

APPIN GROWTH AREA

CONTRIBUTIONS PLAN



PUBLICATION DETAILS

Publication Dated	Details of Publication
1 December 2025	Approved by Council

ACKNOWLEDGEMENT OF COUNTRY

Wollondilly Shire Council acknowledges the Dharawal and Gundungurra people as the Traditional Custodians of this place we now call Wollondilly, and we acknowledge their continued connection to Country. We pay respect to Aboriginal and Torres Strait Islander Elders past, present and emerging.

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OVERVIEW

Greater Macarthur Growth Area (GMGA) was identified by the NSW government and declared as such in December 2019.

Appin Growth Area is part of the Greater Macarthur Growth Area (GMGA) identified by the NSW government and declared as such in December 2019. Appin is located towards the north east corner of the Wollondilly LGA and is the southernmost land release precincts of the GMGA.

The State Government's policy document 'Greater Macarthur 2040: An interim plan for the Greater Macarthur Growth Area' is the overarching strategic planning document, which indicates a potential yield of around 20,000 dwellings between Appin and North Appin Precincts. Appin Growth Area as defined in this plan includes the GMGA Appin Precinct and the part of GMGA North Appin Precinct within Wollondilly Shire Council. It excludes the existing Appin Township. Altogether, its gross land area is of 2,950 ha. This plan assumes a potential dwelling yield of 18,650 and a population of 55,950 people.

Even though there remains a level of unpredictability regarding the precise timing and level of development will actually occur, there is no doubt that a range of new and augmented infrastructure needs to be planned, programmed, funded and delivered in order to sustain the development that is anticipated.

The additional population in Appin will generate new demand for a range of local infrastructure that the Wollondilly Shire Council provides, including roads, open space, stormwater management and community facilities.

Contributions of land, works and money from development of land throughout this Growth Area will be a key source funding for this new and upgraded local infrastructure.

Section 7.11 of the Environmental Planning and Assessment Act 1979 (EP&A Act) authorises councils and other consent authorities to require contributions from developers for local infrastructure as part of their development approvals. Councils and accredited certifiers may only impose a contribution if it is of a kind allowed by and determined in accordance with a contributions plan, such as this plan.

The main purpose of this plan is to authorise Council or an accredited certifier to impose conditions on Development Applications (DA) or Complying Development Certificates (CDCs) requiring Section 7.11 contributions from development in accordance with the rates in the plan.

This plan intends to fund the following local infrastructure over 30 years of development.

1 ADMINISTRATION AND OPERATION OF THE PLAN

1.1 Dictionary

Except where indicated in this section, the definitions of terms used in this plan are the definitions included in the EP&A Act, EP&A Regulation and State Environmental Planning Policy (Precincts - Western Parkland City) 2021 and Wollondilly Local Environmental Plan 2011 are adopted by this plan.

In this plan, the following words and phrases have the following meanings:

- **Appin Growth Area** means the area identified in Figure 2.1
- **CDC** means Complying Development Certificate.
- **Council** means Wollondilly Shire Council.
- **CPI** means the Consumer Price Index (All Groups - Sydney) published by the Australia Statistician.
- **DA** means Development Application.
- **DPHI** means Department of Planning, Housing and Infrastructure (DPHI).
- **EP&A Act** means the Environmental Planning and Assessment Act 1979.
- **EP&A Regulation** means the Environmental Planning and Assessment Regulation 2021.
- **Greater Macarthur Growth Area** means the precinct identified in the State Environmental Planning Policy (Precincts - Western Parkland City) 2021 (SEPP)
- **IPART** means Independent Pricing and Regulatory Tribunal
- **HPC** means Housing and Productivity Contribution
- **Just Terms Act** means the Land Acquisition (Just Terms Compensation) Act 1991.
- **LGA** means Local Government Area.
- **Local Approval** means an approval issued under the Local Government Act 1993.
- **LVI** means the Land Value Index being the Unimproved Land Value Index Greater Sydney (Greater Capital City) published by the CoreLogic.
- **Non-Residential Development** means subdivision or works for commercial, retail, business, employment or industrial uses as defined under the prevailing Environmental Planning Instrument.
- **OC** means an Occupation Certificate issued under the EP&A Act
- **Planning agreement** means a voluntary planning agreement referred to in section 7.4 of the EP&A Act.
- **PPI Open Space Works** means the Producer Price Index (3020 Non-Residential Building Construction Index for NSW) published by the Australia Statistician.
- **PPI Roads and Transport and Stormwater Management Works** means the Producer Price Index (3101 Road and Bridge Construction Index for NSW) published by the Australia Statistician.
- **Residential Accommodation** means a building or place used predominantly as a place of residence, and includes any of the following:
 - attached or abutting dwellings
 - boarding houses
 - dual occupancies
 - dwelling houses
 - group homes
 - hostels,
 - manor homes
 - multi dwelling housing

- residential flat dwelling and buildings
- rural workers' dwellings
- secondary dwellings
- semi-detached dwellings
- seniors housing
- shop top housing
- studio dwellings
- **Residential Development** means subdivision works for the purposes of Residential Accommodation.
- **Security** means an unconditional bank guarantee from an Australian bank or Government institution.
- **Seniors Living Dwelling** means a self-contained dwelling defined in State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004.
- **Works schedule** means the schedule of the specific public amenities and public services for which contributions may be required as set out in this plan.

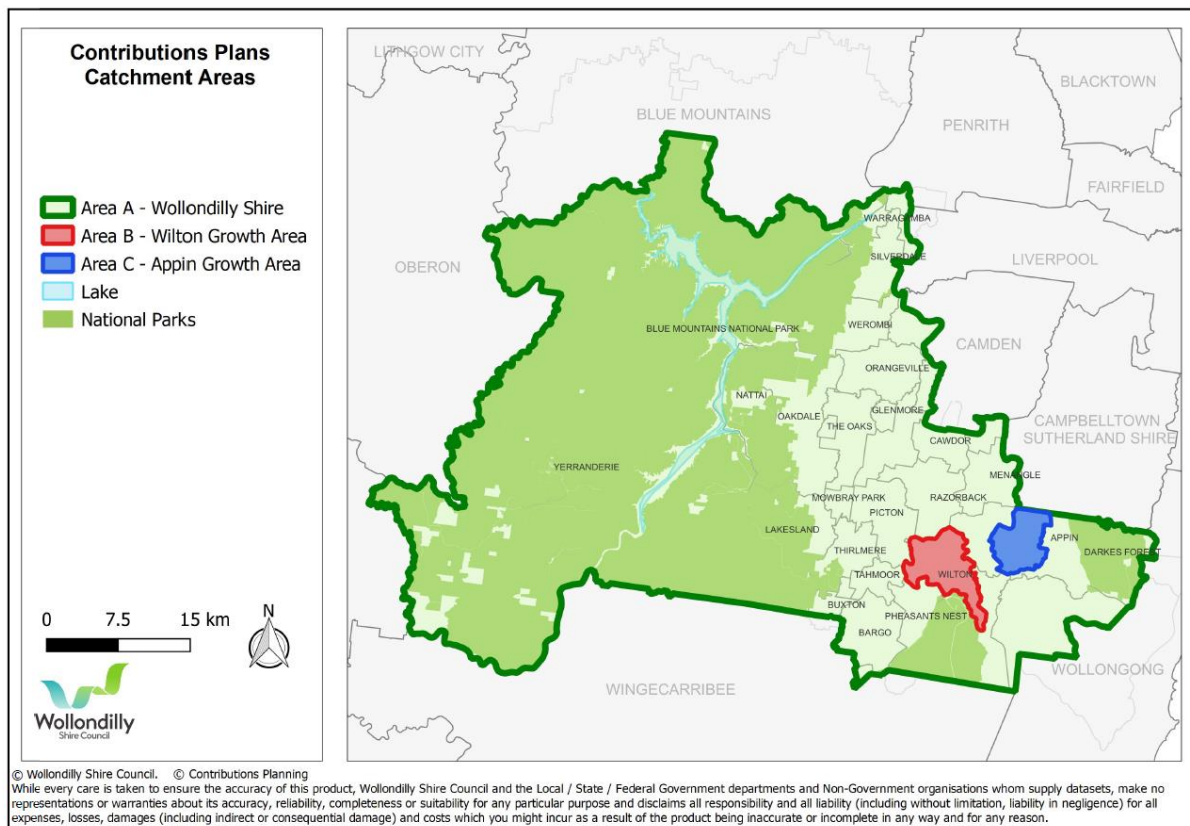
1.2 Introduction

Appin Growth Area is part of the Greater Macarthur Growth Area (GMGA) identified by the NSW government and declared as such in December 2019. It is strategically located between the Hume Highway and Appin Road, towards the north east corner of the Wollondilly LGA and is the southernmost land release precincts of the GMGA.

Appin Growth Area as defined in this plan includes the GMGA Appin Precinct and the part of GMGA North Appin Precinct within Wollondilly Shire Council. It excludes the existing Appin Township. This plan assumes a potential dwelling yield of 18,650 and a population 55,950 people.

This contributions plan establishes the local infrastructure needed to support this development and ensures it is strategically planned and delivered, as well as providing an equitable funding source. It has been prepared pursuant to the provisions of Part 7 of the EP&A Act, Part 4 of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation), the latest Development Contributions Practice Note (DPE), and relevant Ministerial Directions issued under Section 7.17 of the EP&A Act.

Figure 1.1 – Contributions Plan Catchment Area



1.3 Name of This Plan

This Plan is called the Appin Growth Area Contributions Plan.

1.4 Legislative Requirements

Consistent with the EP&A Act and the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation), this plan has been prepared having regard to the latest practice notes issued by the NSW Department of Planning, Housing and Infrastructure (DPHI) and the Independent Pricing and Regulatory Tribunal of New South Wales (IPART). It includes the following:

- a schedule of contribution rates for various types of development
- information on the relationship between the anticipated development and the demand for local infrastructure, including how the nexus-based section 7.11 contribution rates were calculated
- the Council’s policies on how and when developers can settle their development contributions obligations, including opportunities for developers to dedicate land or entering into Planning Agreements.
- specific provisions on the role of accredited certifiers in imposing and collecting development contributions.
- provisions to ensure the fair and transparent administration of development contributions received under this plan.

1.5 Commencement of This Plan

This plan commenced on 1 December 2025.

DAs and CDCs lodged on or after this date will be determined subject to the provisions of this plan.

1.6 Purpose of This Plan

The primary purpose of the plan is to authorise Council or a planning panel, when granting consent to a DA to carry out development to which this plan applies; or an accredited certifier, when issuing a CDC for development to which this plan applies, to require a contribution to be made towards either/both:

- the provision, extension or augmentation of public amenities and public services only where development is likely to require the provision of or increase the demand for those amenities and services; and
- the recoupment of the cost of providing existing public amenities and public services within the area to which this plan applies.

