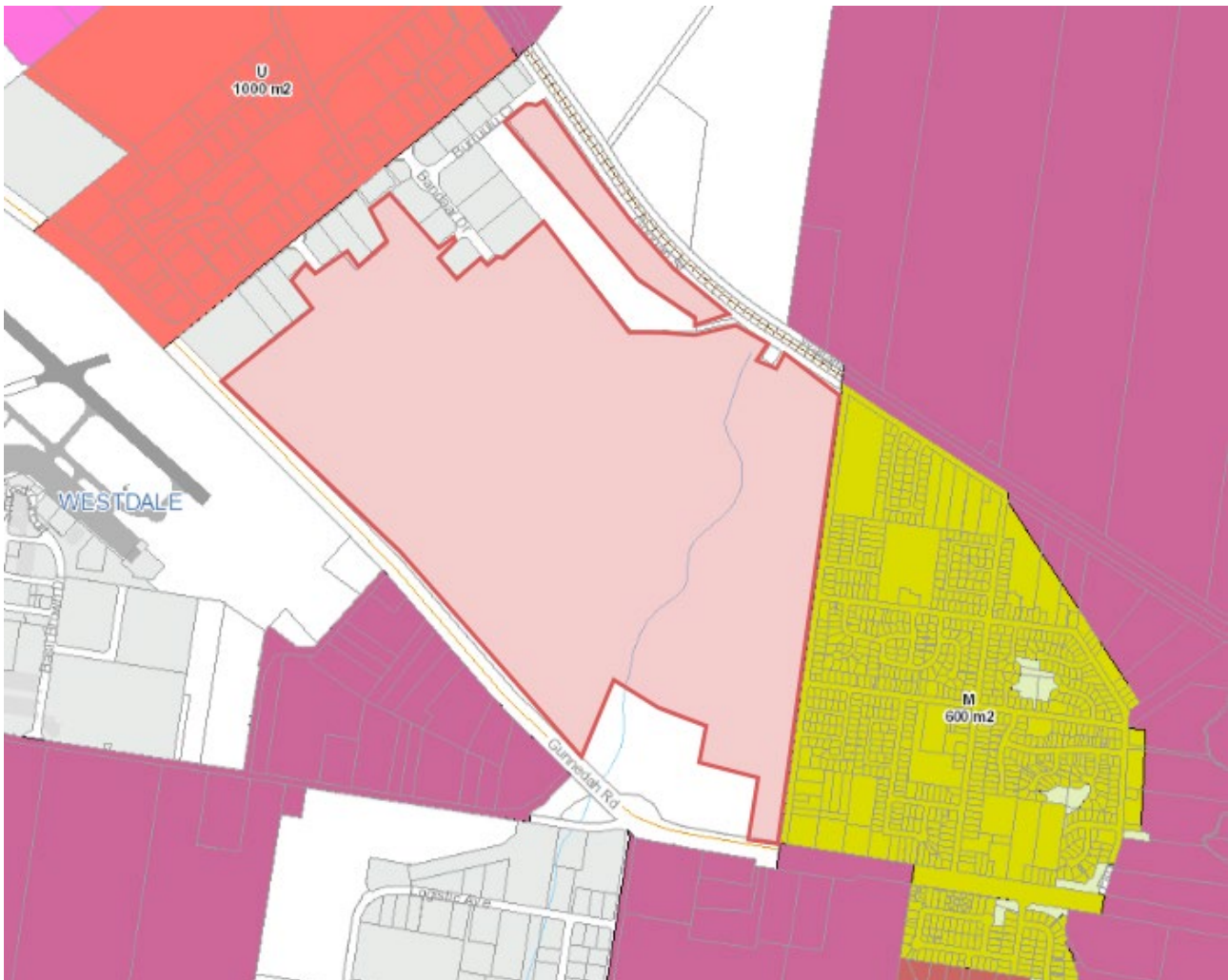


Figure 30 – Tamworth Regional LEP 2010 minimum lot sizes

7.1.3 Obstacle Height Limitation

A portion of Stage 10 within the TGGP is located within the Tamworth Regional Airport's obstacle height limitation. The remainder of the TGGP is within the 45m height limitation. This proposal does not impact on these heights. Future building developments will need to consider the impact of the proposed activity on the obstacle height limitation.

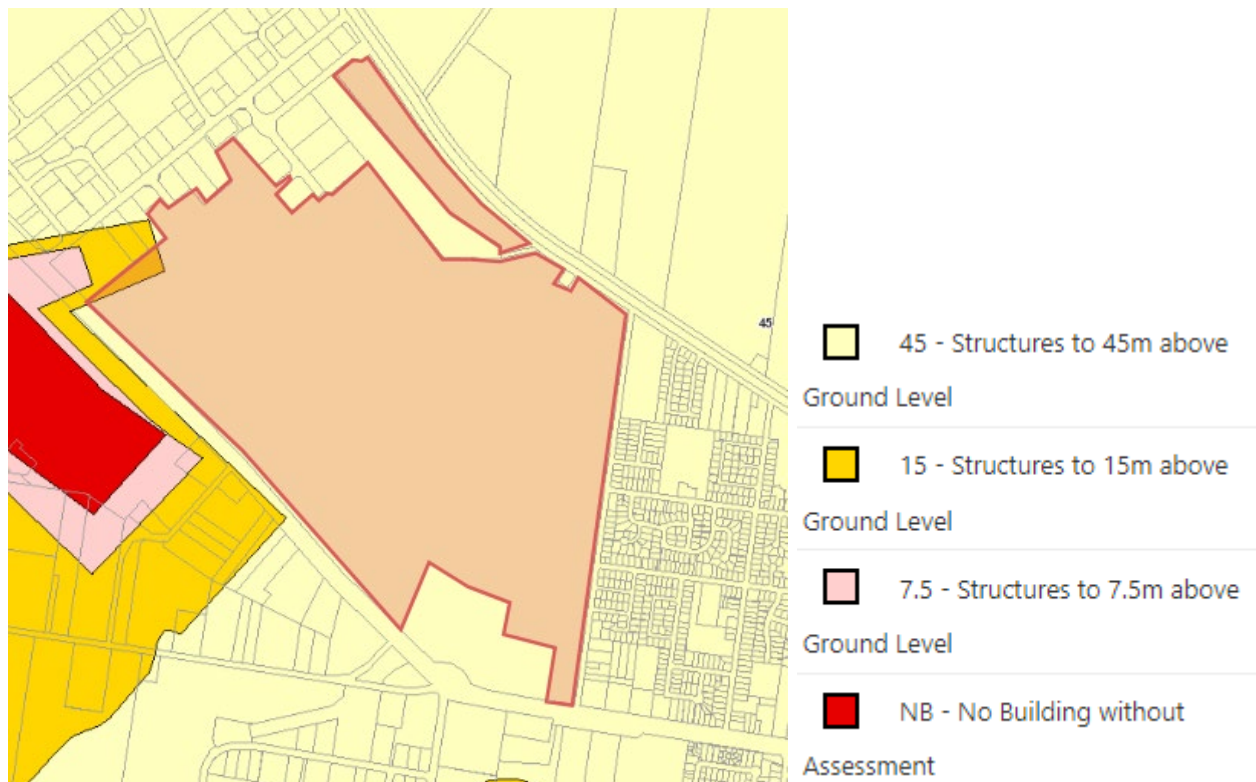


Figure 31 – Tamworth Regional LEP 2010 obstacle height limitation

7.1.4 Sewer Treatment Plant

Portions of Stage 4 and Stage 7 within the TGGP are located within the Westdale Waste Water Treatment Plant's zone of influence. This proposal does not impact and is in turn not impacted by the functioning of the facility. Future building developments will need to consider the impact of the proposed activity on the Westdale Waste Water Treatment Plant, including the impact that the plant has on the development.

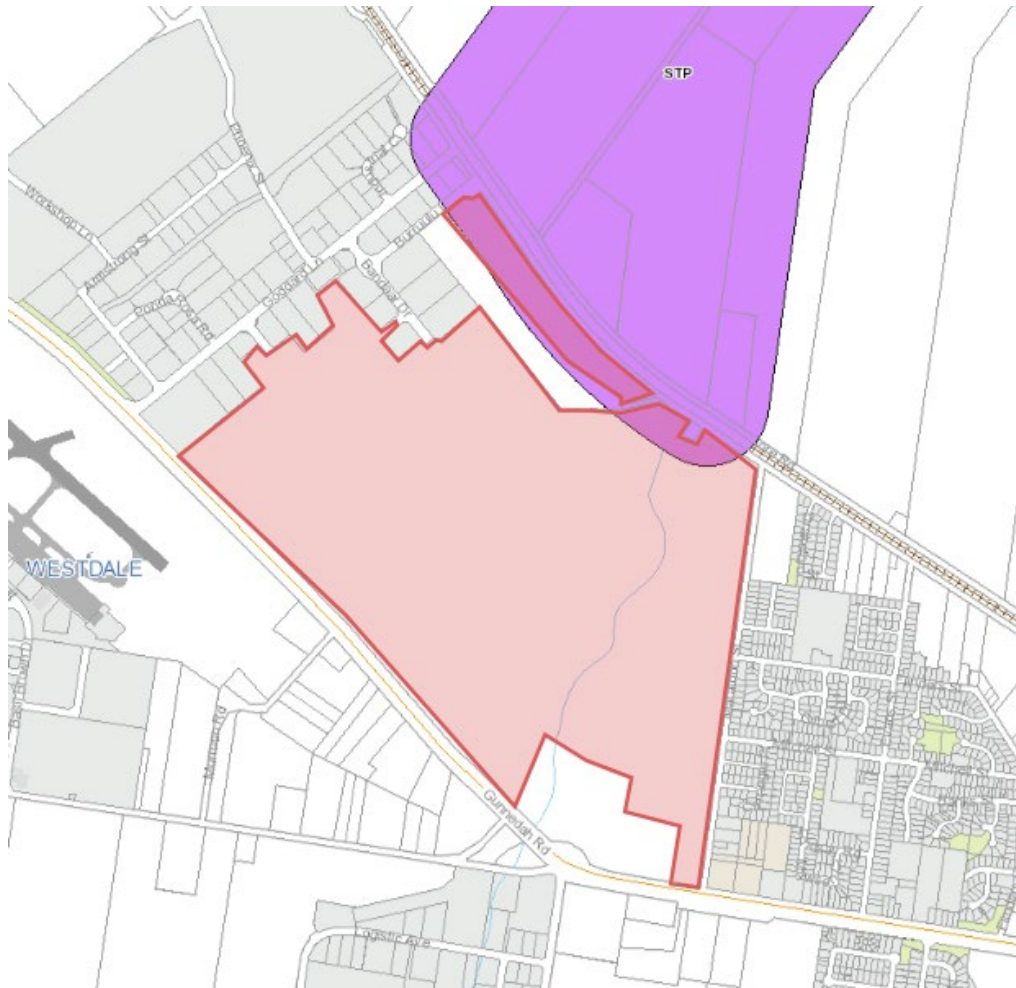


Figure 32 – Tamworth Regional LEP 2010 sewer treatment plant

7.1.5 Flight Training Path

The full TGGP precinct is located within the Tamworth Regional Airport's flight training path. This proposal does not impact on this path. Future building developments will need to consider the impact of the proposed activity on the flight training path.

7.1.6 Australian Noise Exposure Forecast

A portion of Stage 12 and 13 within the TGGP are located within the Tamworth Regional Airport's Australian noise exposure forecast area with a contour of 20. This proposal is not impacted by the noise impact from the airport. Future building developments will need to consider the impact of the noise exposure from the Tamworth Regional Airport on the development.

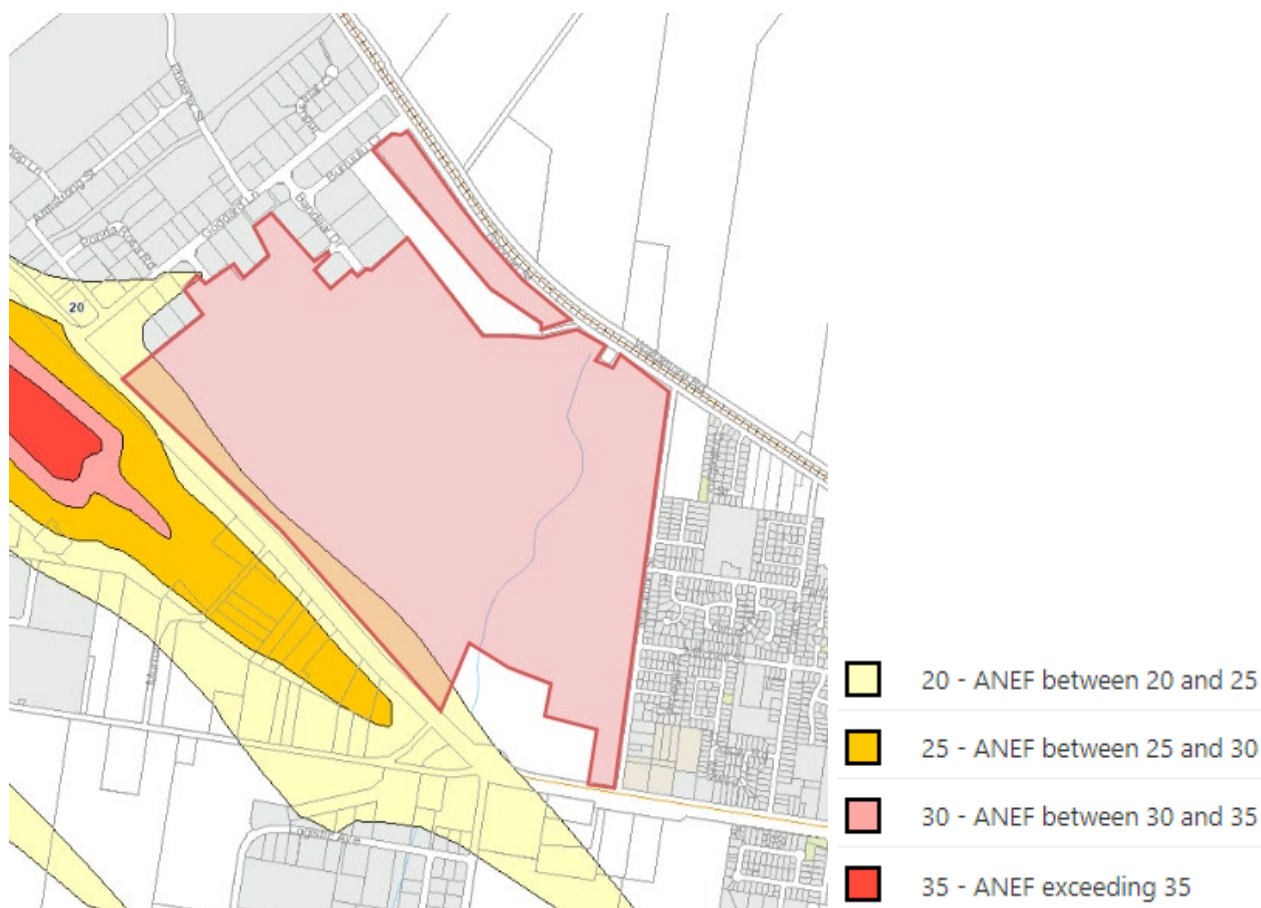


Figure 33 – Tamworth Regional LEP 2010 Australian noise exposure forecast

7.2 Applicable Legislation

Table 8 – Applicable environmental licences and approvals

Instrument	Requirement	Timing
Protection of the Environment Operations Act 1997	Not required. The works are not listed as a scheduled activity under this Act, nor is an environment protection licence (EPL) for non-scheduled activities for the purposes of regulating water pollution required.	N/A.
Fisheries Management Act 1994	Not required. The Proposal site is not located within or results in any interaction with aquatic habitat, fauna or a Key Fish Habitat.	N/A.

Instrument	Requirement	Timing
Forestry Act 2012 (Division 2, Part 4)	Not required. The Proposal site is neither located within a State Forest nor involves the removal of trees.	N/A.
Heritage Act 1977	Not required. The Proposal site is not located near a non-Aboriginal heritage site.	N/A.
National Parks and Wildlife Act 1974	An aboriginal heritage impact permit (AHIP) is required from the Chief Executive of DPIE by others for the relocation of the potential stone artefacts located as identified within Section 4.2.1.	Prior to start of the activity (by others).
Environmentally Hazardous Chemicals Act 1985 (s28)	No required. The Proposal does not include the use of an environmentally hazardous chemical or the generation of a declared chemical waste from the EPA.	N/A.
Water Management Act 2000	Not required. The Proposal does not involve water supply work, drainage work, floor work, aquifer interference, or catchment works requiring approval from Water NSW.	N/A.
Water Act 1912	Not required. The Proposal does not include works requiring permits with Water NSW.	N/A.
Mine Subsidence Compensation Act 1961	Not required. The Proposal site is not located within a mine subsidence district.	N/A.

Instrument	Requirement	Timing
Crown Land Management Act 2016	Not required. The Proposal site is not located within Crown Land.	N/A.
SEPP 55	Not required. The Proposal does not include remediation works.	N/A.
Commonwealth Environment Protection and Biodiversity Act 1999	Not required. The Proposal is unlikely to have a significant impact on any Matters of National Environmental Significance. As such, no referral is required.	N/A.
Contaminated Land Management Act 1997	Not required. No contaminated land has been identified within the Proposal site requiring reporting under the Act.	N/A.
Biodiversity Conservation Act 2016	Credits are required to be retired (offset or paid) in accordance with the stage assessment calculations in the Biodiversity Development Assessment Report.	Prior to the issue of a Subdivision Certificate for each stage.
Biosecurity Act 2015	Not required. The Proposal site does not have any identified weeds of national significance.	N/A

Instrument	Requirement	Timing
Waste Avoidance and Resource Recovery Act 2001	The proposed activity would generate waste and is therefore required to consider the waste management hierarchy referred to in this Act. All waste must be classified in accordance with the Waste Classification Guidelines prior to disposal and permits obtained from Tamworth Regional Council for their disposal. Waste tracking may be required depending on the type of waste.	Prior to disposal.
Roads Act 1993	Not required. The proposal does not include any work in any road reserve.	N/A

7.3 Tamworth Regional Development Control Plan 2010


The sections of the DCP applicable to the subdivision of the noted lots are identified and responded to below.

7.3.1 Step 2: Type of Development (Industrial) Development Controls

- Utilities and Services – Servicing strategies for all serviced development areas provided within Section 6.
- Traffic and Access – Traffic study for the entire precinct (Attachment 5) has been undertaken for the wider road network. Internal road network design has been completed in accordance with the servicing strategies for all serviced development areas provided within Section 6. This includes limiting driveway locations. An analysis of all internal intersections has been completed using SIDRA Intersection 9 based on precinct traffic generation data (Attachment 6). The analysis shows that all intersections shall be constructed as give-way signposted intersections, with the ability for future upgrade to single lane concrete drive-over roundabouts.

7.3.2 Step 2: Type of Development (Subdivision)

- Plans of Subdivision – Draft plans prepared by Baxter Geo Consulting, a registered surveyor. Each stage subdivision plan will be prepared by a registered surveyor for approval through the Subdivision Works Certificate and Subdivision Certificate process.
- Servicing, Strategy & Preliminary Engineering Drawings – Servicing strategies for all serviced development areas provided within Section 6.
- Sewer – Servicing strategies for all serviced development areas provided within Section 6.8.
- Water – Servicing strategies for all serviced development areas provided within Section 6.7.
- Stormwater Drainage – Servicing strategies for all serviced development areas provided within Section 6.5.
- Telecommunications – Servicing strategies for all serviced development areas provided within Section 6.9.

- 
- Electricity – Servicing strategies for all serviced development areas provided within Section 6.11.
 - Road Network Design – Servicing strategies for all serviced development areas provided within Section 6.2.2.
 - Staged Construction – Staging for construction of all serviced development areas provided within Section 2.2. Multiple subdivisions may occur within any stage to accommodate future purchaser requirements currently not known.
 - Contamination – Contamination considered for the TGGP precinct within Section 0.

7.3.3 Step 3: General Development Specifications (Other Types of Development Controls)

- Bushfire Prone Lane – The TGGP precinct is not located within any bushfire prone land.

7.3.4 Step 3: General Development Specifications (Environmental Controls)

- Environmental Effects – This document serves to identify and mitigate impacts from noted areas.

8 Conclusion



Development consent is sought to create the nominated allotments and undertake allotment earthworks. Roadways and service infrastructure to service these allotments is to be constructed prior to the registration of the applicable allotment creation.

The proposal is consistent with the intent of the E3 Productivity Support, E4 General Industrial, and E5 Heavy Industrial zoning of the area and of the TGGP as a precinct for future development.

Based on the information presented in this report, it is the author's opinion that the proposal is in line with the planning controls and intentions and that there are no outstanding issues limiting the creation of these allotments and the issuing of consent to undertake site earthworks across Stage 3 of the TGGP.

We hereby declare to the best of our knowledge that the information presented within this report is true, correct, and has been reviewed prior to issuing for assessment. Any error or omission identified in relation to this report is deemed not to have occurred through any misleading act.

Table 9 – Author and reviewer certification

Author	Reviewer
Callum Fletcher	Graeme McKenzie
Senior Project Engineer, Project Planning and Delivery Tamworth Regional Council	Manager, Strategy Assets and Design Tamworth Regional Council
	
08/11/2023	08/11/2023



9 Appendices

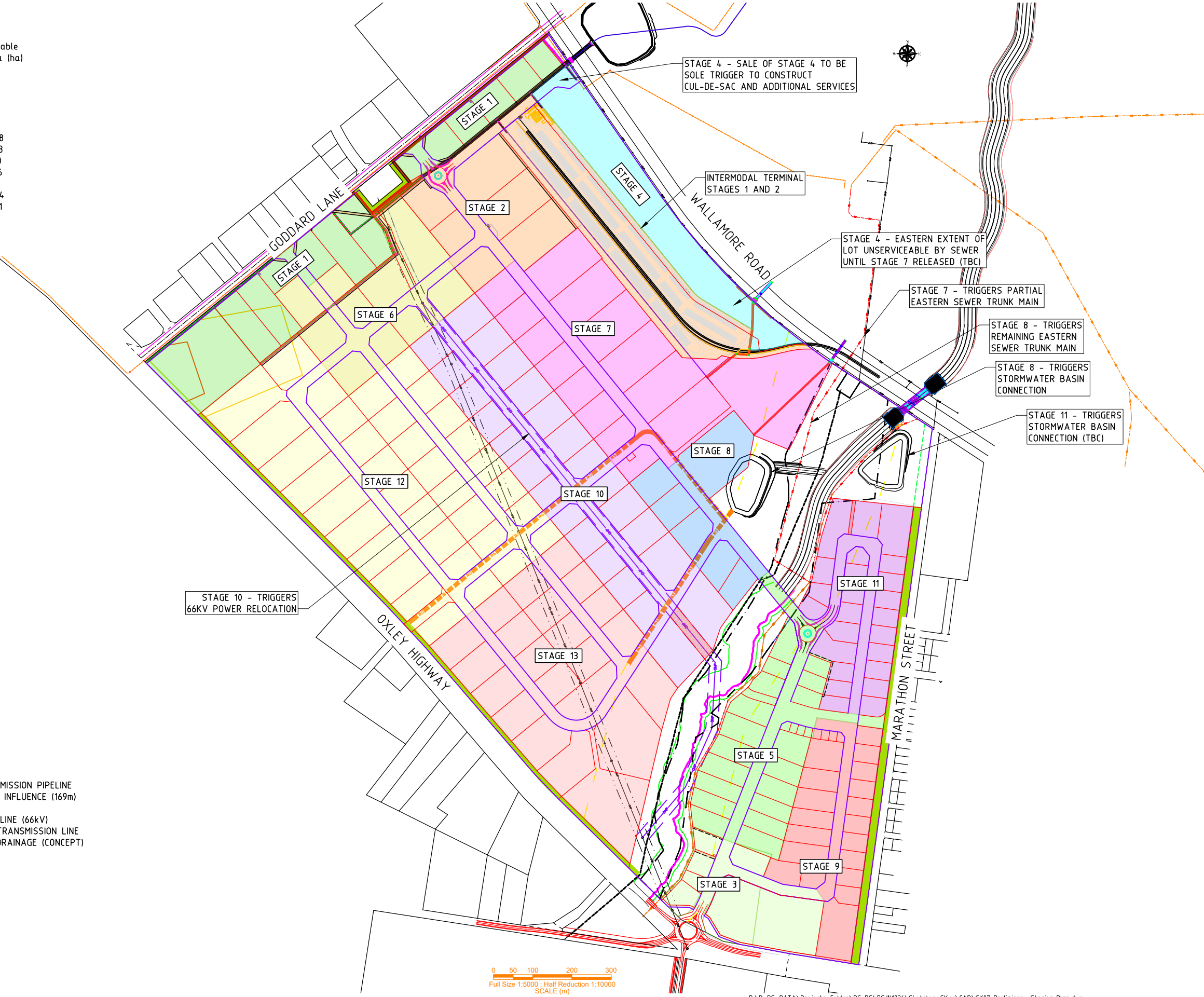
9.1 Appendix A – TGGP Staging Masterplan

LEGEND
STAGING PLAN

		Developable Area (ha)	Saleable Area (ha)
STAGE 1		14.73	14.11
STAGE 2		21.24	9.31
STAGE 3		4.52	3.60
STAGE 4		8.53	8.53
STAGE 5		13.03	9.40
STAGE 6		11.32	9.13
STAGE 7		16.58	14.48
STAGE 8		15.99	14.23
STAGE 9		13.12	11.40
STAGE 10		23.49	18.96
STAGE 11		11.18	9.04
STAGE 12		35.56	30.34
STAGE 13		25.92	23.01

LEGEND

- HIGH PRESSURE TRANSMISSION PIPELINE
- GAS PIPELINE ZONE OF INFLUENCE (169m)
- ENVIRONMENTAL ZONE
- POWER TRANSMISSION LINE (66kV)
- ALTERNATIVE POWER TRANSMISSION LINE
- TRUNK STORMWATER DRAINAGE (CONCEPT)
- TRUNK SEWER MAIN



R:\R_RS_DATA\Projects_Folder\RS-DS\DSJN1236\Sketches_SKxx\CAD\SK07 Preliminary Staging Plan.dwg

REV	DATE	DESCRIPTION
E	19-06-23	ISSUED FOR REVIEW
D	23-03-23	ISSUED FOR REVIEW
C	30-09-21	ISSUED FOR REVIEW
B	05-05-21	ISSUED FOR REVIEW
A	15-05-20	ISSUED FOR INFORMATION

CLIENT APPROVAL	
NAME	DIRECTORATE
SIGNATURE	DATE

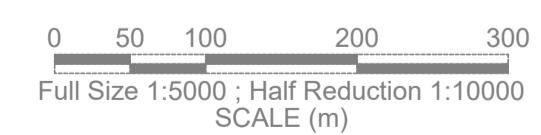
CHECKED:	DATE:
DESIGNER	
CHECKED:	DATE:
SENIOR DESIGN & PROJECT ENGINEER	
CHECKED:	DATE:
CLIENT REPRESENTATIVE	

STAGING PLAN					
SURVEYED:	MH	CLIENT REP:	GMck	DESIGNED:	BL
JOB NO:		DSJN1236			

TAMWORTH REGIONAL COUNCIL		DATUM	SCALES AS SHOWN
TAMWORTH GLOBAL GATEWAY PARK		A.H.D.	DRAWING NO.
OXLEY HIGHWAY		A1	1236-SK07



9.2 Appendix B – TGGP Base Constraints Plan



R:\R_RS_DATA\Projects_Folder\RS-DS\DSJN1236\Sketches_SKxx\CAD\SK10 Base Constraints Plan.dwg

B	15-05-20	ISSUED FOR INFORMATION
A	09-05-20	ISSUED FOR DISCUSSION
REF	DATE	DESCRIPTION

CLIENT APPROVAL	
NAME	DIRECTORATE
SIGNATURE	DATE

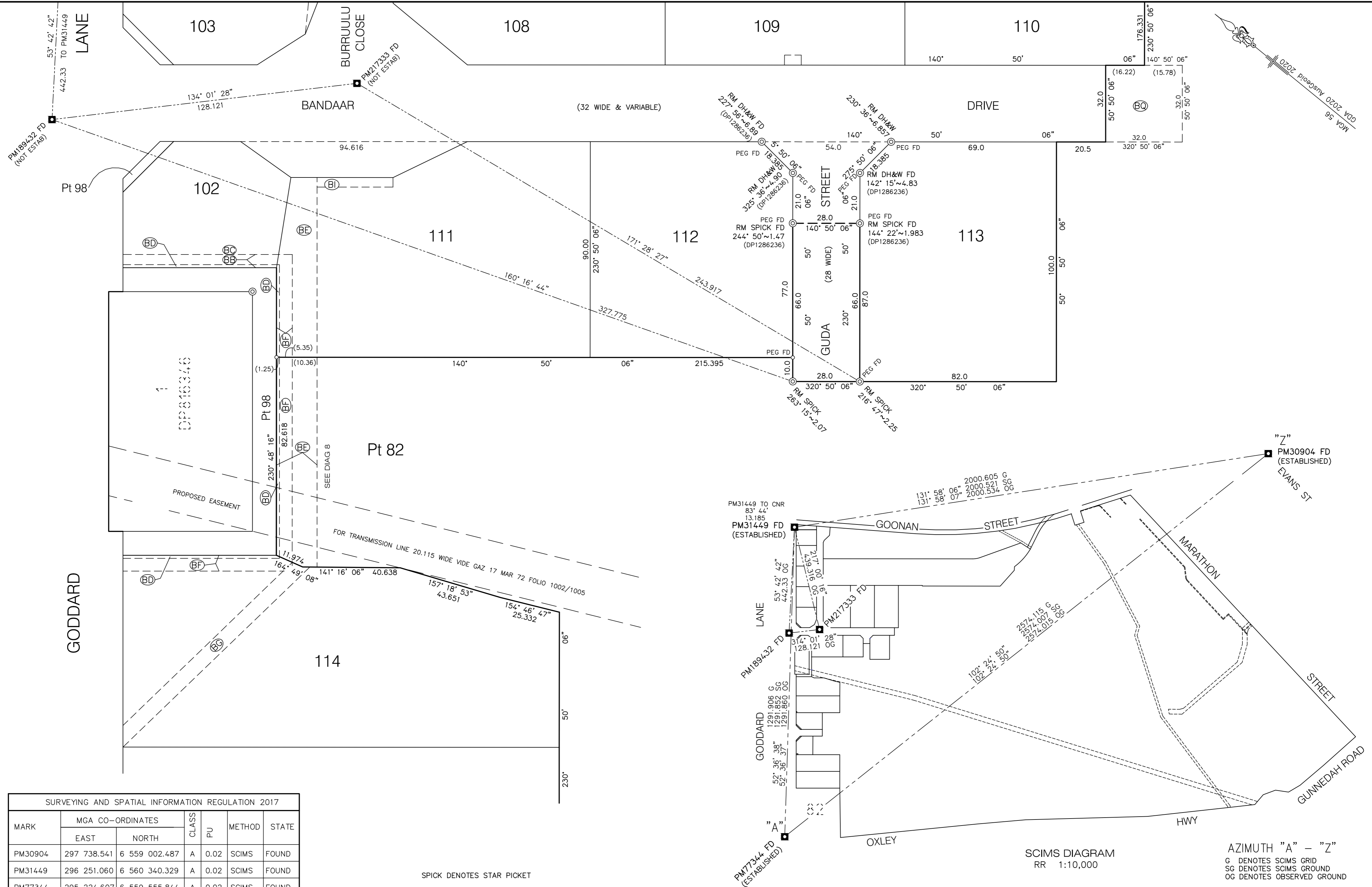
CHECKED: _____	DATE: _____
DESIGNER	
CHECKED: _____	DATE: _____
SENIOR DESIGN & PROJECT ENGINEER	
CHECKED: _____	DATE: _____
CLIENT REPRESENTATIVE	