Other purposes of the plan are:

- To provide the framework for the efficient and equitable determination, collection and management of development contributions toward the provision of public amenities and public services generated by development within Appin Growth Area.
- To determine the demand for public facilities generated by the incoming population to Wollondilly and ensure that development makes a reasonable contribution toward the provision of public amenities and public services that are required for that population.
- To ensure that the existing community is not unreasonably burdened by the provision of public amenities and public services required (either partly or fully) as a result of development in Appin Growth Area.
- To ensure Council's management of development contributions complies with relevant legislation and guidelines and achieves best practice in plan format and management.

1.7 Development to Which This Plan Applies

This plan applies to the following development types:

- Residential subdivision creating lots for a dwelling house and any other forms of residential accommodation not listed below
- Dual occupancy, rural workers' dwelling
- Attached dwelling, abutting dwelling, manor home dwellings, multi dwelling housing, semidetached dwelling
- Apartment, residential flat building or shop top housing
- Self-contained dwelling in a seniors housing development
- Secondary dwellings, studio dwellings, boarding houses, group homes, hostels
- Non-Residential Development

Council or an accredited certifier must impose a condition requiring a contribution for these developments under section 7.11 of the EP&A Act.

1.8 Development to Which This Plan Does Not Apply

This plan does not apply to the following types of development:

- Existing dwellings on lots created in an earlier subdivision that was subject to the application of section 7.11 of the EP&A Act.
- Any development that, in the opinion of Council, does not result in an increase in demand for any of the public amenities or services addressed by this plan (e.g. the replacement of an existing dwelling)
- Public infrastructure provided under Part 7 of the Act or by an infrastructure or utility provider.

2 CONTRIBUTIONS CALCULATION

2.1 Summary of Contribution Rates

The subsequent pages display tables indicating the contribution rates for infrastructure land and works to accommodate the requirements of the new development outlined in this plan.

Table 2.1 – The cost of local infrastructure to be met by development in Appin Growth Area

Local Infrastructure Items	Total Cost to be Met by Appin Growth Area Development
Open Space	\$975,569,819
Transport	\$85,931,419
Stormwater Facilities	\$274,397,705
Community Facilities	\$13,516,433
Plan Management and Administration	\$11,008,663
TOTAL	\$1,306,738,120

Table 2.2 – Contributions rates for different forms of development in Appin Growth Area

Local Infrastructure Items	per final lot or dwelling house, dual occupancy dwelling, rural workers dwelling	per demi detached dwelling, attached dwelling, multi dwelling housing, manor home dwelling	per apartment, residential flat building, or shop top housing	per seniors living self-contained dwelling	per secondary dwelling, studio dwelling, group home dwelling	per hectare of non-residential development
Open Space	\$54,055	\$45,337	\$38,362	\$26,156	\$17,437	
Transport	\$4,757	\$3,989	\$3,376	\$2,302	\$1,1534	\$63,509
Stormwater	\$15,151	\$12,707	\$10,752	\$7,331	\$4,887	\$202,062
Community Facilities	\$763	\$640	\$542	\$369	\$246	
Plan Management and Administration	\$763	\$515	\$436	\$297	\$198	\$3,243
TOTAL	\$75,489	\$63,188	\$53,468	\$36,455	\$24,302	\$268,814

2.2 Calculating a Contribution Under This Plan

2.2.1 Calculating Contribution Amounts

The methods for calculating a contribution under this plan for each of the development types addressed by this plan are discussed below.

Applicants and accredited certifiers should note that the monetary contribution rates shown in this document reflect the contribution rates at the date that the plan commenced. These rates are regularly adjusted for inflation in accordance with the provisions of section 6.3 of this plan. Applicants should inquire at the Council for information on the latest contribution rates.

The total section 7.11 contribution for development is calculated using the rates shown in Table 2.2 as adjusted by section 6.3.

2.2.2 Assumed Dwelling Occupancy Rates for Residential Development

The occupancy rates included in Table 2.3 reflect the estimate of future infrastructure demand for the proposed residential accommodation development as well as the estimate of existing demand allowances (or credits) for existing development.

Table 2.3 – Assumed dwelling occupancy rates

Residential Accommodation Occupancy Rates	Occupancy rates
Residential subdivision lot	3.1 persons per dwelling/lot
Dwelling house, dual occupancy, rural workers' dwelling	3.1 persons per dwelling
Attached dwelling, abutting dwelling, semi-detached dwelling, multi dwelling housing, manor home	2.6 persons per dwelling
Apartment, residential flat building or shop top housing	2.2 persons per dwelling
Self-contained dwelling in a seniors housing development	1.5 persons per dwelling
Secondary dwellings, studio dwellings, boarding houses, group homes, hostels	1 person per secondary dwelling; 1 person per bed or 1 person per bedroom, whichever is the greater

2.2.3 Contributions for Plan Administration

Councils incur significant costs in the preparation and administration of contributions plans. These include:

- The costs of Council staff time to prepare and review contributions plans, account for contributions receipts and expenditure, and coordinate the implementation of works programs.
- The costs of consultant studies that are commissioned by Council from time to time in order to determine the value of land to be acquired, the design and cost of works,

as well as to review the development and demand assumptions in the contributions plan.

- The costs of Council engaging the services of planning, engineering, surveyor, design, accounting, audit and legal professionals to provide advice on implementing the plan.

As these costs arise directly as a result of the development in the areas covered by the plan, it is reasonable that the costs associated with preparing and administering this plan be recouped through section 7.11 contributions.

Costs associated with the ongoing administration and management of the contributions plan will be levied on all DAs and CDCs that are required to make a contribution under this plan.

2.2.4 Summary of Contributions Rates Formulas

Formula for Residential Development

Contributions are based on the expected population in the area, the costs of each infrastructure item, and the portion of the cost that should reasonably be met by the future population of this area. Contribution rates for most of these infrastructure items have been determined using the following formula

$$\text{Contribution per resident} = \sum \left(\frac{\$INF \times AF\%}{P} \right)$$

Where:

\$INF = The estimated cost, or if the infrastructure has been completed, the indexed actual cost, of providing each of the infrastructure items required to meet the development

AF% = The proportion of the total cost of each infrastructure item that should reasonably be met by the anticipated development in the relevant area.

P = The expected net additional resident population anticipated to occupy the development in the relevant area, or the design population of the particular infrastructure item, as appropriate.

Formula for Non-Residential Development

Contribution rates for transport, stormwater and plan administration for Non-Residential development within the area are calculated on the expected area in hectares, the costs of each infrastructure item, and the portion of the cost that should reasonably be met by the future development of the relevant Area.

Contribution rates for most of these facilities have been determined using the following formula:

$$\text{Contribution per Ha} = \sum \left(\frac{\$INF \times AF\%}{A} \right)$$

Where:

\$INF	Is the estimated cost, or if the infrastructure item has been completed, the indexed actual cost, of providing each of the infrastructure items required to meet the development
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AF%	Is the proportion of the total cost of each infrastructure item that should reasonably be met by the anticipated development in the relevant area
A	Is the expected area of non-residential development.

3 CONTRIBUTIONS TO BE IMPOSED – HOW AND WHEN

3.1 Monetary Contributions

This plan authorises the Council, when granting consent to a DA to which this plan applies, to impose a condition under section 7.11 of the EP&A Act requiring the payment of a monetary contribution to the Council towards:

- the provision of public amenities and public services as specified in the works schedule to meet the demands of the development; or
- the recoupment of the cost of public amenities and public services previously provided in advance of development within the area.

This plan requires the Council or an accredited certifier, when determining an application for a CDC relating to development to which this plan applies, to impose a condition under section 7.11 of the EP&A Act requiring the payment of a monetary contribution towards:

- the provision of public amenities and public services as specified in the works schedule to meet the demands of the development; or
- the recoupment of the cost of public amenities and public services previously provided in advance of development within the area

3.2 Land Contributions

This plan authorises the Council, by imposition of a condition of development consent, to require in connection with any development on land to which this plan applies (and in addition to any monetary contribution that may be sought) the dedication free of cost to the Council of any part of the development site that is land that is to be acquired under this plan.

For the purposes of this section, the Attributable Cost of the land is to be calculated in accordance with the value of the land identified in this plan as indexed by the land value index established under this plan. Council will credit only the amount provided in the plan. Council will, wherever appropriate, require developers to dedicate land free of cost for the facilities identified in this plan.

Where the development does not, or cannot provide the full land area required as a contribution the shortfall will be required as a monetary contribution. The contribution rates included in this plan reflect the monetary contribution required where land is not dedicated free of cost.

Where the Attributable Cost of the land exceeds the monetary development contribution otherwise authorised by this plan, the developer may offer to enter into an agreement under this plan dealing with an appropriate settle-up in exchange for the dedication of the remainder.

3.3 Latest rates to be Used

The section 7.11 contribution to be imposed on a development will reflect the latest, indexed contributions rates authorised by this plan. The monetary section 7.11 contribution rates shown in the plan reflect the contribution rates at the date that this plan commenced. These rates are regularly adjusted for inflation (see section 5.3 of this plan). Applicants and accredited certifiers should inquire at the Council or visit Council's website for information on the latest contribution rates.

3.4 Obligations of Accredited Certifiers

3.4.1 Construction Certificates and Accredited Certifier Obligations

It is the responsibility of an accredited certifier issuing a construction certificate to certify that the section 7.11 contributions have been paid to Council prior to the issue of the certificate. The accredited certifier must ensure that the applicant provides a receipt (or receipts) confirming that contributions have been fully paid and copies of such receipts must be included with copies of the certified plans provided to the Council in accordance with the EP&A (Development Certification & Fire Safety) Regulation 2021. Failure to follow this procedure may render such a certificate invalid and expose the certifier to legal action.

The only exceptions to the requirement are where a work in kind, voluntary planning agreement, dedication of land and / or deferred payment arrangement has been agreed by the Council. In such cases the Council will issue, on application, a letter confirming that an alternative payment method has been agreed with the applicant.

3.4.2 Complying Development Certificates and Accredited Certifiers Obligations

In relation to an application made to an accredited certifier for a CDC:

- the accredited certifier must, if a CDC is issued, impose a condition requiring a section 7.11 contribution, if such a contribution is authorised by this plan
- any such contribution may only be a monetary contribution required under this plan
- the amount of the monetary contribution that the accredited certifier must so impose is the amount determined in accordance with this plan in respect of the development.

It is the responsibility of the accredited certifier to accurately calculate and apply the section 7.11 contribution conditions to the CDC. Section 7.11 contributions imposed on a CDC must be paid prior to the work authorised by the CDC commencing. Deferred payments of contributions required by a condition of a CDC will not be accepted.

Accredited certifiers should contact Council if there is any doubt whether section 7.11 conditions should be imposed on particular CDCs.