SURVEYED: MH	CLIENT REP: GMcK	DESIGNED: BL	JOB NO: DSJN1236
--------------	------------------	--------------	------------------

DATUM	SCALES AS SHOWN
A.H.D.	DRAWING NO.
A1	1236-SK10



9.3 Appendix C – Guda Street Extension Draft Plan To Be Registered

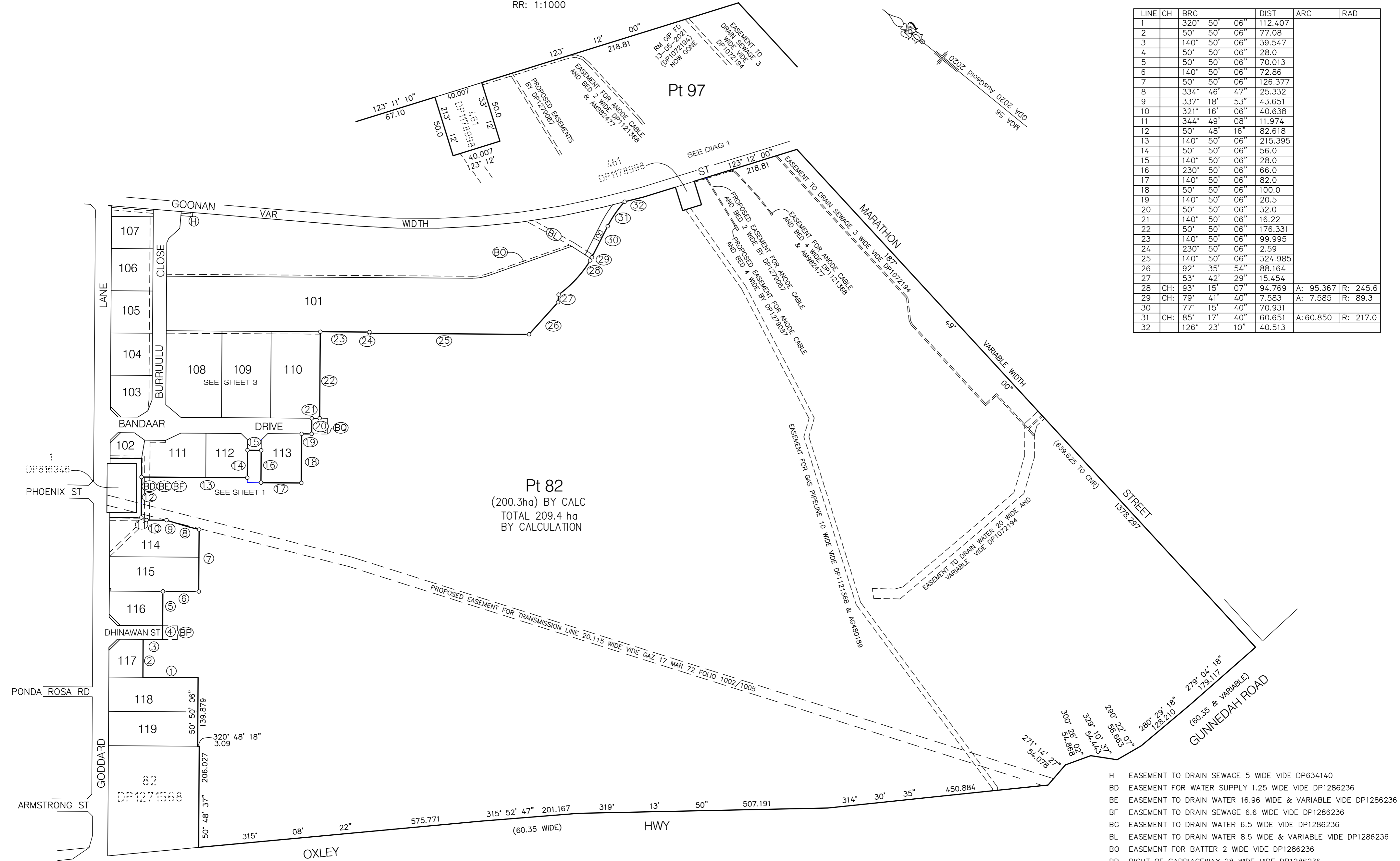


SURVEYING AND SPATIAL INFORMATION REGULATION 2017						
MARK	MGA CO-ORDINATES		CLASS	PU	METHOD	STATE
	EAST	NORTH				
PM30904	297 738.541	6 559 002.487	A	0.02	SCIMS	FOUND
PM31449	296 251.060	6 560 340.329	A	0.02	SCIMS	FOUND
PM77344	295 224.607	6 559 555.844	A	0.02	SCIMS	FOUND
PM189432	295 894.504	6 560 078.524	U		TRAV	FOUND
PM217333	295 986.633	6 559 989.480	U		TRAV	FOUND
DATE OF SCIMS CO-ORDINATES: 29-09-2023			MGA DATUM:GDA2020			
COMBINED SCALE FACTOR: 1.000 042			MGA ZONE:56			

SPICK DENOTES STAR PICKET

Surveyor : Peter John Baxter Date of Survey : 28th September 2023 Surveyor's Ref : 1425	PLAN OF LAND TO BE ACQUIRED FOR THE PURPOSES OF THE ROADS ACT, 1993	LGA: Tamworth Regional Locality : Westdale Subdivision No: Lengths are in metres. Reduction Ratio 1:1000	Registered	ppn DP1299265
---	--	---	------------	---------------

DIAGRAM 1
RR: 1:1000



Surveyor : Peter John Baxter
Date of Survey : 28th September 2023
Surveyor's Ref : 1425

PLAN OF LAND TO BE ACQUIRED FOR THE PURPOSES OF THE
ROADS ACT, 1993

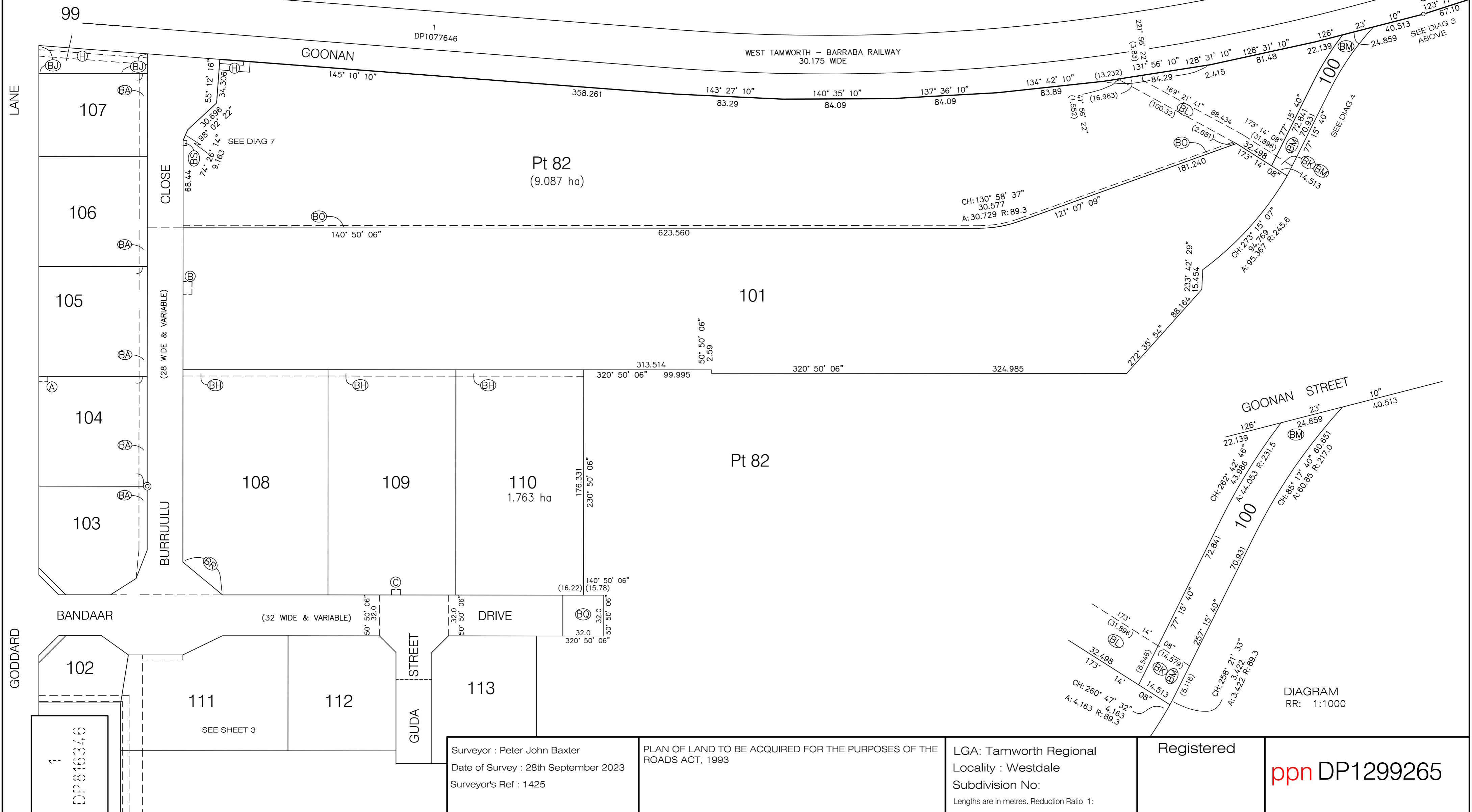
LGA: Tamworth Regional
Locality : Westdale
Subdivision No:
Lengths are in metres. Reduction Ratio 1:5000

Registered

ppn DP1299265

- BURRUULU CLOSE

DIAGRAM 7
RR: 1:400





9.4 Appendix D – Stage 3 Subdivision Draft Plan To Be Registered (Residual Lot 300)

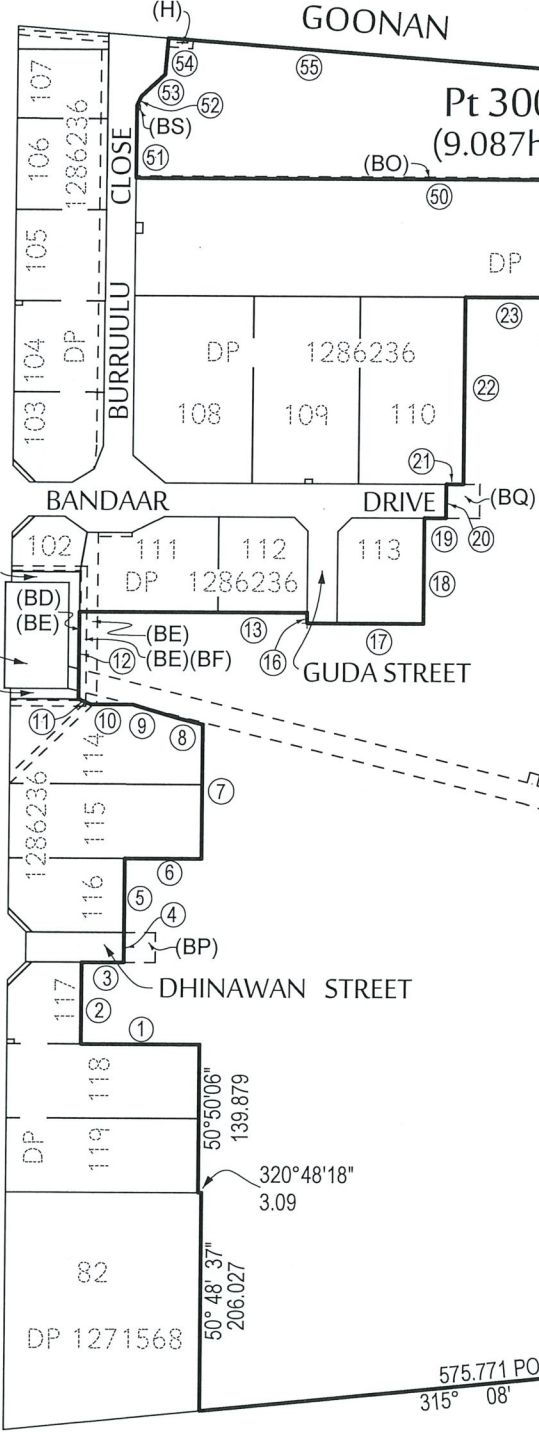
SCHEDULE OF SHORT LINES		
1	320°50'06"	112.407
2	50°50'06"	77.08
3	140°50'06"	39.547
4	50°50'06"	28
5	50°50'06"	70.013
6	140°50'06"	72.86
7	50°50'06"	126.377
8	334°46'47"	25.332
9	337°18'53"	43.651
10	321°16'06"	40.638
11	344°49'08"	11.974
12	50°48'16"	82.618
13	140°50'06"	215.395
16	230°50'06"	10.0
17	140°50'06"	110
18	50°50'06"	100
19	140°50'06"	20.5
20	50°50'06"	32
21	140°50'06"	16.22
22	50°50'06"	176.331
23	140°50'06"	99.995
24	230°50'06"	2.59
25	140°50'06"	324.985
26	92°35'54"	88.164
27	53°42'29"	15.454
30	77°15'40"	70.931
32	126°23'10"	40.513
33	123°11'10"	67.10
34	213°12'	50
35	123°12'	40.007
36	33°12'	50
37	123°12'00"	218.81
38	143°27'10"	83.29
39	140°35'10"	84.09
40	137°36'10"	84.09
41	134°42'10"	83.89
42	131°56'10"	84.29
43	128°31'10"	83.895
44	126°23'10"	22.139
46	257°15'40"	72.841
47	353°14'08"	32.498
48	301°07'09"	181.24
50	320°50'06"	623.56
51	50°50'06"	68.44
52	74°26'14"	9.163
53	98°02'22"	30.696
54	55°12'16"	34.306
55	145°10'10"	358.261
56	306°23'10"	24.859