3.4.3 Occupation Certificates and Accredited Certifiers Obligations

In relation to an application made to an accredited certifier for an OC:

- The accredited certifier must, before an OC is issued, request for confirmation that any condition requiring the payment of contributions has been satisfied.
- Accredited certifiers should contact Council if there is any doubt whether section 7.11 conditions have been imposed and complied with.

3.5 Variation to Contributions Authorised by This Plan

Council retains the right to vary the section 7.11 contribution amount otherwise calculated in accordance with the provisions of this plan.

A developer's request for variation to a contribution calculated in accordance with this plan must be supported by written justification included with the DA. Such request will be considered as part of the assessment of the DA. An accredited certifier other than the Council cannot vary a section 7.11 contribution calculated in accordance with this plan, without Council's written approval.

4 CONTRIBUTIONS SETTLEMENT – HOW AND WHEN

4.1 Timing of Payments

Council's policy in relation to the timing of payments of monetary contributions required under this plan is as follows:

- Development involving subdivision - prior to the issue of the subdivision certificate (line plan) or strata certificate.
- Development that authorises building works - prior to the release of the construction certificate.
- Development authorised under a CDC, the contributions are to be paid prior to any work authorised by the certificate commences, as required by clause 156 of the EP&A Regulation.
- Other development not requiring the issuing of a CDC or construction certificate – prior to the issuing of a Local Approval, the first occupation certificate or commencement of the use, whichever occurs first.

At the time of payment, it will be necessary for monetary contribution amounts to be updated in accordance with the relevant indexes (see section 5.3 of this plan).

4.2 Policy on Periodic Payments

Council may accept a periodic payment for a monetary contribution required under this plan if the applicant, or any other person entitled to act upon the relevant consent, makes a written request and can satisfy the Council that non-compliance with the payment provisions is justified.

Acceptance of any request for periodic payment is entirely at the discretion of the Council. Periodic payments will only be accepted in exceptional circumstances and will be assessed on a case-by-case basis. Periodic payments related to contributions imposed on a CDC will not be allowed.

If Council does decide to accept periodic payment, the conditions under which the Council may accept payment by way of periodic payment for a staged development are that:

- The instalment be paid before the work commences on the relevant stage of the development; and
- Payment plan and indexed at the time of payment.
- The amount to be paid at each stage is to be calculated on a pro-rata basis in proportion to the demand for the relevant facility being levied by the overall development, and indexed in accordance with this plan.

The relevant Certificate that (Subdivision Certificate or Construction Certificate) will not be issued until payment in full has been received by Council.

4.3 Policy on Deferred Payments

If Council does decide to accept deferred or periodic payment, the conditions under which the Council may accept deferred payment are that:

- Security must be in the form of an unconditional bank guarantee from an Australian bank, or Government institution, at the total discretion of Council, for 200% of the amount of the total contribution due.
- Deferral must not exceed a period of 12-months from the time the contributions comes due;
- The bank unconditionally pays the guaranteed sum to the Council if the Council so demands in writing not earlier than 12 months from the provision of the guarantee or completion of the work; (whichever occurs first);
- The bank must pay the guaranteed sum without reference to the applicant or landowner or other person who provided the guarantee, and without regard to any dispute, controversy, issue or other matter relating to the development consent or the carrying out of development in accordance with the development consent; and
- The bank's obligations are discharged when payment to the Council is made in accordance with this guarantee or when Council notifies the bank in writing that the guarantee is no longer required.

4.4 Policy on Staged Payments

Development may occur over multiple stages.

4.5 Can Contributions be Settled by Dedicating Land or Undertaking Works?

Developers may choose to provide, subject to the agreement of the Council, one or more infrastructure items identified in this plan as material public benefit.

4.5.1 Voluntary Planning Agreements

Section 7.4 of the Act allows the negotiation of planning agreements between councils, developers, and/or other planning authorities for the provision of public purposes in connection with a development application.

At its absolute discretion, Council will only consider a Planning Agreement where it will provide a net public benefit in excess of section 7.11 contributions and where the Planning Agreement will not place a burden on Council or the community. Applicants who may be considering a Planning Agreement are encouraged to consult Council's policy register.

5 OTHER ADMINISTRATION MATTERS

5.1 Relationship of This Plan to Other Contribution Plans

This plan does not limit or otherwise affect the operation of Subdivision 4 of Division 7.1 or Division 7.2 of Part 7 of the EP&A Act.

5.1.1 Wollondilly Development Shire Plan 2025

There have been no contributions collected in the area under WCP2020 for development to which this Plan applies. There is no balance to transfer to this Plan when it comes into effect.

5.1.2 Savings and Transitional Arrangements

A DA or application for a CDC which has been submitted but not determined prior to the commencement of this Plan must be determined as if this Plan has not commenced.

5.2 Adjustment of Contributions to Address the Effects of Inflation

The purpose of this section is to ensure that the monetary contributions at the time of development consent reflect the indexed cost of the provision of facilities included in this plan.

Monetary contribution rates in this plan and monetary contribution amounts in development consents will be regularly adjusted using the following indices:

- For Open Space Works – Producer Price Index (PPI) being the 3020 Non-Residential Building Construction Index for NSW published by the Australian Statistician.
- For Roads and Transport and Stormwater Management Works – Producer Price Index (PPI) being the 3101 Road and Bridge Construction Index for NSW published by the Australia Statistician.
- For Land - Land Value Index (LVI) being the Unimproved Land Value Index Greater Sydney (Greater Capital City) published by the CoreLogic.
- For Plan Administration - Consumer Price Index – Sydney All Groups (CPI) published by the Australia Statistician

Council may, without the necessity of preparing a new or amending contributions plan, make changes to the monetary section 7.11 contribution rates set out in this plan to reflect:

- Annual changes to the PPI for all works schedule items in this plan apart from the items comprising land yet to be acquired and plan administration
- Annual changes to the LVI for works schedule items in this plan comprising land yet to be acquired.
- Annual changes to CPI for plan administration

The base period for costs in this plan is prior to 1 July 2025

5.2.1 Contribution Rates for All Works Schedule Items (other than land yet to be acquired and plan administration)

The contribution rate for works schedule items (other than land yet to be acquired and plan administration) will be indexed as follows:

$$\frac{\$CA \times \text{Current PPI}}{\text{Base PPI}}$$

Where:

\$CA	is the contribution rate for works schedule items (other than land yet to be acquired) at the time of adoption of the plan expressed in dollars
Current PPI	is the most recent PPI as published by the council at the time of the review of the contributions rate as at 1 July of that year
Base PPI	is the PPI prior to 1 July 2025

The contribution rate will not be less than the contribution rate specified at the date of the adoption of this plan.

5.2.2 Contribution rates for Works Schedule Items Involving Land yet to be Acquired

The contribution rate for works schedule items involving land yet to be acquired will be indexed as follows:

$$\frac{\$CA \times \text{Current LVI}}{\text{Base LVI}}$$

Where:

\$CA	is the contribution rate for land yet to be acquired at the time of adoption of the plan expressed in dollars
Current LVI	is the most recent LVI as published by the Council at the time of the review of the contribution rate as a 1 July of that year
Base LVI	is the LVI at 2025 Q1

The contribution rate will not be less than the contribution rate specified at the date of the adoption of this plan.

5.2.3 Contribution rates for Plan Administration

The contribution rate for plan will be indexed as follows:

$$\frac{\$CA \times \text{Current CPI}}{\text{Base CPI}}$$

Where:

\$CA	is the contribution rate for works schedule items (other than land yet to be acquired) at the time of adoption of the plan expressed in dollars
Current CPI	is the most recent CPI as published by the council at the time of the review of the contributions rate as at 1 July of that year
Base CPI	is the CPI at June 2025

5.3 Adjustments to Contributions in Consents

The purpose of this section is to ensure that the monetary contributions at the time of development consent reflect the indexed cost of the provision of facilities included in this plan.

Monetary contribution amounts in consents will be indexed as follows:

5.3.1 Contributions Amounts for Works (other than land yet to be acquired and plan administration)

The contribution amount or amounts included in a development consent for works schedule items (other than land yet to be acquired and plan administration) will be indexed as follows:

$$\frac{\$CA \times \text{Current PPI}}{\text{Base PPI}}$$

Where:

\$CA	is the contribution amount in the development consent for works schedule items (other than land yet to be acquired) at the time the consent was issued, expressed in dollars
Current PPI	is the most recent PPI as published by the council at the time of the review of the contributions rate as at 1 July of that year
Base PPI	is the PPI prior to 1 July 2025

The contribution rate will not be less than the contribution rate specified at the date of the adoption of this plan.

5.3.2 Contribution Amounts for Works Items Involving Land Yet to Be Acquired in Consents

The contribution amount for works schedule items involving land yet to be acquired will be indexed as follows:

$$\frac{\$CA \times \text{Current LVI}}{\text{Base LVI}}$$

Where:

\$CA	is the contribution amount in the development consent for land yet to be acquired at the time of the consent was issued, expressed in dollars
Current LVI	is the most recent LVI as published by the Council at the time of the review of the contribution rate as a 1 July of that year
Base LVI	is the LVI at 2025 Q1

The contribution rate for land yet to be acquired will not be less than the contribution rate specified at the date of the adoption of this plan.

5.3.3 Contribution Amounts for Plan Administration

The contribution amount for plan administration in a development consent for works schedule items will be indexed as follows:

$$\frac{\$CA \times \text{Current CPI}}{\text{Base CPI}}$$

Where:

\$CA	is the contribution rate for works schedule items (other than land yet to be acquired) at the time of adoption of the plan expressed in dollars
Current CPI	is the most recent CPI as published by the council at the time of the review of the contributions rate as at 1 July of that year
Base CPI	is the CPI at June 2025

5.4 Pooling of Contributions Funds

This Contributions Plan permits the pooling of Contributions funds within the same contributions' category. The priorities for the expenditure of pooled monetary contributions under this plan will be determined by The Council. The Council deciding whether to pool and progressively apply contributions funds must be satisfied that such action will not

unreasonably prejudice the delivery within a reasonable time, of the purposes for which the money was originally paid.

5.5 Goods and Services Tax

Items in the works schedule of this plan have been calculated without any GST component, in accordance with Australian Taxation Office rulings that were current at the time this plan was made.

5.6 Accountability and Access to Information

Council is required to comply with a range of financial accountability and public access to information requirements in relation to section 7.11 contributions. These are addressed in Division 4 Part 9 of the EP&A Regulation (which may be amended from time to time) and include:

- maintenance of, and public access to, a contributions' register;
- maintenance of, and public access to, accounting records for contributions receipts and expenditure;
- annual financial reporting of contributions; and
- public access to contributions plans and supporting documents.

These records are available on Council's website.

5.7 Review of Plan Without the Need for Public Exhibition

Pursuant to clause 215 of the EP&A Regulation, Council may make certain minor adjustments or amendments to the plan without prior public exhibition and adoption by Council. Minor adjustments could include typographical errors and corrections, amendments to rates resulting from changes in the indexes adopted by this plan, updating of maps and works schedules as development consent are approved or as works are complete, development contributions made by planning agreements or the omission of details concerning works that have been completed.

5.8 Review of Works Schedule

Substantial research has been applied to the derivation of the plan's works schedules and the planning for the location of all facilities has been completed but detailed design will be carried out in the development phase. The facilities will be developed in a manner that allows them to effectively serve the demand attributable to the anticipated development.

The infrastructure items included in this plan are based on strategic information. It is likely that, as the planning process for the different areas proceed, modified and more cost-effective solutions that still meet the planning objectives will be developed.

Council will prepare design concepts for the facilities so that specification and costing of the facilities can be more accurately defined as implementation of this plan proceeds. This may result in amendment of this plan.

Where alternatives to the works schedule are proposed by developers in conjunction with the development of areas and the alternatives are approved by the Council, the section 7.11 contribution applicable to a development the subject of a DA may be reviewed, or the works schedule in this plan updated, or both.

6 APPIN GROWTH AREA

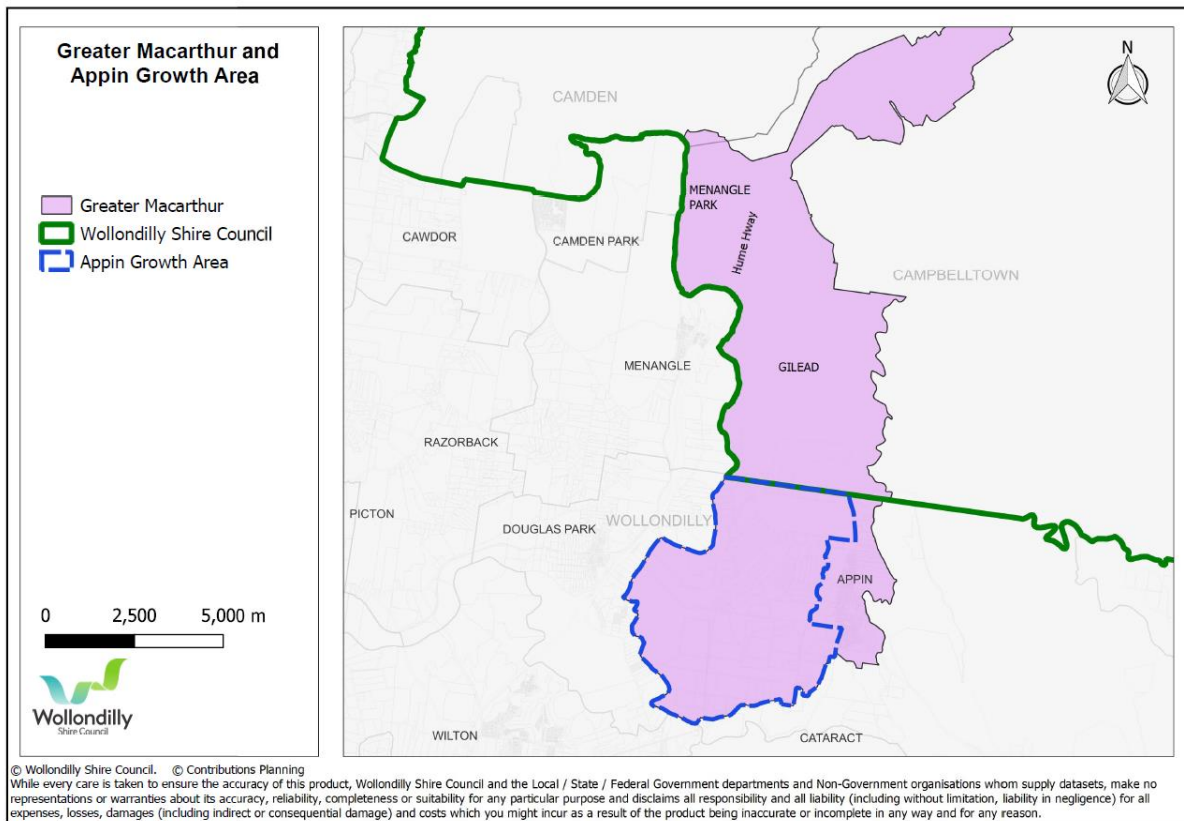
6.1 Introduction to the Appin Growth Area

Appin Growth Area is part of the Greater Macarthur Growth Area (GMGA) identified by the NSW government and is located towards the north east corner of the Wollondilly LGA. This precinct is strategically located between the Hume Highway and Appin Road, being the southernmost land release precincts of the GMGA. It was declared a growth area by the NSW Government on 6 December 2019 and an amendment was made to the State Environmental Planning Policy (Sydney Region Growth Centres) (2006) to identify the Greater Macarthur Growth Area which incorporates Glenfield to Macarthur as urban renewal precincts and Appin as a land release precinct.

State Environmental Planning Policy (Sydney Region Growth Centres) (2006) was repealed on 28 February 2022 and the State Environmental Planning Policy (Precincts—Western Parkland City) 2021 applies to Greater Macarthur Growth Area, including Appin.

The plan adopts the State Government's policy document 'Greater Macarthur 2040: An interim plan for the Greater Macarthur Growth Area' overarching strategic planning document and also considers main landowners' lodged rezoning planning proposals as at February 2024. GMGA 2040 indicates a potential yield of around 20,000 dwellings between Appin and North Appin Precincts, while the planning proposals provide further details and make dwellings provision beyond the 20,000 dwelling cap yield. Appin Growth Area as defined in this plan includes the GMGA Appin Precinct and the part of GMGA North Appin Precinct within Wollondilly Shire Council. It excludes the existing Appin Township. Altogether, Appin Growth Area gross land area is of 2,950ha. This plan assumes a potential dwelling yield of 18,650, a population of 55,950 people and the creation of 4,550 jobs.

Figure 6.1 – Greater Macarthur Growth Area Precinct & Appin Growth Area Boundaries



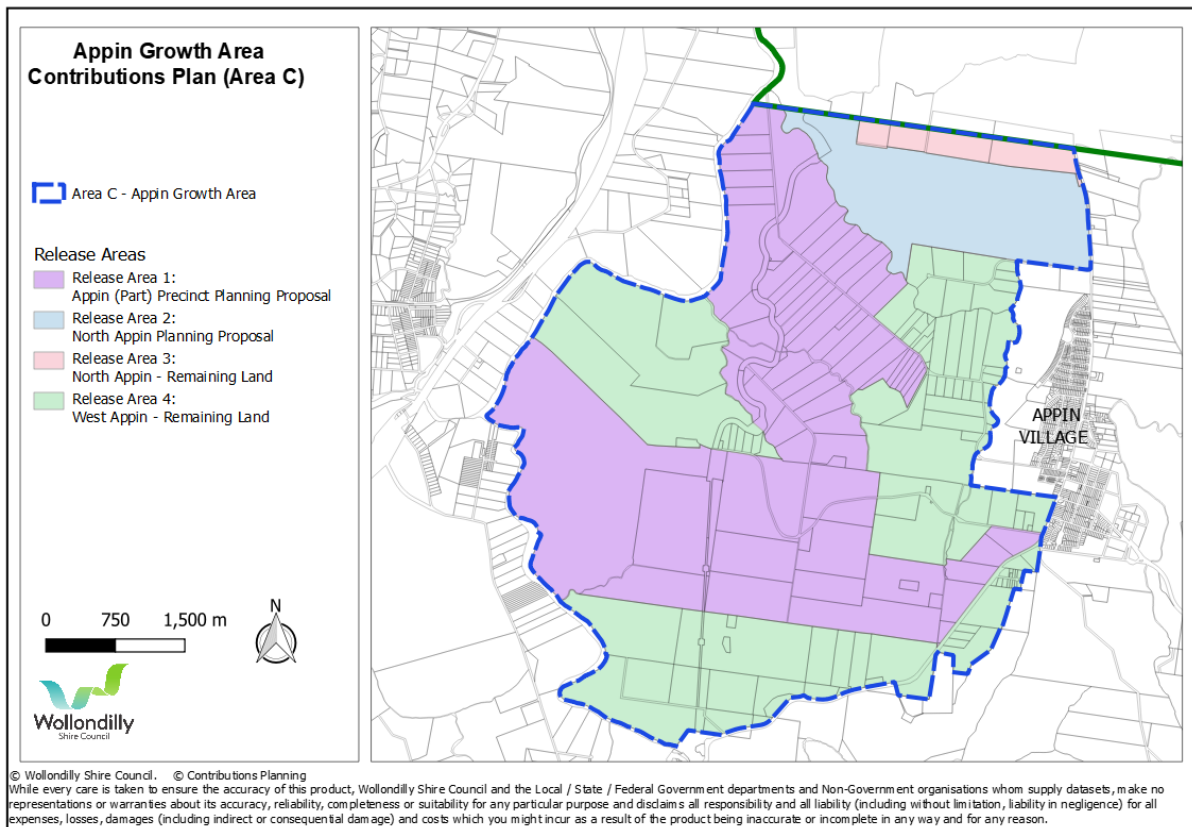
Source: Wollondilly Shire Council based on State Environmental Planning Policy (Sydney Region Growth Centre) Amendment (Greater Macarthur) 2021

There are eleven major landowners who collectively own over 65% of the land holdings within the Appin Growth Area. The balance of land comprises private, individual landowners or existing roads and infrastructure.¹ Land ownership has been considered when assessing where there are practical reasons that prevent a certain piece of infrastructure from being delivered through conditions of development consent and therefore it is reasonable for the infrastructure to be included in a contributions plan.

Three major release areas have been identified for the purposes of this plan and are shown in following Figure 6.2

¹ Appin and North Appin Precincts Urban Context Reports, Urbis, November 2022. p16

Figure 6.2 – Appin Growth Area release Areas



Source: Wollondilly Shire Council

Precinct planning in Appin Growth Area, including the determination of regional infrastructure needs and positioning, has been led by the Department of Planning, Housing and Infrastructure (DPHI), formerly Department of Planning and Environment (DPE). Figure 6.3 shows the Greater Macarthur Structure Plan 2040 which will guide planning and development.

Development in the Appin Growth Area will generate demand for a wide range of infrastructure to support the anticipated growth, including both regional and local infrastructure. The State Government will collect a Housing and Productivity Contribution from development towards regional infrastructure needs.