Lines 1-12, 18-55 have been compiled from DP 1286236 [PO]
Lines 13, 16 & 17 have been compiled from DP 1299265

SCHEDULE OF CURVED BOUNDARIES				
Number	Bearing	Distance	Arc	Radius
28	93°15'07"	94.769	95.367	245.6
29	79°41'40"	7.583	7.585	89.3
31	85°17'40"	60.651	60.85	217
45	262°42'46"	43.986	44.053	231.5
49	310°58'37"	30.577	30.729	89.3

COORDINATE SCHEDULE						
MARK	M.G.A. CO-ORDINATES		CLASS	PU	METHOD	STATE
	EASTING	NORTHING				
PM 30524	297 255.924	6 559 308.570	C	NA	SCIMS	Found
PM 30525	297 073.008	6 557 974.923	C	NA	SCIMS	Found
PM 77344	295 224.607	6 559 555.844	A	0.02	SCIMS	Found
PM 218036	296 704.825	6 558 208.759	NA	NA	BY SURVEY	Placed
Date of SCIMS Coordinates: 20.9.2023			MGA Zone: 56		MGA Datum: GDA2020	
Combined Scale Factor: 1.000041						

LANE
BURRUULU CLOSE
GODDARD



300
(193.0ha)
202.1ha

DRAFT

H	EASEMENT TO DRAIN SEWAGE 5 WIDE	DP 634140
J	EASEMENT FOR TRANSMISSION LINE 20.115 WIDE	AH256089
	GOV GAZ 17.3.1972 FoL 1002-1005	
K	EASEMENT FOR PIPELINE VARIABLE WIDTH...AG480189	DP 1121368
L	EASEMENT FOR ANODE CABLE AND BED 2 & 4 WIDE..AM982477	DP 1121368
M	EASEMENT TO DRAIN SEWAGE 3 WIDE	DP 1072194
N	EASEMENT TO DRAIN WATER 20 WIDE & VARIABLE WIDTH	DP 1072194
BD	EASEMENT FOR WATER SUPPLY 1.25 WIDE.	DP 1286236
BE	EASEMENT TO DRAIN WATER 16.96 WIDE & VARIABLE	DP 1286236
BF	EASEMENT TO DRAIN SEWAGE 6.6 WIDE.	DP 1286236
BK	EASEMENT TO DRAIN WATER 8.5 WIDE	DP 1286286
BL	EASEMENT TO DRAIN WATER 8.5 WIDE & VARIABLE	DP 1286236
BO	EASEMENT FOR BATTER 2 WIDE	DP 1286236
BP	RIGHT OF CARRIAGEWAY 28 WIDE	DP 1286236
BQ	RIGHT OF CARRIAGEWAY 32 WIDE	DP 1286236
BS	PROPOSED EASEMENT FOR MULTIPURPOSE ELECTRICAL INSTALLATION 3 WIDE	
AA	PROPOSED EASEMENT FOR ANODE CABLE & BED 2 WIDE	DP 1279087
AB	PROPOSED EASEMENT FOR ANODE CABLE & BED 4 WIDE	DP 1279087

PM 30524	PM 30525	187°48'35"	1346.089	By Survey
		187°48'35"	1346.077	MGA Ground
PM 30525	PM 77344	310°32'24"	2432.15	By Survey
		310°32'24"	2432.162	MGA Ground
PM 77344	PM 30524	96°56'26"	2046.215	By Survey
		96°56'26"	2046.228	MGA Ground
PM 30525	PM 218036	302°25'10"	436.145	
PM 218036	PM 30524	26°36'53"	1230.125	

Datum Line:
PM 30525 - PM 30524
SCIMS

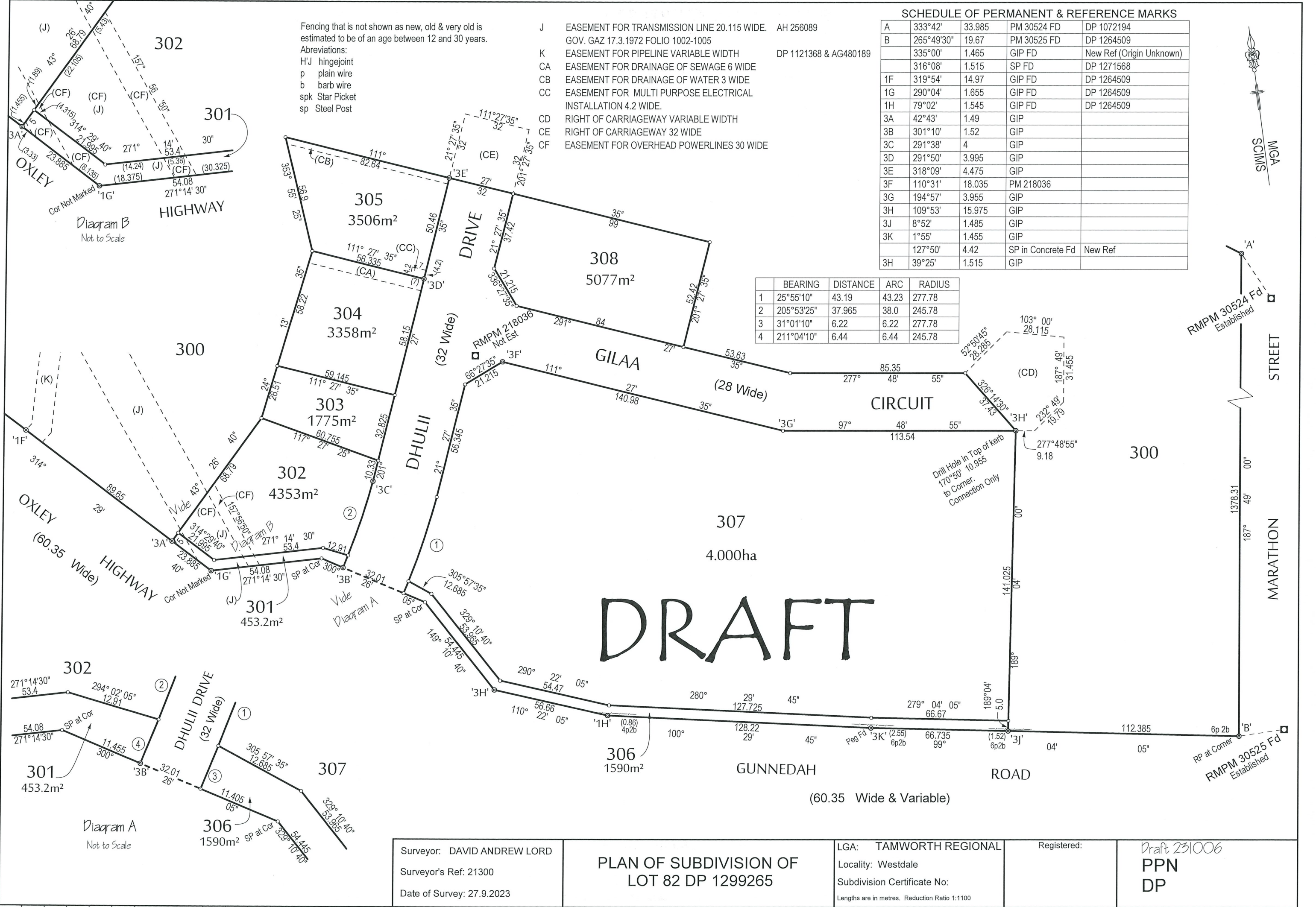
Surveyor: DAVID ANDREW LORD
Surveyor's Ref: 21300
Date of Survey: 27.9.2023

PLAN OF SUBDIVISION OF
LOT 82 DP 1299265

LGA: TAMWORTH REGIONAL
Locality: Westdale
Subdivision Certificate No:
Lengths are in metres. Reduction Ratio 1:5000

Registered:

Draft 231009
PPN
DP





9.5 Appendix E – Stage 4 Onwards Subdivision Draft Plan (Subject of This DA)

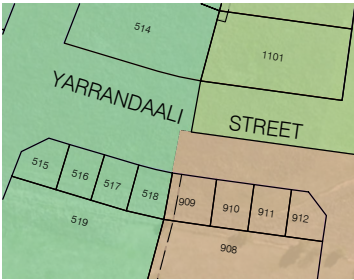


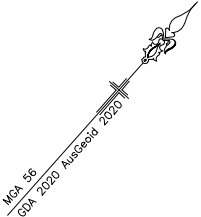
DIAGRAM
Red Ratio: 1:2000 @A1 1:4000 @ A3
Plot size issued : A3

ELECTRICAL EASEMENTS

- 1. EASEMENTS FOR ELECTRICAL INFRASTRUCTURE (SUBSTATIONS AND SWITCHING STATIONS) WILL BE DETERMINED ON A STAGE BY STAGE BASIS FOLLOWING DETAILED ELECTRICAL DESIGN.
- 2. THESE EASEMENTS WILL BE SHOWN ON FUTURE PLANS ISSUED FOR CONTRACT PURPOSES.

IMPORTANT NOTES AND CAUTIONS

- 1. THESE NOTES FORM AN INTEGRAL PART OF THIS PLAN
- 2. THIS PLAN HAS BEEN PREPARED FOR THE EXCLUSIVE USE TAMWORTH REGIONAL COUNCIL FOR THE MAKING OF A DEVELOPMENT APPLICATION.
- 3. NO USE OF THIS PLAN IS PERMITTED UNLESS AUTHORIZED IN WRITING BY BAXTER GEO CONSULTING.
- 4. BAXTER GEO CONSULTING AND ITS EMPLOYEES ARE NOT RESPONSIBLE FOR THE CONSEQUENCES OF ANY USE OF THIS PLAN BY ANY THIRD PARTY.
- 5. THIS PLAN HAS BEEN ISSUED IN PDF FORMAT AND THE SCALING OF ANY PRINTED COPY MAY BE AFFECTED BY THE PRINT SETTINGS. TO PRINT AT SCALE SET PAPER SIZE TO A3 AND SCALING TO NONE.
- 6. SOME SHEETS OF THIS PLAN SET HAVE BEEN PREPARED IN COLOUR AND PRINTING IN GREYSKALE MAY DIMINISH INTERPRETATION OF THE INFORMATION PRESENTED.
- 7. THESE NOTES APPLY TO EACH AND EVERY SHEET IN THE PLAN SET.
- 8. ADDITIONAL NOTES MAY APPLY TO INDIVIDUAL SHEETS.
- 9. ALL DISTANCES AND AREAS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FINAL SURVEY AND REGISTRATION OF THE DEPOSITED PLAN.



SCHEDULE OF PLANS		
SHEET	DESCRIPTION	
1	OVERALL DEVELOPMENT	STAGING PLAN
2	OVERALL DEVELOPMENT	EASEMENTS TO BE EXTINGUISHED
3	STAGE 04	FUTURE DEVELOPMENT LOT
4	STAGE 05	
5	STAGE 06	
6	STAGE 07	
7	STAGE 08	
8	STAGE 09	
9	STAGE 10	
10	STAGE 11	
11	STAGE 12	
12	STAGE 13	
13	GENERAL STAGING	OVERALL STREET NUMBERING

BAXTER GEO CONSULTING

ACN 103 579 335 ABN 63 323 316 716
14 Byrnes Ave, Tamworth, 2340 P.O. Box 1402, Tamworth, 2340
Telephone: 02-6766 6499 Facsimile: 02-6766 6599
email: peter@baxtergeo.com.au

SURVEYING - DEVELOPMENT PLANNING & CO-ORDINATION

Baxter Geo Consulting All Rights Reserved 2023.
Copyright in the whole and every part of this drawing belongs to Baxter Geo Consulting and may not be used, sold, transferred, copied or reproduced in whole or in part in any manner or form on any media to any person other than by agreement with Baxter Geo Consulting.
This document is produced by Baxter Geo Consulting solely for the benefit and use by the client in accordance with the terms of the client agreement. Baxter Geo Consulting does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by the third party on the content of the document.

DESIGN: TRC
DRAWN: PJB
CHECKED: PJB
SURVEY: -

CAD FILE: Z:\1410 TGGP Planning\Cad\23\1410-231107 TGGP DA Plans 56-20 Rv C.dwg

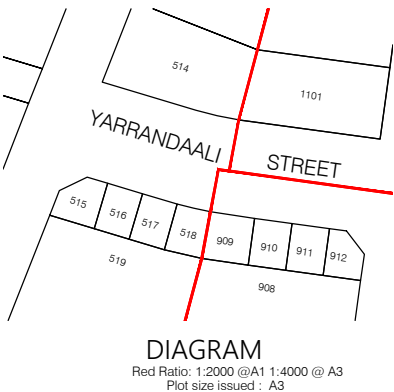
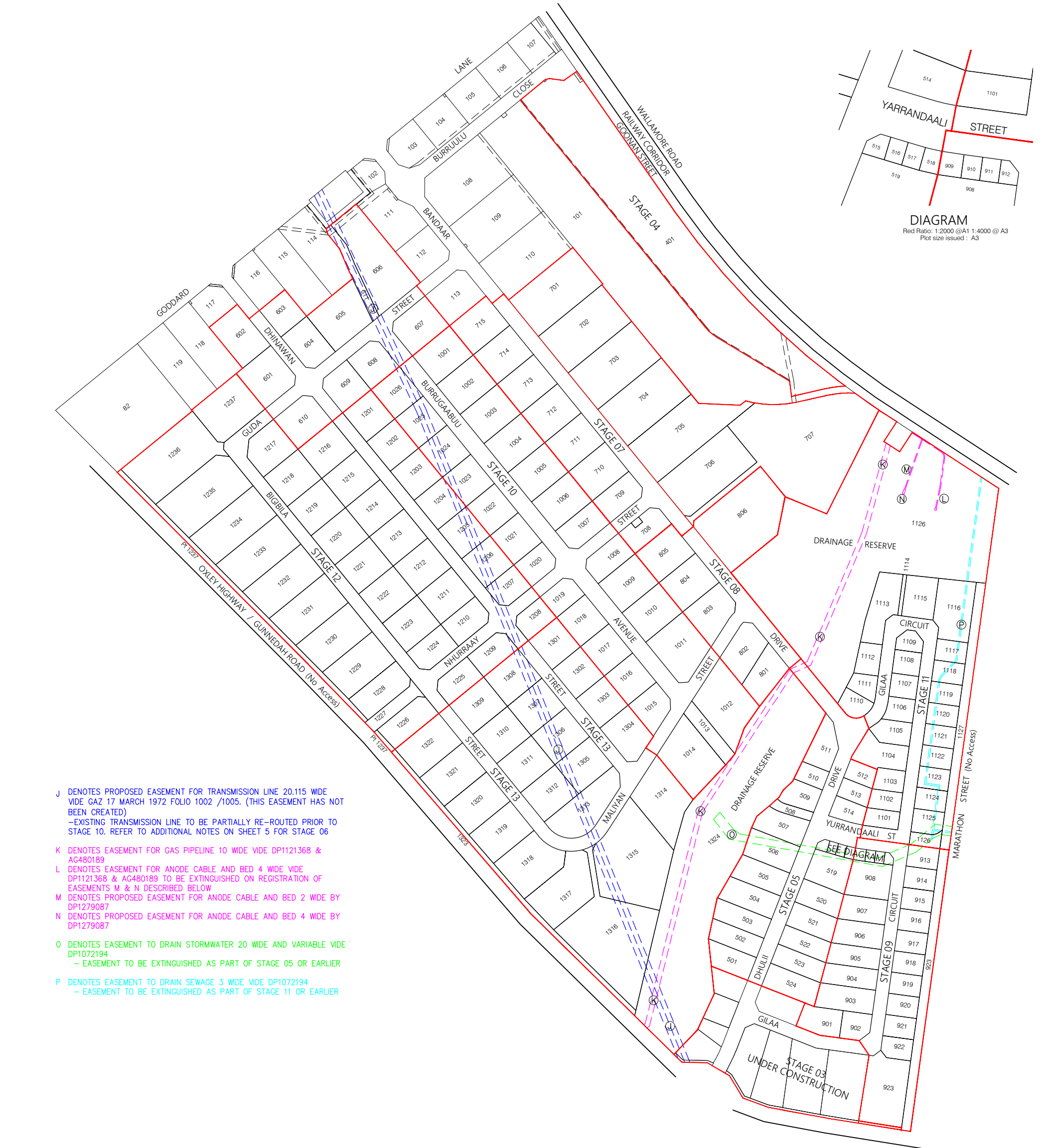
DATUM: AHD
Red Ratio: 1:4000 @A1 1:8000 @ A3
Plot size issued : A3

CLIENT: TAMWORTH REGIONAL COUNCIL

TAMWORTH GLOBAL GATEWAY PARK
OVERALL DEVELOPMENT
STAGING PLAN

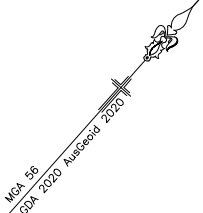
DATE: 7th Nov 2023
DRAWING No.:
1410-230925

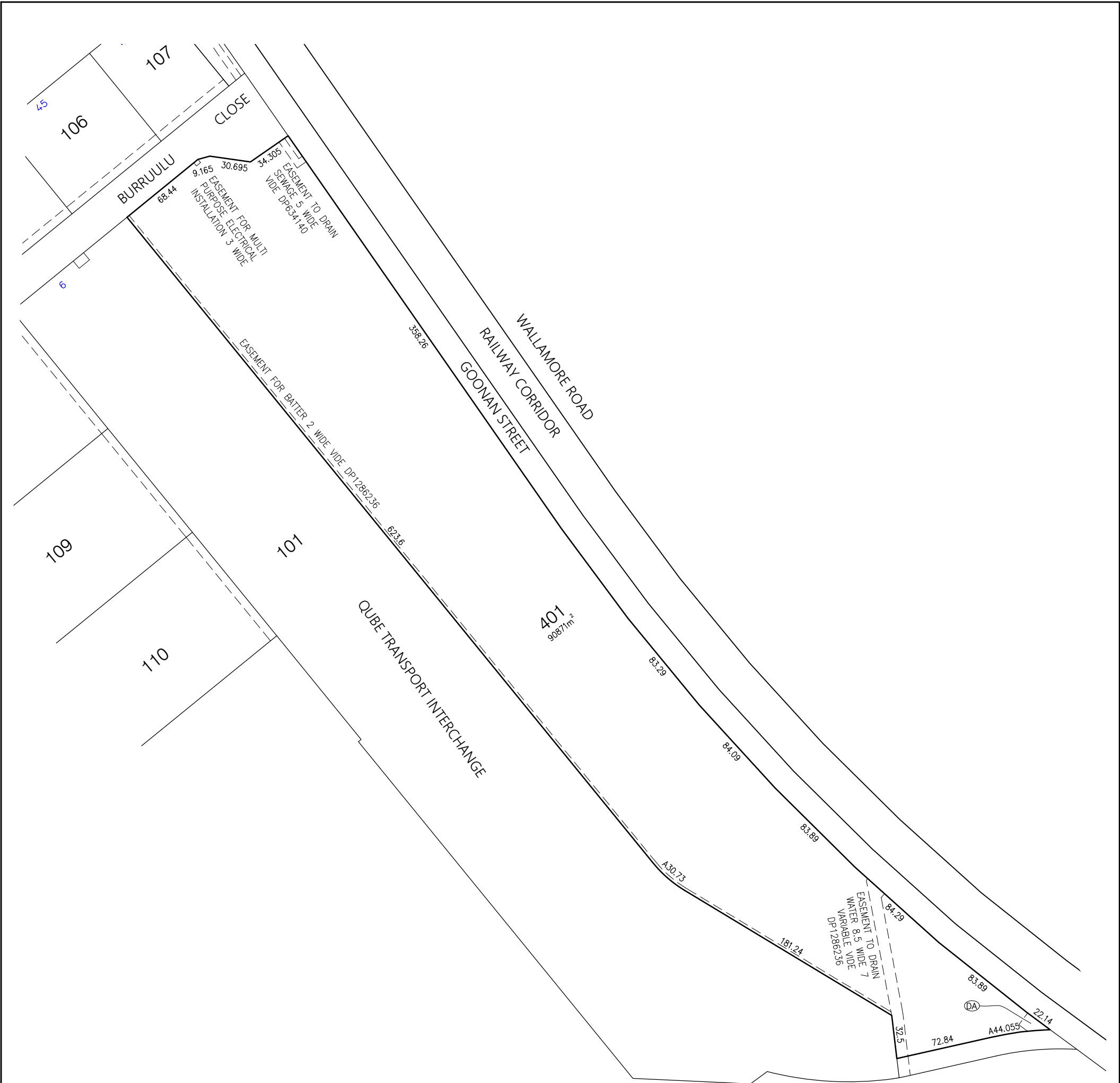
Rv:
C



- J DENOTES PROPOSED EASEMENT FOR TRANSMISSION LINE 20.115 WIDE VIDE GAZ 17 MARCH 1972 FOLIO 1002 /1005. (THIS EASEMENT HAS NOT BEEN CREATED)
-EXISTING TRANSMISSION LINE TO BE PARTIALLY RE-ROUTED PRIOR TO STAGE 10. REFER TO ADDITIONAL NOTES ON SHEET 5 FOR STAGE 06
- K DENOTES EASEMENT FOR GAS PIPELINE 10 WIDE VIDE DP1121368 & AG480189
- L DENOTES EASEMENT FOR ANODE CABLE AND BED 4 WIDE VIDE DP1121368 & AG480189 TO BE EXTINGUISHED ON REGISTRATION OF EASEMENTS M & N DESCRIBED BELOW
- M DENOTES PROPOSED EASEMENT FOR ANODE CABLE AND BED 2 WIDE BY DP1279087
- N DENOTES PROPOSED EASEMENT FOR ANODE CABLE AND BED 4 WIDE BY DP1279087
- O DENOTES EASEMENT TO DRAIN STORMWATER 20 WIDE AND VARIABLE VIDE DP1072194
- EASEMENT TO BE EXTINGUISHED AS PART OF STAGE 05 OR EARLIER
- P DENOTES EASEMENT TO DRAIN SEWAGE 3 WIDE VIDE DP1072194
- EASEMENT TO BE EXTINGUISHED AS PART OF STAGE 11 OR EARLIER

Red Ratio: 1:4000 @A1 1:8000 @ A3 Plot size issued : A3		
CAD FILE: Z:\1410 TGGP Planning\Cad 23\1410-231107 TGGP DA Plans 56-20 Rv C.dwg		
CLIENT: TAMWORTH REGIONAL COUNCIL		
TAMWORTH GLOBAL GATEWAY PARK		
OVERALL DEVELOPMENT		
EASEMENTS TO BE EXTINGUISHED		
DATE: 7th Nov 2023	Rv	
DRAWING No.: 1410-230925		C

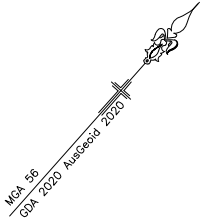




- IMPORTANT NOTES AND CAUTIONS**
- 1. STAGE 04 IS A DEVELOPMENT LOT AND WILL BE EXCISED IN ACCORDANCE WITH FUTURE DEVELOPMENT PROPOSALS.
 - 2. LOT 401 WILL BE REQUIRED TO BE CREATED PRIOR TO LODGEMENT OF ANY DEVELOPMENT APPLICATION ON THE PROPOSED LOT.
 - 3. THE EXCISION OF STAGE 04 MAY BE COMBINED WITH ANY OTHER STAGE IN THE DEVELOPMENT PROCESS.

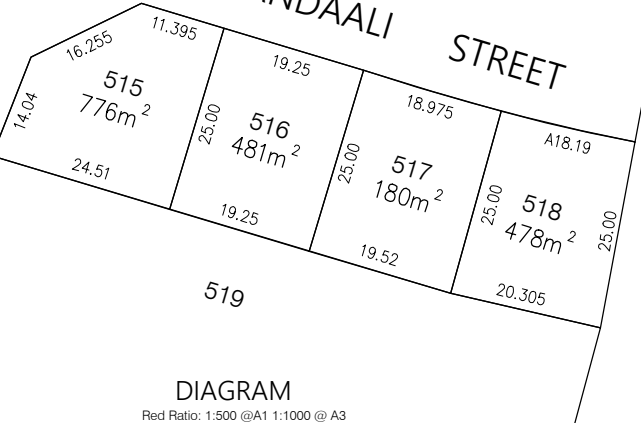
DA EASEMENT TO DRAIN SEWAGE 11 WIDE & VARIABLE

Red Ratio: 1:1500 @A1 1:3000 @ A3 Plot size issued : A3		
CAD FILE: Z:\1410 TGGP Planning\Info\Out\231107 Rv C Update\1410-231107 TGGP DA Plans 56-20 Rv C.dwg		BAXTER GEO CONSULTING
CLIENT: TAMWORTH REGIONAL COUNCIL		
TAMWORTH GLOBAL GATEWAY PARK		DATE: 7th Nov 2023
STAGE 04 FUTURE DEVELOPMENT LOT		Rv.
DRAWING No.: 1410-230925		C



DHULII DRIVE

YARRANDAALI STREET



DIAGRAM

Red Ratio: 1:500 @A1 1:1000 @ A3
Plot size issued : A3

EASEMENT FOR GAS PIPELINE
TO WIDE WIDE DRIVE UP 171/21388
& AC480/189

NEW ROAD CONSTRUCTION STAGE 5

FUTURE STAGE 11

FUTURE DRAINAGE RESERVE (STAGE 13)

DRIVE

FUTURE STAGE 11

YARRANDAALI STREET
(50.5 WIDE)
see diagram

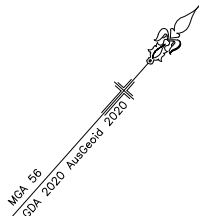
DHULII

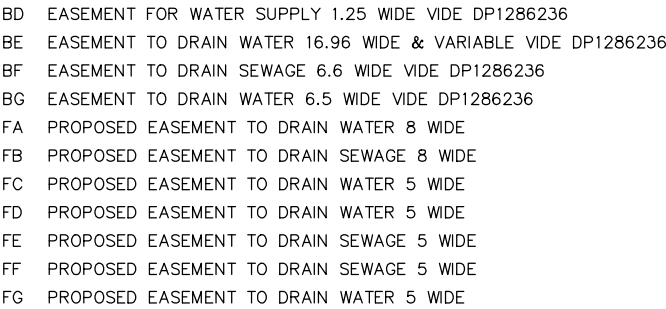
STAGE 3 UNDER CONSTRUCTION

FUTURE STAGE 09

Red Ratio: 1:1000 @A1 1:2000 @ A3
Plot size issued : A3

CAD FILE: Z:\1410 TGGP Planning\Cad 23\1410-231107 TGGP DA Plans 56-20 Rv C.dwg		BAXTER GEO CONSULTING	
CLIENT: TAMWORTH REGIONAL COUNCIL			
TAMWORTH GLOBAL GATEWAY PARK		DATE: 7th Nov 2023	Rv.
STAGE 05		DRAWING No.: 1410-230925	C





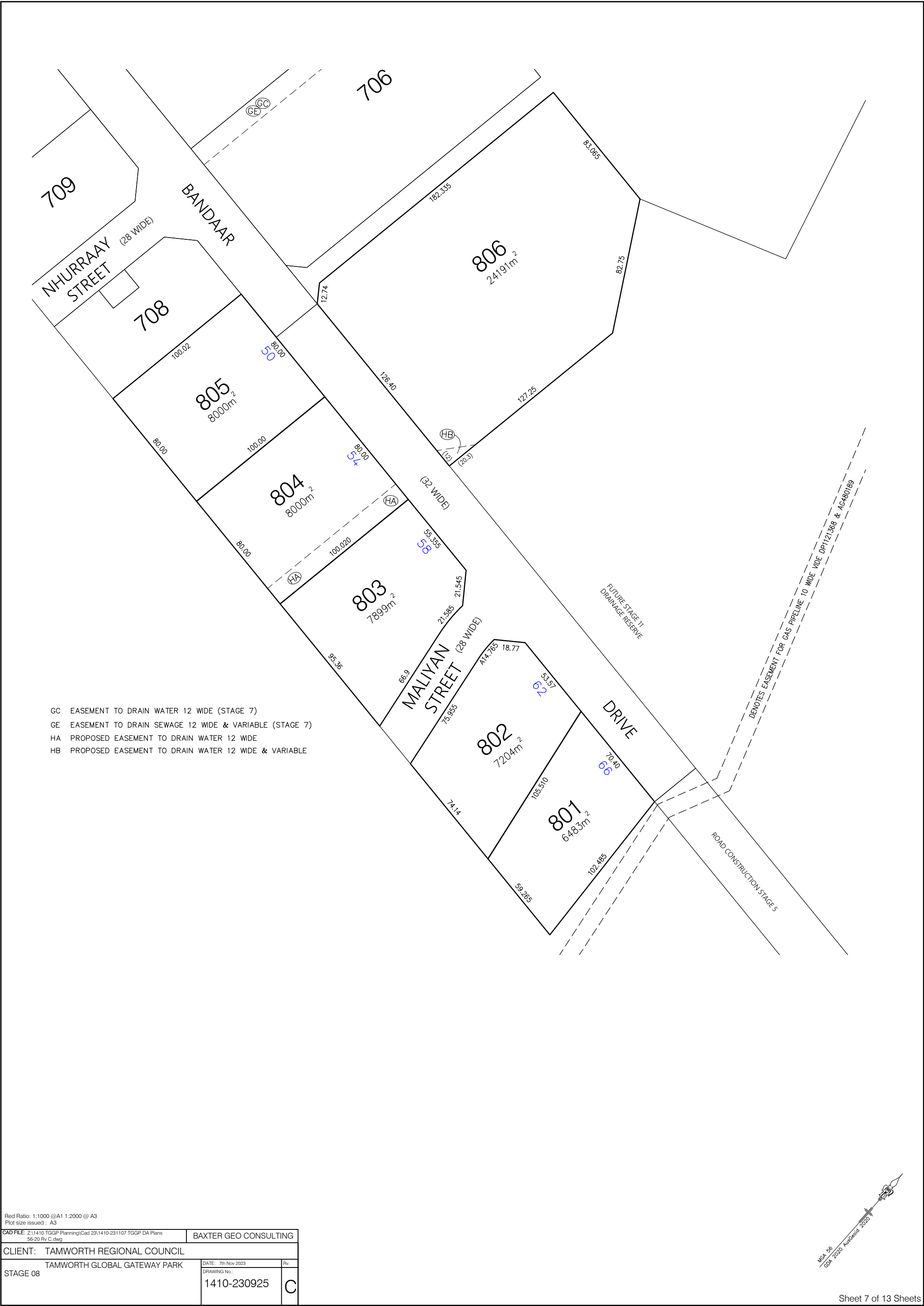
NEW EASEMENT FOR TRANSMISSION LINE TO BE CREATED IN STAGE 6 OVER LOTS 606 7 611



- BH EASEMENT TO DRAIN WATER 6 WIDE VIDE DP1286236
- BK EASEMENT TO DRAIN WATER 8.5 WIDE VIDE DP1286236
- BL EASEMENT TO DRAIN WATER 8.5 WIDE & VARIABLE VIDE DP1286236
- BM RIGHT OF CARRIAGEWAY RAIL 14.5 WIDE WHOLE OF LOT VIDE DP1286236
- DA EASEMENT TO DRAIN SEWAGE 11 WIDE & VARIABLE (STAGE 4)
- GA PROPOSED EASEMENT TO DRAIN WATER 5 WIDE
- GB PROPOSED EASEMENT TO DRAIN WATER 5 WIDE & VARIABLE
- GC PROPOSED EASEMENT TO DRAIN WATER 12 WIDE
- GD PROPOSED EASEMENT TO DRAIN WATER 12 WIDE & VARIABLE
- GE PROPOSED EASEMENT TO DRAIN SEWAGE 12 WIDE & VARIABLE