Figure 6.3 – Greater Macarthur Growth Area Structure Plan

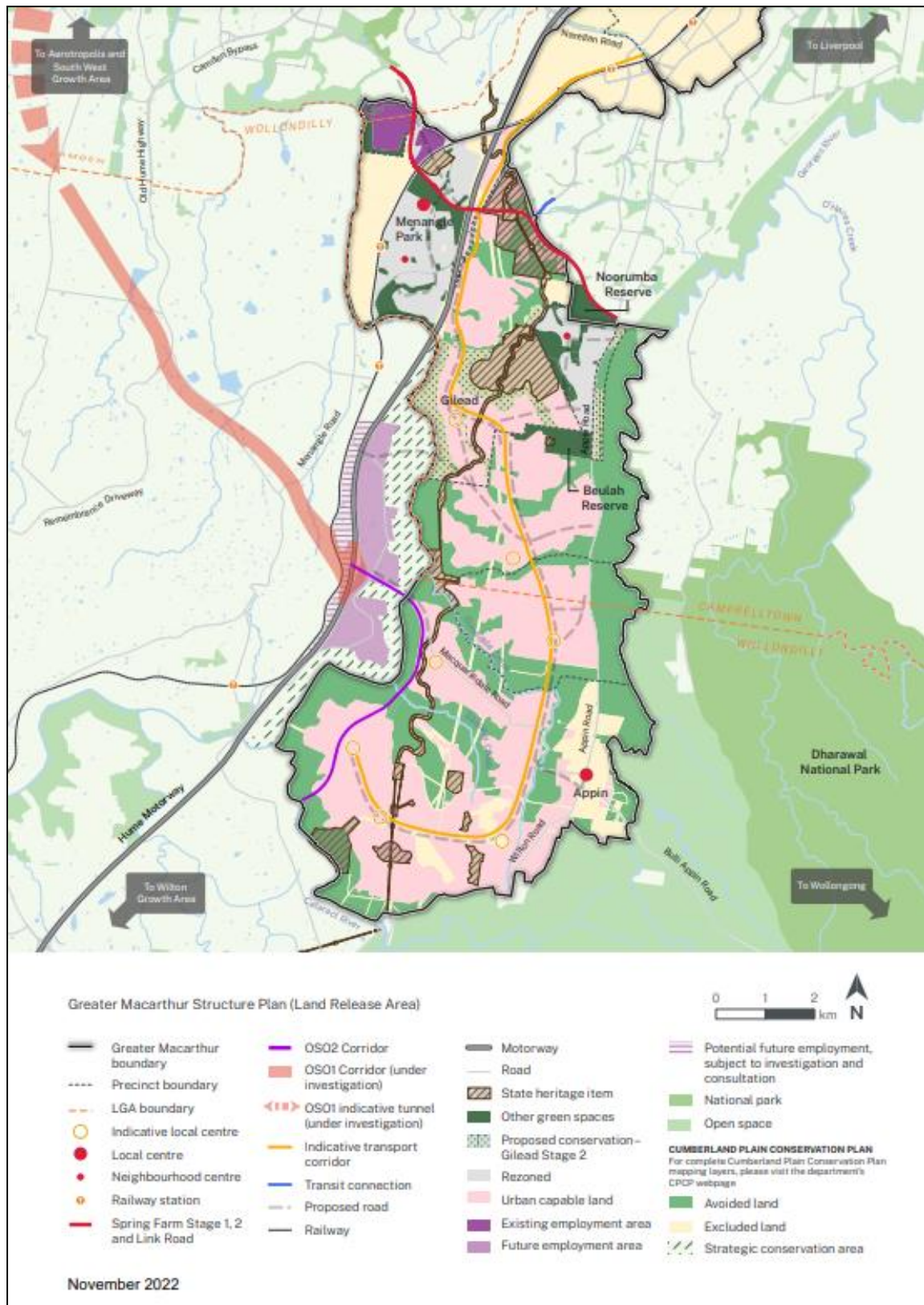


Figure Source: Guide to the Greater Macarthur Growth Area – Update to the Greater Macarthur 2040 Interim Plan, November 2022. DPE, NSW

This Plan provides the legal mechanism for the collection of contributions by Wollondilly Shire Council towards local infrastructure in Appin Growth Area, such as transport and stormwater management, open space and recreation infrastructure and community facilities land. The local infrastructure provision has been determined by Wollondilly Shire Council to specifically service the demand for local infrastructure arising from the new development.

The information presented in Section 6 of this Contributions Plan establishes the nexus for the proposed local infrastructure for Appin Growth Area and the reasonableness of the apportionment of costs and contribution rates.

It is important to note that Appin Growth Area is a product of a State-led rezoning pathway and Wollondilly Shire Council is not the planning authority for this growth area. It is the practice in a State-led Growth Area, released at no additional cost to Government [Greater Macarthur 2040 Interim Plan 2018 and Proposed Greater Macarthur Special Infrastructure Contribution 2018] that all overarching strategy issues are resolved before a local contributions plan is drafted. The comprehensive planning process involves various factors and considerations that must be addressed for the successful development of the area. Key strategies and overarching documents that are still undefined at the time of preparation of this contributions plan and therefore still require additional planning from relevant State Government Agencies, include:

- density areas which are to be included in a Development Control Plan (DCP)
- an updated transport study and strategy for all of Greater Macarthur endorsed by TfNSW,
- formulation of a stormwater strategy for the whole growth area,
- definition of the state infrastructure sequencing and funding strategy,
- longer-term regional utilities and servicing plan.

6.1.1 Existing Development

The Appin Growth Area is predominantly a rural landscape with a range of agricultural activities. Land holdings throughout much of the area range from large rural parcels to rural residential holdings of two hectares. The existing township and peri-urban landscape is excluded from the catchment area of this Contributions Plan and are included in the Wollondilly Shire Contributions Plan 2025.

6.1.2 Expected Development

This plan adopts the anticipated 21,511 new dwellings projected by main landowners Planning Proposals within the Appin Growth Area. Table 6.1 shows the existing and expected residential development.

Table 6.1 – Expected Residential Development: Appin Growth Area

Release Area	Anticipated Development
Release Area 1 – Appin (part) Precinct Planning Proposal	12,900
Release Area 2 – North Appin Planning Proposal	3,000
Release Area 3 – North Appin – Remaining Land	650
Release Area – West Appin – Remaining Land	2,100
TOTAL	18,500

Retail & Employment Study prepared for Appin (Part) Planning Proposal estimates more than 51,000 sqm of retail floor space by 2050 across the 5 neighbourhood centres and a local centre². According to this study, the expected non-residential development will generate around 4,550 jobs.

6.1.3 Expected Population

Markets investigations suggest detached housing typologies with large lot and low residential densities (10 dw/ha– 12.5dw/ha and 15dw/ha -25 dw/ha) will be the preferred housing formats in the Appin locality for some time. Demand for medium-density housing typologies (25dw/ha-35dw/ha) is expected to grow significantly over the coming years. Shop-top housing in local centre settings would be considered appropriate.³

A mix of densities and housing types will provide housing choice. Planning for the right mix of densities will consider infrastructure provision and local character:

- Detached housing on medium sized lots is expected to make up the majority of homes in land release precincts. Density: 15-25 dw/ha.
- Medium density residential housing within 400m of transit corridor. Medium density housing types such as townhouses, terraces and low-rise apartments will be delivered close to essential infrastructure such as public transport, town and local centres public amenity, waterways and open space. Density: 25-45 dw/ha.⁴

Most of the development in the Appin Growth Area will be low rise with low density development making up around 80% of all forecast dwellings in the new rezoned area. Development will become denser closer to high levels of amenity and services, with medium density representing 20% of all dwellings distributed across all of the new released area.

Table 6.2 – Assumed Density: New Development

Anticipated Density Type	% of overall yield	Total dwellings	Occupancy rate	Anticipated population
Low Density	80%	14,920	3.1 persons per dwelling	46,252
Medium Density	20%	3,730	2.6 persons per dwelling	9,698
TOTAL	100%	18,650		55,950

Based on 18,650 additional dwellings, it is anticipated that the population of the Appin Growth Area to increase 55,950 over 30+ years. Appin recorded a ratio of 3.2 persons per dwellings in 2021, an increase from 3.1 persons per dwelling in 2016. In comparable high growth suburbs, ratios also increased over the same period, for example, Wilton - 3.1 persons (2016) to 3.2 persons (2021). The average recorded household size in all

² Appin and North Appin Precincts - Retail & Employment Study , Urbis, October 2022. p21

³ West Appin Investigation Area – Residential Density Discussion paper, Atlas Urban Economics, September 2021. p4

⁴ Appin and North Appin Precincts Urban Context Reports, Urbis, November 2022. p36

Wollondilly Shire Council was 2.95 in 2021. Wollondilly Shire Council assumed the following occupancy rates (Table 6.3) in projecting the population for the Appin Growth Area.

Table 6.3 – Assumed Residential Occupancy Rate – Appin Growth Area

Residential Accommodation Occupancy Rates	Occupancy rates
Residential subdivision lot	3.1 persons per dwelling/lot
Dwelling house, dual occupancy, rural workers' dwelling	3.1 persons per dwelling
Attached dwelling, abutting dwelling, semi-detached dwelling, multi dwelling housing, manor home	2.6 persons per dwelling
Apartment, residential flat building or shop top housing	2.2 persons per dwelling
Self-contained dwelling in a seniors housing development	1.5 persons per dwelling
Secondary dwellings, studio dwellings, boarding houses, group homes, hostels	1 person per secondary dwelling; 1 person per bed or 1 person per bedroom, whichever is the greater

Source: Wollondilly Shire Council

Based on the projected population increase the density is forecast to rise to 19 persons per hectare, significantly higher than the Wollondilly Shire current population density of 0.2 persons per hectare, but still lower than comparable greenfield sites such as The Ponds (31.91 persons per hectare by 2016).⁵

Table 6.4 – Expected Population – Appin Growth Area

Release Area	Additional Population	Total Population
Release Area 1 – Appin (part) Precinct Planning Proposal	38,700	38,700
Release Area 2 – North Appin Planning Proposal	9,000	9,000
Release Area 3 – North Appin – Remaining Land	1,950	1,950
Release Area – West Appin – Remaining Land	6,300	6,300
TOTAL	55,950	55,950

The need for local infrastructure in this plan has been based on the above population forecasts. However, it is to be noted that a Development Control Plan (DCP) led by DPE, which defines density areas is yet to be prepared for the site.

⁵ Community Needs Assessment, Cred Consulting, December 2018. p19 (based on ABS 2016 Census data).

6.1.4 Demand for Local Infrastructure

The current public amenities and services in the Appin Growth Area were primarily designed to support the rural living environment. However, the transformation of the area from rural to urban development requires a significant investment in new and enhanced public amenities and services to support the future development and population.