DIAGRAM
Red Ratio: 1:500 @A1 1:1000 @ A3
Plot size issued : A3

Red Ratio: 1:1250 @A1 1:2500 @ A3 Plot size issued : A3		
CAD FILE: Z:\1410 TGGP Planning\Info\Out\231107 Rv C Update\1410-231107 TGGP DA Plans 56-20 Rv C.dwg		BAXTER GEO CONSULTING
CLIENT: TAMWORTH REGIONAL COUNCIL		
TAMWORTH GLOBAL GATEWAY PARK		DATE: 7th Nov 2023
STAGE 07	DRAWING No.:	Rv.
	1410-230925	C



- GC EASEMENT TO DRAIN WATER 12 WIDE (STAGE 7)
- GE EASEMENT TO DRAIN SEWAGE 12 WIDE & VARIABLE (STAGE 7)
- HA PROPOSED EASEMENT TO DRAIN WATER 12 WIDE
- HB PROPOSED EASEMENT TO DRAIN WATER 12 WIDE & VARIABLE

Red Ratio: 1:1000 @A1 1:2000 @ A3 Plot size issued : A3	
CAD FILE: Z:\1410 TGGP Planning\Info\Out\231107 Rv C Update\1410-231107 TGGP DA Plans 56-20 Rv C.dwg	BAXTER GEO CONSULTING
CLIENT: TAMWORTH REGIONAL COUNCIL	
TAMWORTH GLOBAL GATEWAY PARK	DATE: 7th Nov 2023 Rv.
STAGE 08	DRAWING No.: 1410-230925 C

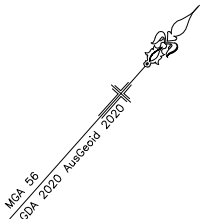


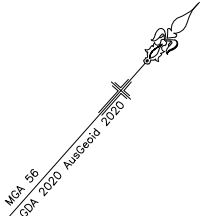


DIAGRAM
Red Ratio: 1:500 @A1 1:1000 @ A3
Plot size issued : A3

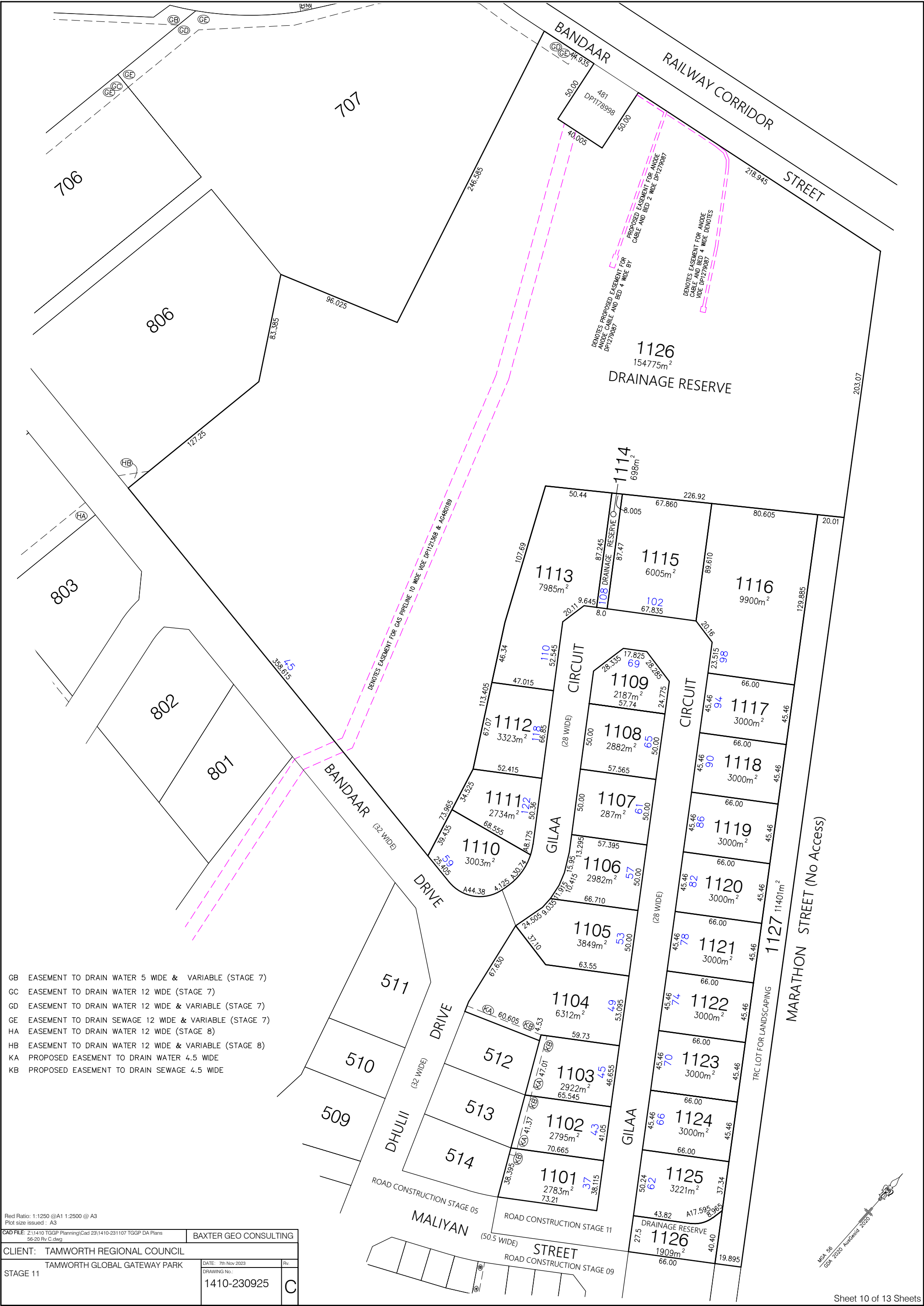
- IA PROPOSED EASEMENT TO DRAIN WATER 5 WIDE
IB PROPOSED EASEMENT TO DRAIN SEWAGE 5 WIDE

Red Ratio: 1:1000 @A1 1:2000 @ A3
Plot size issued : A3

CAD FILE: Z:\1410 TGGP Planning\Cad 23\1410-231107 TGGP DA Plans 56-20 Rv C.dwg		BAXTER GEO CONSULTING	
CLIENT: TAMWORTH REGIONAL COUNCIL			
TAMWORTH GLOBAL GATEWAY PARK		DATE: 7th Nov 2023	Rv.
STAGE 09		DRAWING No.: 1410-230925	C

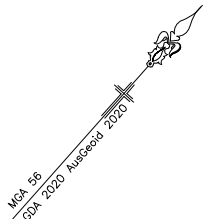






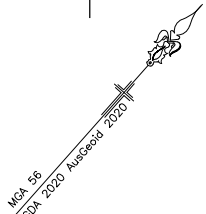
GB EASEMENT TO DRAIN WATER 5 WIDE & VARIABLE (STAGE 7)
GC EASEMENT TO DRAIN WATER 12 WIDE (STAGE 7)
GD EASEMENT TO DRAIN WATER 12 WIDE & VARIABLE (STAGE 7)
GE EASEMENT TO DRAIN SEWAGE 12 WIDE & VARIABLE (STAGE 7)
HA EASEMENT TO DRAIN WATER 12 WIDE (STAGE 8)
HB EASEMENT TO DRAIN WATER 12 WIDE & VARIABLE (STAGE 8)
KA PROPOSED EASEMENT TO DRAIN WATER 4.5 WIDE
KB PROPOSED EASEMENT TO DRAIN SEWAGE 4.5 WIDE

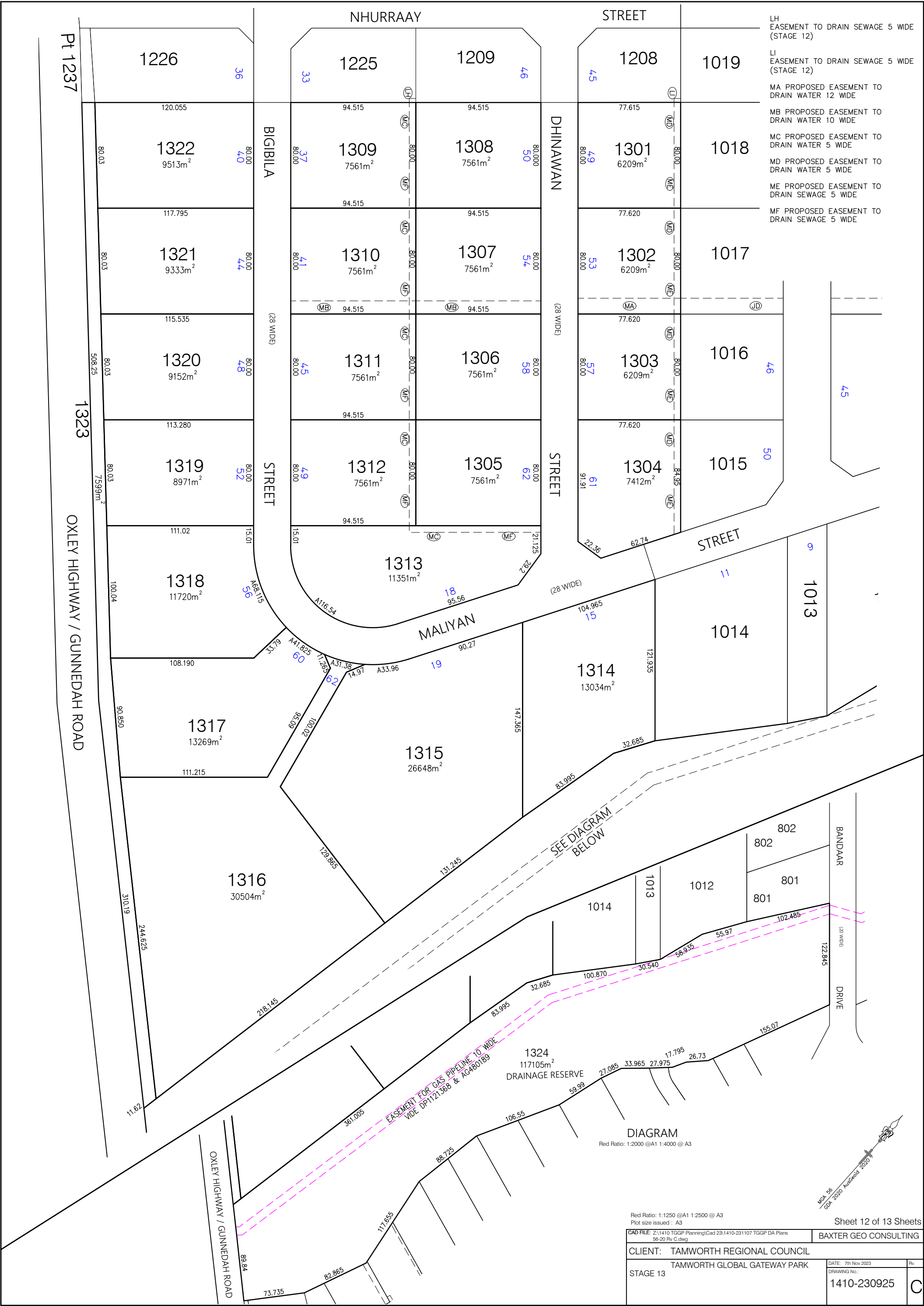
Red Ratio: 1:1250 @A1 1:2500 @ A3 Plot size issued : A3		
CAD FILE: Z:\1410 TGGP Planning\Cad 23\1410-231107 TGGP DA Plans 56-20 Rv C.dwg		BAXTER GEO CONSULTING
CLIENT: TAMWORTH REGIONAL COUNCIL		
TAMWORTH GLOBAL GATEWAY PARK		DATE: 7th Nov 2023
STAGE 11		Rv.
DRAWING No.: 1410-230925		C





Red Ratio: 1:1250 @A1 1:3000 @ A3 Plot size issued : A3		
CAD FILE: Z:\1410 TGGP Planning\Info\Out\231107 Rv C Update\1410-231107 TGGP DA Plan Stages 4-13 RvC.dwg		BAXTER GEO CONSULTING
CLIENT: TAMWORTH REGIONAL COUNCIL		
TAMWORTH GLOBAL GATEWAY PARK		DATE: 7th Nov 2023
STAGE 12		Rv.
DRAWING No.:		
1410-230925		
		C





- LH EASEMENT TO DRAIN SEWAGE 5 WIDE (STAGE 12)
- LI EASEMENT TO DRAIN SEWAGE 5 WIDE (STAGE 12)
- MA PROPOSED EASEMENT TO DRAIN WATER 12 WIDE
- MB PROPOSED EASEMENT TO DRAIN WATER 10 WIDE
- MC PROPOSED EASEMENT TO DRAIN WATER 5 WIDE
- MD PROPOSED EASEMENT TO DRAIN WATER 5 WIDE
- ME PROPOSED EASEMENT TO DRAIN SEWAGE 5 WIDE
- MF PROPOSED EASEMENT TO DRAIN SEWAGE 5 WIDE

Red Ratio: 1:1250 @A1 1:2500 @ A3
Plot size issued : A3

CAD FILE: Z:\1410 TGGP Planning\Info\Out\231 107 Rv C Update\1410-231107 TGGP DA Plan Stages 4-13 RvC.dwg
56-20 Rv C.dwg