Research on infrastructure needs undertaken at the precinct planning stage by both the DPE, major landowners and Council have identified the following impacts on public services and public amenities:

- Increased demand for facilities that will support safe and convenient travel between land uses both within the Precinct and to and from destinations outside of the Precincts, such as new roads and public transport facilities
- Increased demand for active and passive recreation facilities, such as recreation centres, sports fields, sports courts, playgrounds, and bike paths
- Increased demand for spaces that will foster community life and the development of social capital in the Precinct, such as cultural and leisure centres, multi-purpose community centres and libraries.
- Increased demand for stormwater management facilities as a result of the extra stormwater runoff generated by impervious surfaces associated with urban (as distinct from rural) development in specific precinct.

A range of public facilities and public amenities have been identified as being required to address the impacts of the expected development, including:

- Traffic and transport management facilities,
- Open space and recreation facilities,
- Community and cultural facilities, and
- Stormwater management infrastructure

More detail on the demand for public services and amenities, the relationship with the expected development, and the strategies for the delivery of required infrastructure is included in the following sections of this Plan.

The costs, indicative timing, and proposed location of individual items for the public amenities and public services included in this Plan are shown in Section 7 and Section 8.

6.1.5 Infrastructures Staging

The staging and priority of infrastructure in the Precinct will generally occur with development.

Table 6.5 has been prepared by Wollondilly Shire Council based on NSW Common Planning Assumptions of about 400 new dwellings per year at the beginning of the development and increasing to 600 dwellings per year.

Table 6.5 - Estimated take up of dwellings in Appin Growth Area

	Year						
	1-5	6-10	11-15	16-20	21-25	26-30	30+
Additional Dwellings (%)	8%	11%	16%	16%	16%	16%	17%
Total Additional Dwellings (%)	8%	19%	35%	51%	67%	83%	100%
Additional Dwellings (Qty)	1,500	2,000	3,000	3,000	3,000	3,000	3,150
Total Additional Dwellings (Qty)	1,500	3,500	6,500	9,500	12,500	15,000	18,650

Source: Wollondilly Shire Council

However, several factors such as market conditions, access to land parcels, changes in lot release timing, and decisions concerning road upgrades may affect the sequencing. Therefore, the facility staging and priorities details in the works schedule are general in their scope and subject to regular review.

6.2 Infrastructure Strategies

The precinct planning process for Appin is State led. However, to date, no infrastructure phasing plan which outlines opportunities for infrastructure to support growth in this area has been released by the State Government.

The transport works in this plan were informed by transport reports undertaken as part of the precinct planning process, including Greater Macarthur Strategic Transport Infrastructure Study Part 1 & Part 2, Jacobs, December 2017 and Appin and North Appin Precincts, Strategic Transport Assessment, WSP, October 2022. At the time of preparation of this Contributions Plan an updated traffic modelling from the Greater Macarthur Transport Network Plan is being prepared by Transport for NSW. This will be the basis of further traffic and transport modelling (Transport Management Accessibility Plan (TMAP) for planning proposals in the GMGA, including Appin.

The demand and delivery of social infrastructure has been informed by social needs assessments undertaken, including Urbis Appin Social Infrastructure and Open Space Report and CRED's Community Needs Assessment for Wilton and Greater Macarthur. Stormwater Infrastructure requirements have been derived from WSUD Scenario Modelling and Cost Estimation, WMA Water, Oct 2021, and reports prepared by the proponents who have lodged planning proposals for development within Appin Growth Areas.

It is important to clarify that the local contributions plan in Appin Growth Area still requires additional planning from relevant State Government Agencies. The comprehensive planning process involves various factors and considerations that must be addressed for the successful development of the area. The key components still uncertain at the time of preparation of this plan include:

- density areas which are to be included in a Development Control Plan (DCP)
- an updated transport study and strategy by TfNSW,

- formulation of a stormwater strategy for the whole Growth Area,
- establishment of the state infrastructure funding strategy.

6.2.1 How Have the Infrastructure Costs Been Derived?

Land Costs - The land costs have been informed by a land valuations report prepared by AEC Group for various classes of land as in Table 6.6 The land valuation method utilised is consistent with IPART's 'valuation of land Contributions plan'.

The underlying land use categories expected in this plan is the land use that is assumed would apply if the land were not identified for public infrastructure in the contributions plan. The underlying land use considers the Appin Growth Area structure plan in Greater Macarthur 2040 and the adopted structure plan in the Western Parkland City SEPP.

The land identified in this plan may be constrained for a range of reason (such as the existence of a riparian corridor, the being bush fire affection impacting development, flood-affected or encumbered with a transmission easement).

Table 6.6 – Land Cost Rates

Type	Density	Land Rate - \$ per sqm (Sep 2023)
Low density residential land	(15-25 dwellings per hectare)	\$350
Medium density residential land	(25-44 dwellings per hectare)	\$400
Rural residential (suitable for large-lot rural residential housing)	(suitable for large-lot rural residential housing)	\$95
Retail and Civic Centre land		\$410
Mixed use commercial & residential land	(45+ dwellings per hectare)	\$425
Other enterprise or employment land	(commercial / industrial)	\$350
Constrained Land	e.g. with significant slopes or environmental value, riparian or habitat corridors, flood prone land or bushfire prevention restrictions.	\$80

Source: Land Valuation Report for the Proposed Appin Growth Area Developers Contributions Plan. AEC Group. Sep 2023

Where land identified in this plan comprises more than one land use category the estimated value of the land will be based on these relative proportions in each category (e.g. 70% Constrained and 30% Low density residential).

Infrastructure Works Costs - The capital costs for the transport, stormwater, open space, recreation and community facility infrastructure have been informed by Quantity and Cost Estimation Report, Altus Group.

Other general studies considered for benchmarking comparison are:

- Road construction cost and infrastructure procurement benchmarking: 2017 update, Bureau of Infrastructure, Transport and Regional Economics
- Benchmark Costs for Local Infrastructure. Cardno, November 2021

6.2.2 Contributions Catchments and Apportionment

Appin Growth Area is a single catchment for contributions towards roads and transport, open spaces, stormwater infrastructure and community facilities land because of the interlinkage of the movement network, uniformity of open space, social infrastructure and stormwater requirements for the incoming population.

When deciding the apportionment percentages to be applied to each type of infrastructure, the following has been taken into consideration:

For open space and recreation infrastructure and community facilities land costs, Cred's Consulting Report⁶ demonstrates a clear nexus between the incoming population as a result of the residential development and the pieces of infrastructure requirements to cover their needs by applying planning industry adopted benchmarks. These costs will be apportioned 100% to residential development.

The need for transport and stormwater management infrastructure is generated by both residential and non-residential development and therefore these costs will be apportioned based on the land area. This calculation and the resulting apportionment between residential and non-residential land uses are shown in Table 6.7

Table 6.7 – Apportionment Between Residential and Non-residential Land - Transport and Stormwater Management Infrastructure

Land use	Total area (Ha)	Apportionment Factor
Residential	1333.0	99.6%
Commercial	5.1 ⁷	0.4%
Total	1338.1	100%

Table 6.8 – Apportionment Between Residential and Non-residential Land Uses by Category

Infrastructure Type	Residential Development	Non-residential - Commercial	Total
Transport	99.6%	0.4%	100%
Open Space and Recreation	100%	0%	100%
Community and Cultural	100%	0%	100%
Stormwater Management	99.6%	0.4%	100%
Administration	99.6% / 100%	0.4% / 0%	100%

⁶ Community Needs Study, Cred Consulting, December 2023, p 48.

⁷ Appin and North Appin Precincts - Retail & Employment Study, Urbis, October 2022, p 21.

6.3 Roads Transport and Infrastructure

6.3.1 Relationship Between Expected Types of Development and Demand for Additional Infrastructure

The existing road network in Appin is limited in scope and comprises generally rural roads. Accordingly, the existing road network is generally not capable of supporting increased traffic volumes and loads as a result of new development.

Future occupants of expected development will utilise a transport network comprising:

- facilities for private vehicles, including roads and intersections
- facilities for public transport, including primarily bus facilities in the short to medium term
- facilities for walking and cycling.

6.3.2 Proposed Road and Intersection Hierarchy

The strategic layout of the arterial and sub-arterial road network for the Appin Growth Area is underway through the State-Led precinct planning process. This Contributions Plan adopts the proposed road network on the updated structure plan, published by the Department in November 2022 (see Figure 6.3). The Department structure plan includes:

- a north-south transit corridor through Appin Growth Area
- OSO2 alignment is proposed at the west end of Appin Growth Area.
- Appin Road to stay as a local road within Appin Township and Wilton Road.

Wilton Road also appears to be the main connection between Appin and Wilton Growth Areas in the short to medium term. The design of the network ensures connectivity to Campbelltown and Wilton Town Centre from Appin in the long term.

The SEPP maps for Appin (part) precinct rezoning show a slightly modified layout of the transit corridor, as well as an indicative East- West connection road that would link the OSO corridor to Wilton Road.

The proposed road network for Appin Growth Area complements the broader hierarchy envisaged for the Greater Macarthur Growth Area. These local roads will connect to a network of existing and new roads in adjoining areas.

The transport works in this plan were informed by transport reports undertaken as part of the precinct planning process, including Greater Macarthur Transport Infrastructure Study Part 1 & Part 2, Jacobs, December 2017 and Appin and North Appin Precincts, Strategic Transport Assessment, WSP, October 2022. At the time of preparation of this Contributions Plan, an updated traffic modelling from the Greater Macarthur Transport Network Plan is being prepared by Transport for NSW. The Transport Management Accessibility Plan (TMAP) will be the basis of further traffic and transport modelling or planning proposals in the GMGA, including Appin. Despite the state transport network identified in the draft SIC not being completely aligned with the latest structure plan released by the Department, it has also been considered as a guide of which pieces of infrastructure will be state-funded.

The road and transport network used as a base for this plan has already apportioned out of area traffic demand and as such Appin Growth Area will be a contained precinct only pointing internal traffic demand based on the simple apportionment method from IPART guidance of April 2019 to residential development per person.

6.3.3 Funding and Delivery Dependant on Road Hierarchy

Higher order roads are proposed to be funded through state contributions. Special Infrastructure Contributions (SIC) have been replaced by the Housing and Productivity Contributions, which are imposed via conditions of consent on developments in the Precinct. More details on the applicability of the Housing and Productivity Contributions can be found by accessing DPHI's website.

Any planned higher order roads for the Precinct that are not covered by state government funding, will need to be covered by Council. Typically, these roads are funded through land or monetary development contributions.

The new collector road network is not funded through state contributions and therefore the associated land and works are included in this contributions plan, representing:

- a series of new internal collector roads to provide connections to the State Road Network and at a discrete number of locations where they cannot be provided by developers as direct works associated with the development of their land.
- additional lanes to match the demand requirements, whilst retaining local amenity and promoting active transport modes such as walking and cycling
- intersection controls for internal intersections, including roundabouts and traffic signals

IPART released a guidance on the 'Inclusion of roads in contributions plans' (April 2019). The method for assessing roads in contribution plans is that Councils should secure the delivery of local and collector roads through conditions of development consent, where possible. Where it is not possible or practical to secure the delivery of a local or collector road (or segment of road) through conditions of development consent, there may be a case for including the road in the plan. This may include one or more of the following principles

- the road fronts public or non-developable land.
- the road serves a critical role in the transport network.
- the road is required to lead or facilitate development.
- it is not practical for an individual developer to provide the road.

6.3.4 Infrastructure Works Identified in this Plan

This plan adopts the IPART guidance of April 2019. The following roads and transport infrastructure items in Table 6.9 are included in the works schedules for the following reasons:

Table 6.9 – Roads and Transport works included

Item Ref Number	Description	Connection to new development
AT1.1.1	Brooks Point Road	This road will connect residential areas to different points of the transit corridor and will assist in the south east movements within the precinct. With development occurring, Brooks Point Road will be connecting development on its northern boundary to the East West

		Connection Road. Development between the south frontage of this road and the East-West connection road will be limited, which makes it impractical to condition the upgrade of this piece of road to one developer.
AT1.1.2 AT1.3.1	Brooks Point Rd & Appin Road Intersection Upgrade Brooks Point Road Upgrade- Link to Transit Corridor	These collector roads and intersection play a critical role in the transport network, connecting residential areas to different point of the transit corridor and assisting in the south east movements within the precinct. It is not practical for an individual developer to provide these upgrades due to fronting non-developable land in various sections.
AT1.1.3	Wilton Road Upgrade (to collector road)	This collector road plays a critical role in the transport network, connecting Appin GA to Appin Township and Wilton Strategic Centre. It is not practical for an individual developer to provide this road due to fragmented ownership and also fronting non-developable land in certain sections.
AT4.2.1, ATR4.2.2	Macquariedale Road Upgrade between corridors, Roundabout along Macquariedale Road	Upgrade of that part of Macquariedale road is not practical for an individual developer due to fragmented ownership.
AT4.3.1 AT2.1.1	New Collector Road (South Appin) New Collector Road (North Appin)	These roads are required to facilitate development in North Appin Precinct and South of Appin
ABS1.1	Bus Shelters (every 400m)	The bus shelters will be located along collector roads within this plan.

6.3.5 Other Works Not Included in This Plan: New Broughton Pass Bridge

Broughton Pass Bridge is an important transport link for services, supplies and residents within the Shire. Located along Wilton Road, being the major road connecting Appin and Wilton Growth Areas, the traffic along this bridge will be increased over time.

Various studies highlight the need of a connecting Appin Growth Area to the South West of Wollondilly Shire Council, particularly Wilton, including:

- Jacobs Greater Macarthur Investigation Area Strategic Transport Infrastructure Study proposes an East-West connection via Macquariedale Road upgrade, Hume Highway Interchange and Finns Road upgrade by 2036. It also proposes a new 2 lanes bridge over Broughton Pass by 2051⁸.
- Appin and North Appin Precincts Strategic Transport Assessment Report issued by WSP in October 2022 proposes the East-West connection Road Neighborhood 2 to Hume Highway between 2030 and 2037 (approx. 8,000 lots) and a Transit corridor west to Moreton Park Road by 2051. It also states that

“the need for the bridge at Broughton Pass is reduced by the East-West Connection Road and the connection of the Transit Corridor to Moreton Park Road. These other connections can provide the

⁸ Greater Mac Arthur Investigation Area Strategic Transport Infrastructure Study, Jacobs, December 2017. p72-75.

connectivity needed to the south-west. The traffic signals at the existing one-lane bridge would increase its capacity until these new connections are built".⁹

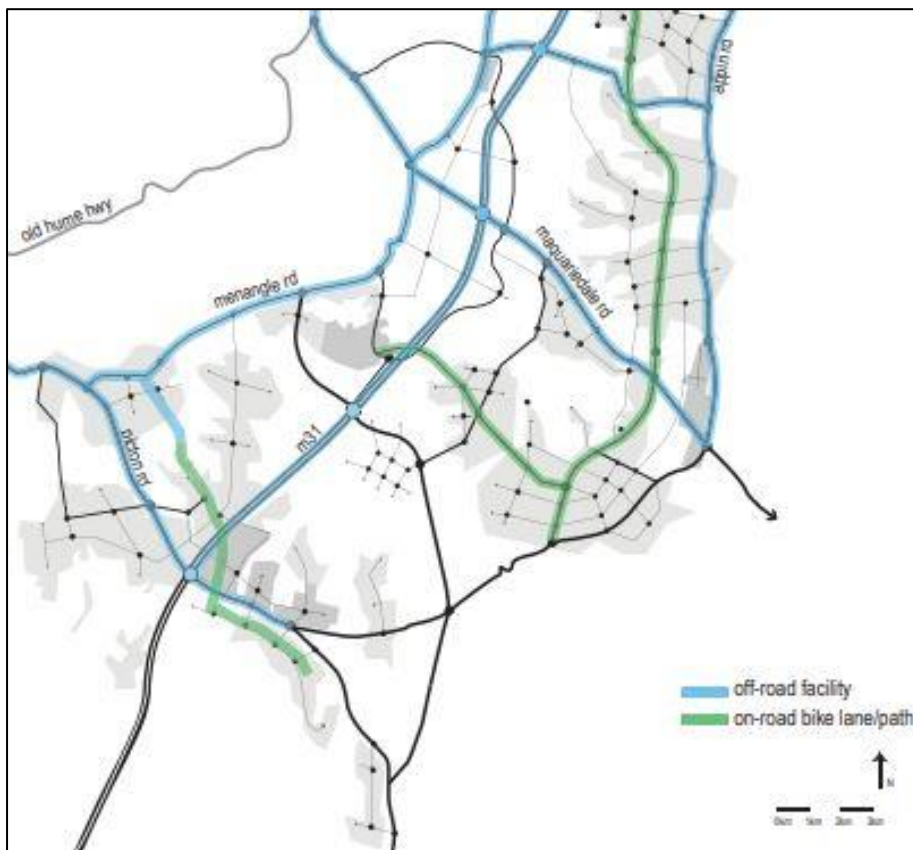
Contrary to the advice of above reports, the latest Appin Structure Plan and Appin (Part) Precinct SEEP maps released by the Department do not illustrate the connection between the transit corridor and Moreton Park Road. This leaves Appin Growth Area with only an indicative East-West Road but without proposed connections to the south west of the Shire.

Wilton being a strategic centre where main facilities and jobs are to be located servicing both growth areas, it is reasonable for a connection between the two growth areas and for it to be State funded infrastructure. It is unreasonable to levy all new development in Appin under a local contributions plan for these works.

6.3.6 Proposed Walking and Cycling Facilities

The Greater Macarthur Strategic Transport Infrastructure Study considers the transport infrastructure requirements to support the development of two major urban spines from Macarthur to Douglas Park and Maldon to Wilton East. Figure 6.4 shows the Regional Bike Network prepared by Jacobs. It is to be noted that, despite not being completely aligned with the latest Structure Plan of the area, it still assists as a guide for infrastructure requirements.

Figure 6.4 – Regional Bike Network



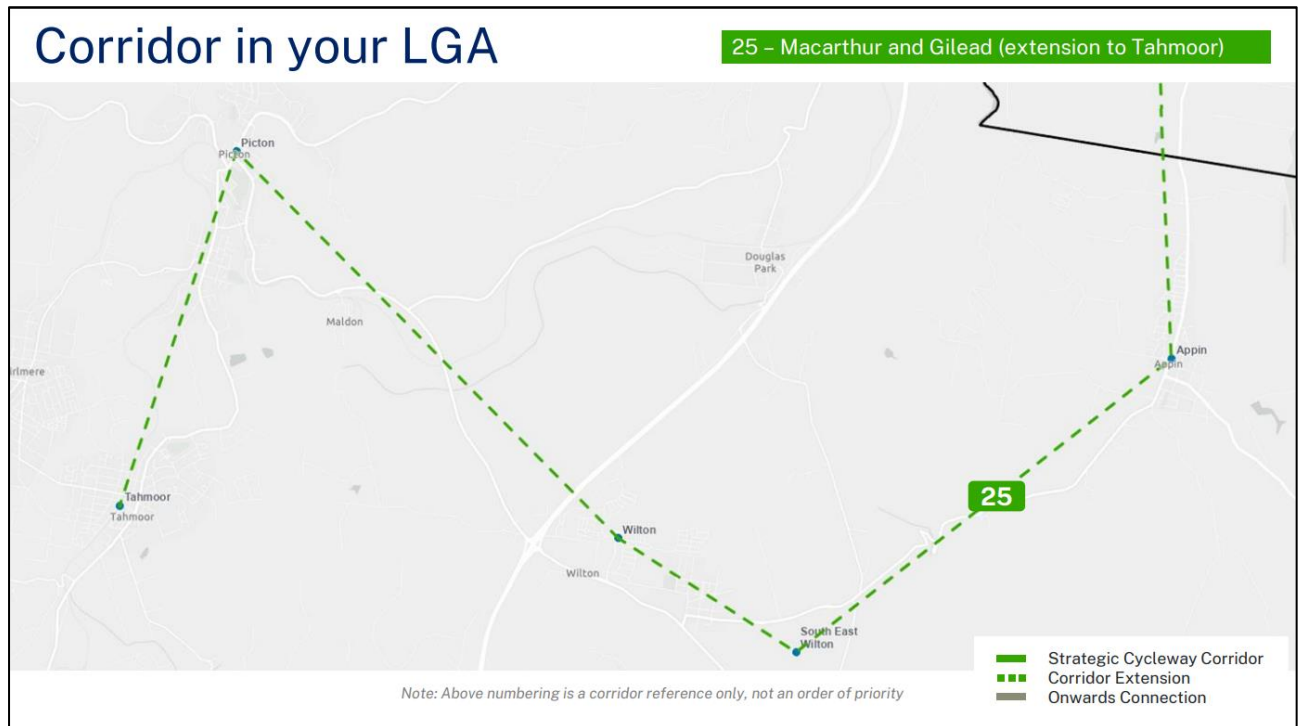
Source: Greater Macarthur Strategic Transport Infrastructure Study, Jacobs, December 2017. P 45

In early 2023 the state government published an update on the Strategic Cycleway Corridors for Greater Sydney. They propose a stated-funded corridor which connects Greater

⁹ Appin and North Appin Precincts Strategic Transport Assessment Report, WSP, October 2022. p31 and p34.

Macarthur to Wilton, Picton and Tahmoor. However, neither the routes of such corridor, nor the timing for delivery have been identified on the publication.