CLIENT: TAMWORTH REGIONAL COUNCIL

STAGE 13 TAMWORTH GLOBAL GATEWAY PARK

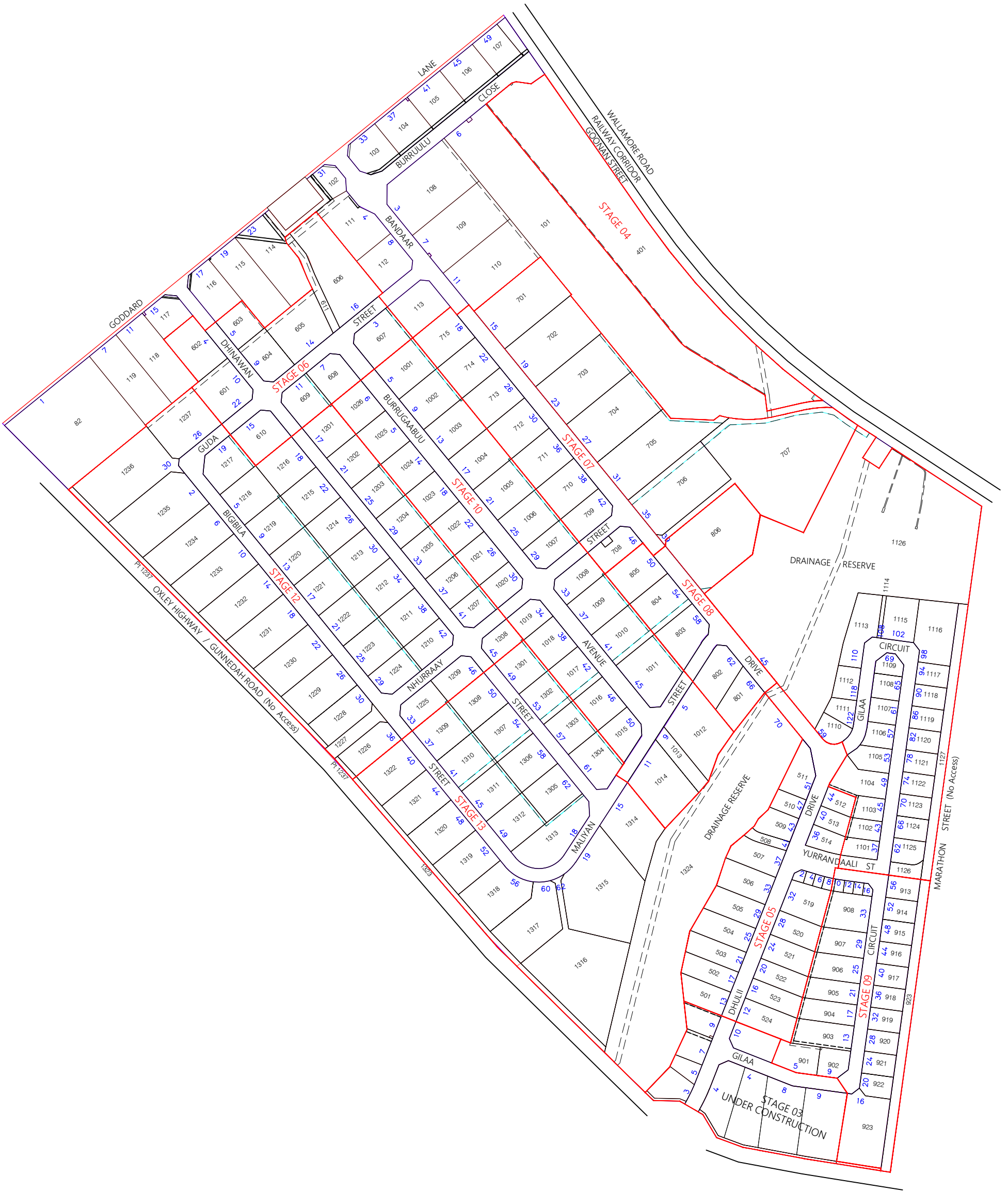
Sheet 12 of 13 Sheets

BAXTER GEO CONSULTING

DATE: 7th Nov 2023

DRAWING No.: 1410-230925

Rv: C



Red Ratio: 1:4000 @A1 1:8000 @ A3
Plot size issued : A3

CAD FILE: Z:\1410 TGGP Planning\Cad 23\1410-231107 TGGP DA Plans 56-20
Rv C.dwg

BAXTER GEO CONSULTING

CLIENT: TAMWORTH REGIONAL COUNCIL

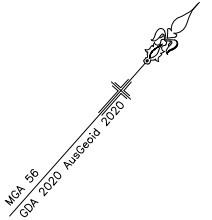
TAMWORTH GLOBAL GATEWAY PARK
GENERAL STAGING AND
OVERALL STREET NUMBERING

DATE: 7th Nov 2023

DRAWING No.:

1410-230925

C





9.6 Appendix F – Stage 4 Sewer Servicing



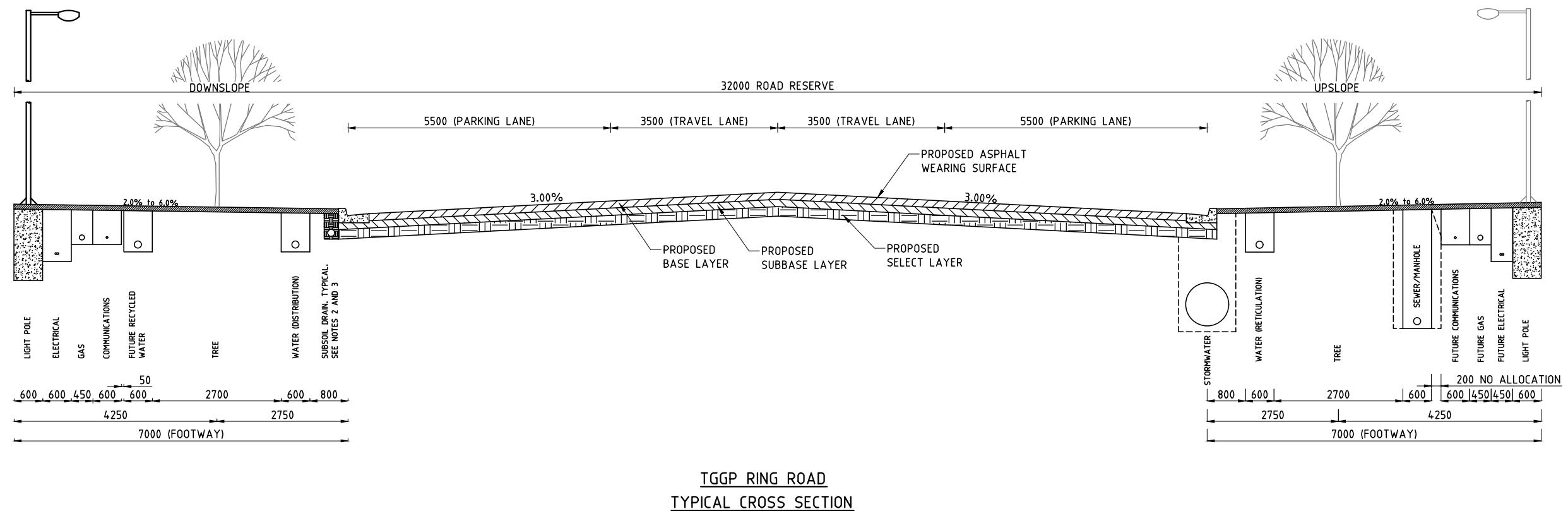
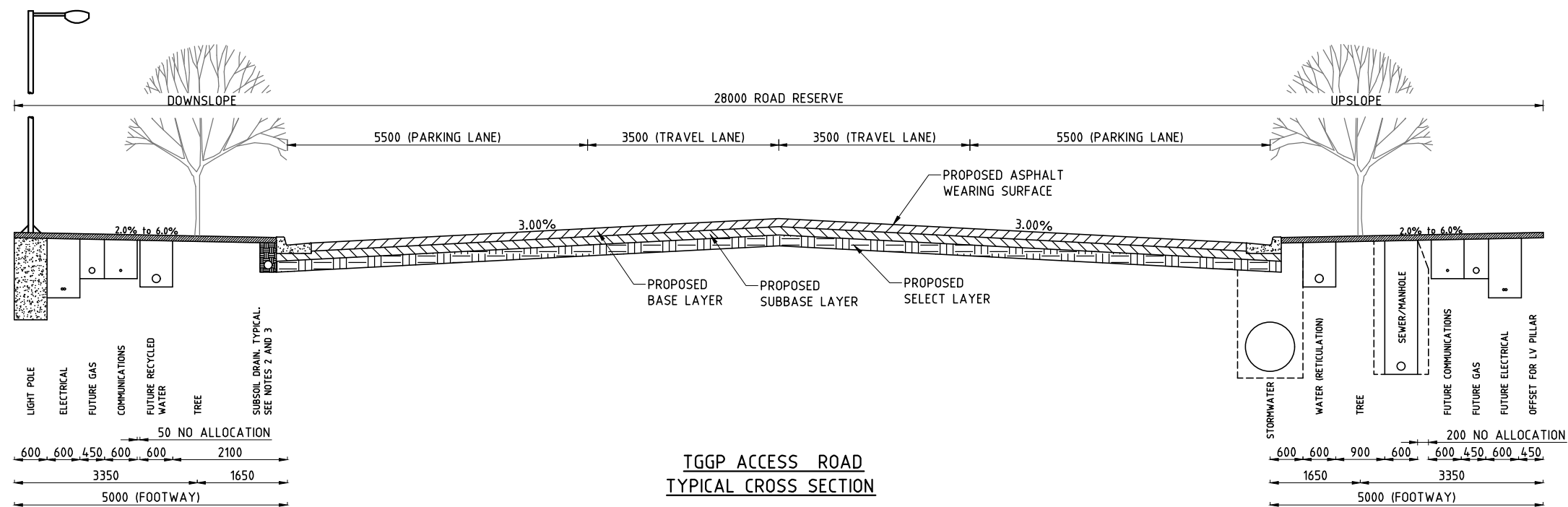
The site plan illustrates the proposed sewer network. Sewer Line B is a horizontal line starting from the Northern Connection Point and extending eastwards. Sewer Line A is a diagonal line branching off from Line B and running towards the southeast. The plan is divided into several zones: a yellow zone (B-1 to B-6) along Line B, a blue zone (A-1 to A-8) along Line A, and a brown zone (A-9) at the bottom right. A central area is labeled 'APPROXIMATELY 9.1ha'. The plan also shows a road, a railway line, and various topographic features like contour lines and a water body.

PRELIMINARY
NOT FOR CONSTRUCTION

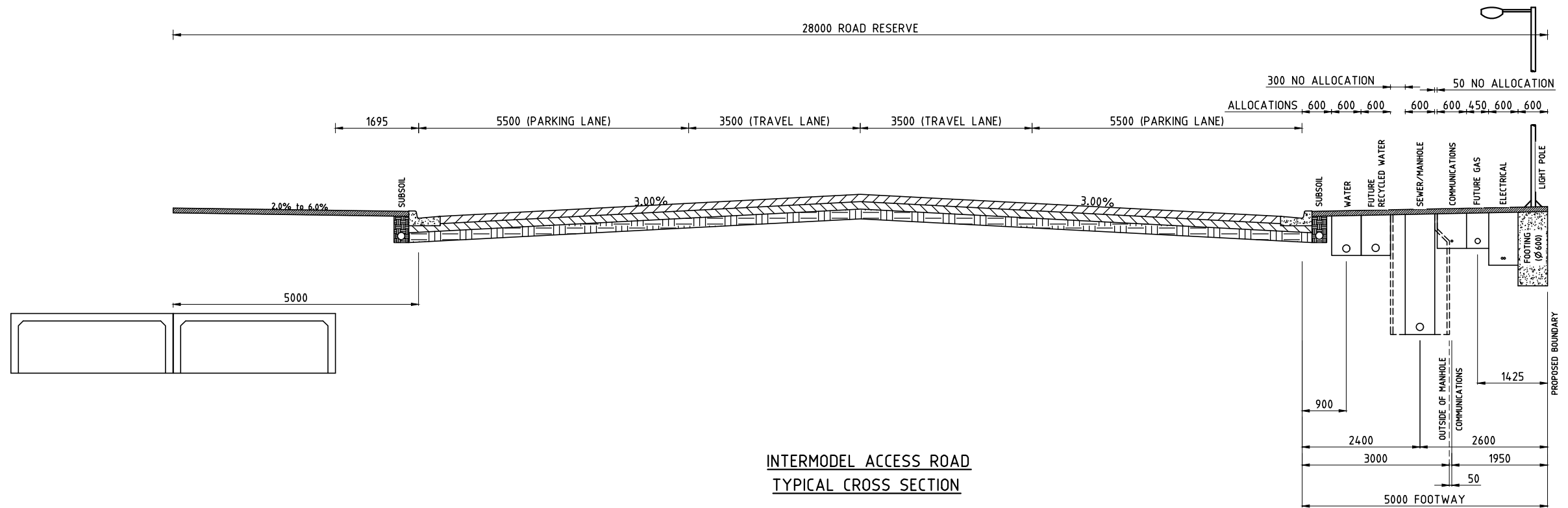
DRAWN	DATE	JOB No.:	ISSUE	SHEET No.
J.T	27/10/21	IV3372	B	11
DESIGNED	DATE	DOCUMENT No.:		
J.T	27/10/21	D010		12
APPROVED	DATE	STATUS:		
		90% DESIGN		
DATUM:		REG. No.:		



9.7 Appendix G – Typical Road Cross Sections

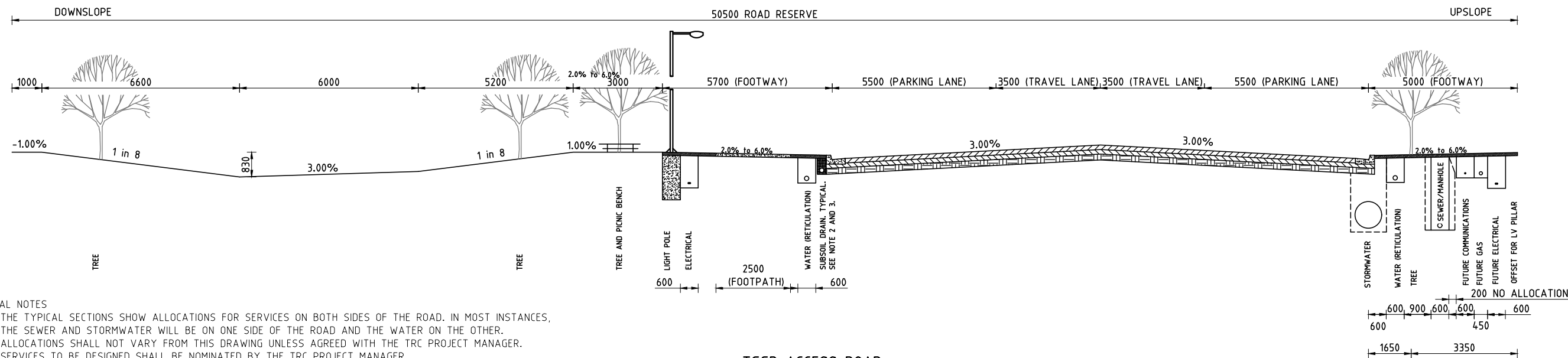


G	28-09-20	ISSUED FOR INFORMATION	<div>CLIENT APPROVAL</div> <div>NAME: _____ DIRECTORATE: _____</div> <div>SIGNATURE: _____ DATE: _____</div>	CHECKED: _____ DATE: _____	TYPICAL ROAD CROSS SECTIONS SHEET 1 OF 3	TAMWORTH REGIONAL COUNCIL				DATUM	SCALES AS SHOWN		
F	22-09-20	RE-ISSUED FOR REVIEW		CHECKED: _____ DATE: _____						DESIGNER	A.H.D.	DRAWING NO.	
E	29-04-20	ISSUED FOR ACCEPTANCE		CHECKED: _____ DATE: _____									SENIOR DESIGN & PROJECT ENGINEER
D	7-04-20	RE-ISSUED FOR REVIEW		CHECKED: _____ DATE: _____		CLIENT REPRESENTATIVE	SURVEYED: _____	CLIENT REP: _____	DESIGNED: BL _____	JOB NO: DJSJN236	TAMWORTH GLOBAL GATEWAY PARK ROAD DESIGN	A1	
C	2-04-20	ISSUED FOR REVIEW		CHECKED: _____ DATE: _____									
B	12-09-19	ISSUED FOR REVIEW											
A	11-09-19	ISSUED FOR REVIEW											
REV	DATE	DESCRIPTION											



INTERMODEL ACCESS ROAD
TYPICAL CROSS SECTION

* DEVIATE COMMUNICATION CONDUITS AROUND THE SEWER MANHOLE WHERE REQUIRED



TGGP ACCESS ROAD
TYPICAL CROSS SECTION

GENERAL NOTES

1. THE TYPICAL SECTIONS SHOW ALLOCATIONS FOR SERVICES ON BOTH SIDES OF THE ROAD. IN MOST INSTANCES, THE SEWER AND STORMWATER WILL BE ON ONE SIDE OF THE ROAD AND THE WATER ON THE OTHER. ALLOCATIONS SHALL NOT VARY FROM THIS DRAWING UNLESS AGREED WITH THE TRC PROJECT MANAGER. SERVICES TO BE DESIGNED SHALL BE NOMINATED BY THE TRC PROJECT MANAGER
2. SUBSOIL DRAINS TYPICALLY SHOWN 300mm BELOW UNDERSIDE OF SELECT PAVEMENT. TRENCH SHALL BE 300mm WIDE, TYPE A FILTER MATERIAL WITH 100Ø CLASS 1000 CORRUGATED SLOTTED PLASTIC PIPE ENCLOSED IN CLASS A GEOTEXTILE PLACED 50mm ABOVE BOTTOM OF DRAIN
3. WHERE SUBSOIL DRAINS ARE ADJACENT TO A STORMWATER TRENCH, THE SUBSOIL MAY BE OMITTED. IN THIS INSTANCE A 3m LENGTH OF SUBSOIL PIPE SHALL BE PROVIDED AT THE DOWNSTREAM END OF THE STORMWATER TRENCH
4. ROAD PAVEMENT IS FOR CONCEPT DESIGN PURPOSES ONLY. PAVEMENT DESIGN IS TO BE CONFIRMED. THE USE OF LIME STABILISED SUBGRADE IN LIEU OF SELECT IS CONSIDERED ACCEPTABLE
5. ESSENTIAL ENERGY APPROVAL IS TO BE OBTAINED FOR PROPOSED 66KV POWER POLE INSTALLATION AND PROTECTION.
6. APA APPROVAL IS TO BE OBTAINED FOR THE GAS MAIN DESIGN



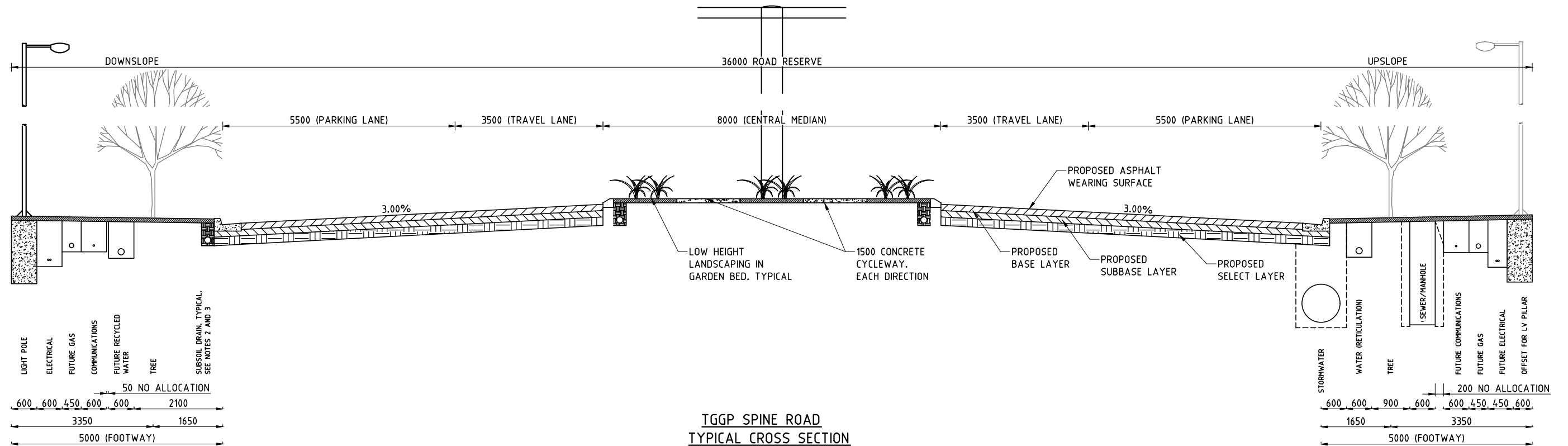
REV	DATE	DESCRIPTION
D	28-09-20	ISSUED FOR INFORMATION
C	29-04-20	ISSUED FOR ACCEPTANCE
B	7-04-20	RE-ISSUED FOR REVIEW
A	2-04-20	ISSUED FOR REVIEW

CLIENT APPROVAL	
NAME	DIRECTORATE
SIGNATURE	DATE

CHECKED:	DATE:
DESIGNER	
CHECKED:	DATE:
SENIOR DESIGN & PROJECT ENGINEER	
CHECKED:	DATE:
CLIENT REPRESENTATIVE	

TYPICAL ROAD CROSS SECTIONS SHEET 2 OF 3				
SURVEYED:	CLIENT REP:	DESIGNED: BL	JOB NO: DSJN1236	

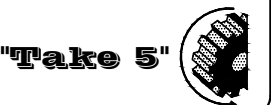
TAMWORTH REGIONAL COUNCIL		DATUM	SCALES AS SHOWN
TAMWORTH GLOBAL GATEWAY PARK ROAD DESIGN		A.H.D.	DRAWING NO.
		A1	1236-SK02



TGGP SPINE ROAD
TYPICAL CROSS SECTION

GENERAL NOTES

1. THE TYPICAL SECTIONS SHOW ALLOCATIONS FOR SERVICES ON BOTH SIDES OF THE ROAD. IN MOST INSTANCES, THE SEWER AND STORMWATER WILL BE ON ONE SIDE OF THE ROAD AND THE WATER ON THE OTHER. ALLOCATIONS SHALL NOT VARY FROM THIS DRAWING UNLESS AGREED WITH THE TRC PROJECT MANAGER. SERVICES TO BE DESIGNED SHALL BE NOMINATED BY THE TRC PROJECT MANAGER
2. SUBSOIL DRAINS TYPICALLY SHOWN 300mm BELOW UNDERSIDE OF SELECT PAVEMENT. TRENCH SHALL BE 300mm WIDE, TYPE A FILTER MATERIAL WITH 100Ø CLASS 1000 CORRUGATED SLOTTED PLASTIC PIPE ENCLOSED IN CLASS A GEOTEXTILE PLACED 50mm ABOVE BOTTOM OF DRAIN
3. WHERE SUBSOIL DRAINS ARE ADJACENT TO A STORMWATER TRENCH, THE SUBSOIL MAY BE OMITTED. IN THIS INSTANCE A 3m LENGTH OF SUBSOIL PIPE SHALL BE PROVIDED AT THE DOWNSTREAM END OF THE STORMWATER TRENCH
4. ROAD PAVEMENT IS FOR CONCEPT DESIGN PURPOSES ONLY. PAVEMENT DESIGN IS TO BE CONFIRMED. THE USE OF LIME STABILISED SUBGRADE IN LIEU OF SELECT IS CONSIDERED ACCEPTABLE
5. ESSENTIAL ENERGY APPROVAL IS TO BE OBTAINED FOR PROPOSED 66kV POWER POLE INSTALLATION AND PROTECTION.
6. APA APPROVAL IS TO BE OBTAINED FOR THE GAS MAIN DESIGN

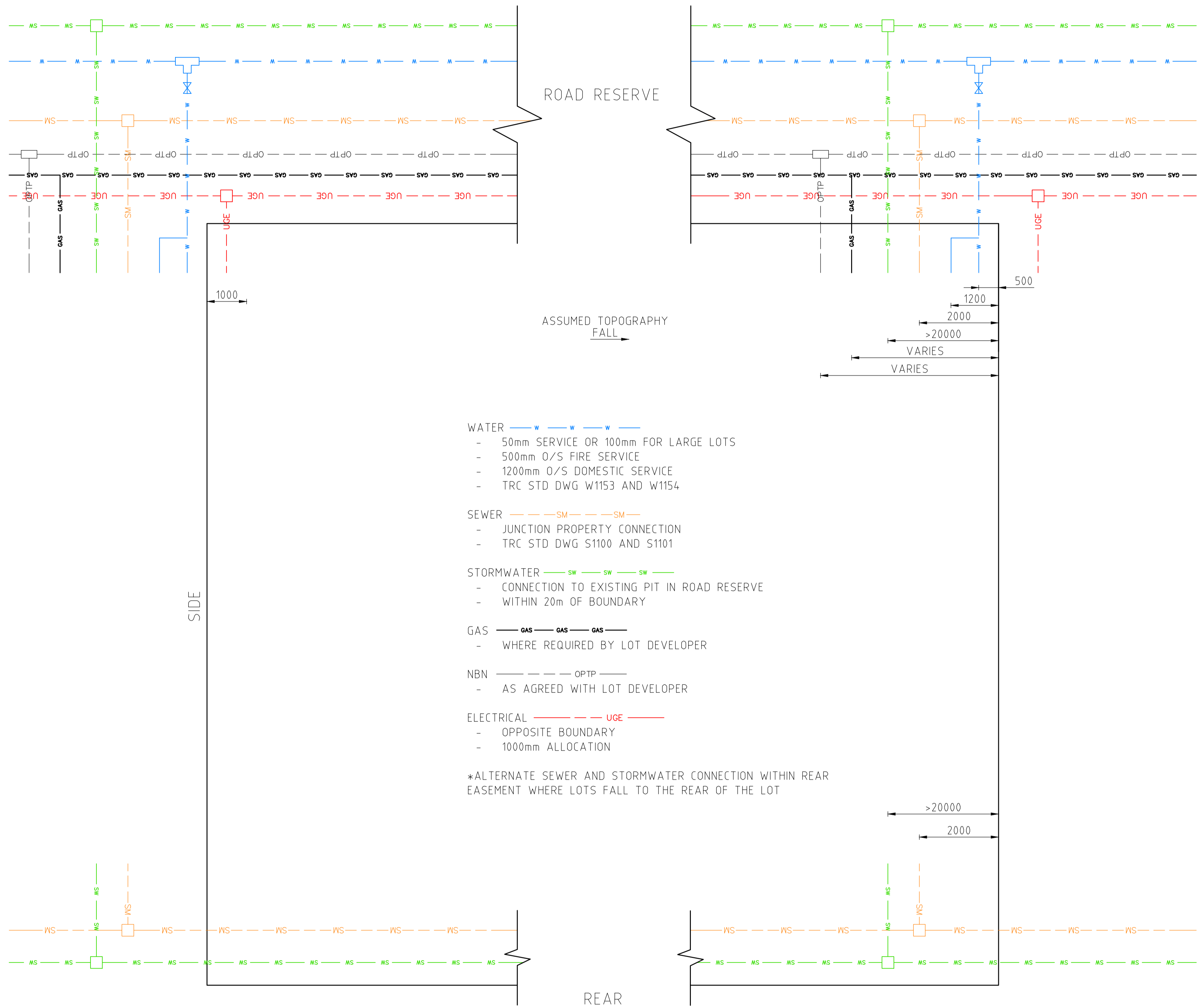


R:\R_RS_DATA\Projects_Folder\RS-DS\DSJN1236\Sketches_SKxx\CAD\SK01-SK02 Road Typical Sections.dwg

			CLIENT APPROVAL		TYPICAL ROAD CROSS SECTIONS SHEET 3 OF 3				TAMWORTH REGIONAL COUNCIL		DATUM	SCALES AS SHOWN
			NAME DIRECTORATE						TAMWORTH GLOBAL GATEWAY PARK ROAD DESIGN		A.H.D.	DRAWING NO.
A 23-03-22 ISSUED FOR REVIEW			SIGNATURE DATE		SURVEYED: CLIENT REP: DESIGNED: BL JOB NO: DSJN1236						A1	1236-SK16
REV	DATE	DESCRIPTION										



9.8 Appendix H – Allotment Incoming Service Allocations



LOT SERVICE LOCATION PLAN



REV	DATE	DESCRIPTION
B	28-09-20	ISSUED FOR INFORMATION
A	11-09-20	ISSUED FOR REVIEW

CLIENT APPROVAL	
NAME	DIRECTORATE
SIGNATURE	DATE

CHECKED:	DATE:
DESIGNER	
CHECKED:	DATE:
SENIOR DESIGN & PROJECT ENGINEER	
CHECKED:	DATE:
CLIENT REPRESENTATIVE	

INDICATIVE INCOMING SERVICE ALLOCATION FOR LOTS			
SURVEYED:	CLIENT REP:	DESIGNED: BL	JOB NO: DSJN1236

TAMWORTH REGIONAL COUNCIL	
TAMWORTH GLOBAL GATEWAY PARK ROAD DESIGN	

DATUM	SCALES AS SHOWN
A.H.D.	DRAWING NO.
A1	1236-SK14



10 Attachments

Attachment 1 – Biodiversity Development Assessment Report – Tamworth Global Gateway Park – NGH, November 2023

Attachment 2 – Aboriginal Cultural Heritage Assessment – Tamworth Global Gateway Park – Area, June 2023

Attachment 3 – Detailed PFAS Site Investigation Report Enterprise Area Lot 2 DP 816346 and Lot 426 DP 1178998 Marathon Street Westdale NSW – Geo-logix, December 2017

Attachment 4 – Additional PFAS Site Testing Report – Tamworth Global Gateway Park – Geo-logix, August 2023

Attachment 5 – Tamworth Enterprise Area Transport Impact Assessment – GTA Consultants, June 2018

Attachment 6 – Intersection Modelling – Tamworth Global Gateway Park – Tamworth Regional Council, January 2023

Attachment 7 – DSJN1365 TGGP Landscaping Treatments – Tamworth Regional Council, August 2021

Attachment 8 – DSJN1263 Eastern Trunk Sewer Main – Tamworth Regional Council, July 2021

END OF REPORT

Report Name: Statement of Environmental Effects – Tamworth Global Gateway Park – All Stages (Excluding Stage 1-3) Subdivision and Earthworks

Report Number: PROJ2020-0045-REP03

Project Reference / ECM Index: PROJ2020-0045

Document Control			
Version	Date Update	Author	Notes
0	29/08/2023		Draft SEE for internal review and approval
1	08/11/2023		Final for submission



TAMWORTH

GLOBAL GATEWAY PARK

<https://yourvoice.tamworth.nsw.gov.au/tamworth-global-gateway-park>