Figure 6.5 – Strategic Cycleway Corridors for Greater Sydney



Source: Transport for NSW, 2023

The draft Wollondilly Bike Plan Update, SLR, June 2019 envisages that these urban areas are to be serviced by a number of active transport routes as shown in with the key north-south corridors within the Wollondilly LGA consisting of Hume Motorway, Menangle Road, Finns Road-Old Hume Highway; and Appin Road. The key east-west corridors identified within the study consist of Macquariedale Road; and Picton Road.¹⁰

Providing viable alternatives to the private car for journeys with destinations both within and outside the development area is viewed as essential to encouraging sustainable development. New cycleways and pedestrian paths are planned within the development connecting DA direct works as part of DA to, and compatible with, Wollondilly Shire Council’s planned network of shared cycle and pedestrian paths. The pedestrian and cycle networks are designed to have a greater level of permeability than provided to vehicles to promote their greater use. The cycle routes proposed are mainly 2.5m wide share pathway facility each side of collectors’ roads. This active transport infrastructure has been included in the Contributions Plan within the cost of delivering the collector roads, as per cross sections provided in Appendix A.

¹⁰ Draft Wollondilly Bike Plan Update, SLR, June 2019. p6

6.3.7 Public Transport Facilities

Jacobs Transport Study proposes a Public Transport corridor connecting Douglas Park, West Appin, North Appin to Gilead, and Macarthur. This spine provides connections to the new major centre (West Appin), existing regional centres (Campbelltown / Macarthur), and local centres in-between.¹¹

Appin 2040 Structure Plan includes this Public Transport corridor up to the West end of “(West) Appin Precinct. Further to this, the proposed collector road widths of 22m to cater for the minimum 3.5m standard traffic lane widths desirable on all road types.¹²

However, bus stops located on the collector road network are not included and must be funded from local infrastructure contributions. Bus shelters must be spaced every 400m. Based on a total collector road network length of around 7km, and numerous road junctions which need to be accounted for in the distribution of bus stops, it is estimated that 17 bus shelters are required across the network.

All roads and transport infrastructure items included in this Plan are to be designed and delivered in accordance with Council’s Engineering Specifications.

The new transport network is required wholly to support the urban development. All of the roads are specifically required to support the Appin Growth Area development and are apportioned 100% to the Plan.

The need to provide transport infrastructure as identified in this Plan is predominately generated by the residential development of Appin Growth Area. Non-residential developments in Appin GA will serve the new residents, and therefore any trips populating the future employment (non-residential) development within the proposed industrial and business zonings will also generate demand for this critical infrastructure. It is therefore appropriate that the costs be apportioned between residential and non-residential land uses based on the land areas, as shown in Table 6.8.

6.3.8 Roads and Transport Infrastructure Nexus and Apportionment

Nexus between the new development and the transport infrastructure included in this plan has been detailed in Table 6.9.

The need for transport infrastructure is generated by both residential and non-residential development and therefore these costs will be apportioned based on the land area. This calculation and the resulting apportionment between residential and non-residential land uses are shown in Table 6.8

6.4 Open Space and Recreation Facilities

6.4.1 Relationship Between Expected Types of Development and Demand for Additional Public Facilities

A population of 55,950 residents in the Appin Growth Area will place significant demand for new open space and recreational facilities. Recognizing the significance of this demand, Wollondilly Shire Council engaged Cred Consulting to undertake an assessment of the extent and nature of this demand and provide recommendations for the required local, district, shire-wide and regional social infrastructure. These proposed measures aim to foster social cohesion, health and wellbeing for Wilton Growth Area and Appin Growth Area. The detailed recommendations are outlined in the Community Needs Study, prepared by Cred

¹¹ Greater Macarthur Investigation Area, Strategic Transport Infrastructure Study, Jacobs, December 2017. p30

¹² Public Transport guidelines. p10.

Consulting in December 2023. However, it is be considered that Cred’s analysis for Appin includes the development and existing facilities in existing Appin Township, which is not included in the catchment area of this contributions plan.

The proposed infrastructure is consistent with adopted structure plans in the State Environmental Planning Policy (Precincts - Western Parkland City) 2021 (the SEPP), which stated how for open space and recreation infrastructure, precinct planning must:

Provide a range of open space and recreation areas and facilities for passive and active recreation, including local playgrounds and neighbourhood parks.

Maximise the accessibility and utility of open space areas are to allow use by the community.

Locate and design recreational activities and facilities within each precinct to maximise conservation of the cultural and natural environmental values of buildings, works and places within the precinct.

6.4.2 Recreation Demand Assessment Based on Forecast Demographics

With 55,950 total residents expected, a total of 158.3 hectares of open space is required to meet the benchmark of 2.83ha per 1,000 people. This provision will be addressed via a set of regional and local, passive and active open spaces distributed across the Appin Growth Area. Table 6.10 summarizes the adopted Quantity Benchmark Requirements for Open Space.

Table 6.10 – Quantity Benchmark - Minimum Requirements for Local Open Space

Hierarchy	Benchmark	Size	Scenario: 55,950 people
Per person	2.83ha per 1,000	Varies	158.3 ha
Regional Park (State owned)		20 ha	Cred report
Parks (Passive Open Space)	1.415ha per 1,000	Varies	79.2 ha
Sports Spaces (Active Open Space)	1.415ha per 1,000	Varies	79.2 ha
Active sports grounds - double playing fields and amenities	1 Double playing fields and amenities per 5,000 people	5 ha	12 double playing fields, Equivalent to 60 ha of Active Parks. To be delivered in sports grounds, with two double playing fields each in line with NSW Government Architect’s guidelines and design guidelines in attachment A.
Small size passive parks - local level	1 per 2,000 people- 400m walking distance	0.3 ha to 0.5 ha	28 parks
Medium size park - district level	Within 2km of residents’ homes	2 ha to 5 ha	12-13 parks

Linear parks, other multiple-use open space	NA for linear	Minimum 20m wide	NA
Multi-purpose outdoor courts	1 per 4,200 people	approx. 0.05 ha per court + runoff space and amenities	14 multipurpose courts, + Netball, Basketball and Tennis courts
Play space	1 local playground per 2,000 people in local parks	300 m ² minimum within a park	28 local playgrounds
	1 district playground per 25,000 people in district parks	Min 1,000 sqm	3 district playgrounds
Outdoor fitness stations	1 station per 10,000 people	Min 250 sqm -	6 outdoor fitness stations

6.4.3 Existing Open Space Provision

Given the Appin Growth Area is predominantly a rural landscape with a range of agricultural activities, there is no existing open space provision that will cater for the incoming population needs.

Appin Village has been determined as self-sufficient in terms of open space provision and it is not considered part of this growth area for contributions purposes. Therefore, none of the open space or recreation facilities located within the village account as provision for the new development in Appin Growth Area.

Appin Growth Area will serve as a self-contained community, providing essential local amenities and facilities for the incoming population.

6.4.4 Local passive Open Space Requirements

Community Needs Study¹³ provides benchmarks recommendations for the required local, district, shire-wide and regional social infrastructure in Wilton Growth Area and Appin Growth Area.

To meet the demand of the new population in Appin Growth Area, the following local passive open space facilities are proposed:

48 ha of medium- size local parks - approximately 13 parks of between 2ha and 5 ha each.

15.5 ha of small local parks - approximately 35 parks of between 0.3 and 0.5 ha each.

Medium-size parks (or District Parks) are to have a minimum useable area of 2 ha, excluding any encroachment from stormwater or other infrastructure or environmental areas. The level of open space planning will be addressed at the DA stage when more detail regarding the scope and scale of development is provided. All off these parks will include the following level of durable design, fit for purpose and low maintenance embellishment:

- A range of recreation opportunities, including exercise equipment, multipurpose courts, off-leash dog exercise areas, kickabout spaces, and youth recreation spaces
- Shade structures, picnic/BBQ areas
- Amenities (male/female and accessible)

¹³ Community Needs Study, Cred Consulting, December 2023

- District-level play space (large, inclusive play space with equipment for a range of ages, providing a unique offer).
- Water bubblers, bins, seating and walking paths
- An element of water play, ranging from a mister to more sophisticated water play, to ensure usability during hotter weather.

Small local parks are to have a minimum useable area of 0.3 ha, excluding any encroachment with the Upper Canal Corridor, stormwater or other infrastructure and/or environmental areas.

The level of open space planning will be addressed at the DA stage when more detail regarding the scope and scale of development is provided. All local parks will include the following level of durable design, fit for purpose and low maintenance embellishment:

- A range of recreation opportunities, including local play spaces, exercise equipment, multipurpose courts, off-leash dog exercise areas, and community gardens.
- Shade structures over picnic/BBQ area and all play spaces.
- Water bubblers, bins, seating and walking paths.
- Amenities (male/female and accessible).

Hilltop and linear open spaces may adjoin but any encroachment from stormwater or other infrastructure or environmental areas will be excluded from open space provision calculations. These areas must be designed to respond to site constraints and be low maintenance, easily accessible. Details of open space works are described in the Works Schedule.

This Plan recognises that the location of some open spaces is indicative and subject to assessment in a subdivision application. However, the following parameters should remain consistent across the planning process:

- Playing fields to be located near future dwellings. The Draft CP applies this parameter by locating most playing fields where most of the development is to occur within Appin Growth Area. It is not based on a consistent spatial distribution, but on number of dwellings expected by release area.
- Passive open space is to be located within major developers' holdings rather than minor landowners. This aligns with the principle that the provision of land and works for new or augmented infrastructure is to be afforded by those who generate the demand.
- Cred Consulting recommends co-locating medium size (district) parks with double sports fields for combined variation.¹⁴

Further to the local open space provision, Cred's Report recommends the delivery of 2 destination parks of 10 ha each in Appin Growth Area. Destination parks should include significant views or landmarks to contribute to a sense of place, have a high level of amenity and embellishment, and offer a variety of activities for everyone. Outdoor recreation facilities such as regional level playgrounds and youth precincts (BMX/skateparks) should be located within these parks. These 'destination parks' are not considered as local open space provision and their delivery is to be funded via arrangements between the State Government and developers.

¹⁴ Community Needs Study, Cred Consulting, December 2023. p67

6.4.5 Active Open Space, Playing Fields and recreation Facilities Requirements

The benchmarking analysis recommended:

Active (Playing Fields) Open Space

- 12 double playing fields distributed across all Appin Growth Area, close to public transport and active transport routes. All of these double playing fields should be a minimum 5ha Sportsground in size. If one double paying field provided, it needs to include amenities buildings of 400sqm min, change rooms for players and officials, canteen, toilets, storage for different sports clubs, lighting, irrigation, meeting space and on-site car parking for 100 cars.
- 38 new multipurpose outdoor courts should be provided across Appin Gross Area. This includes tennis, basketball and informal courts. Courts should be provided in groups of at least two to four to minimise conflicts between users and support use for social competitions, training, and school activities. Multipurpose courts could include combinations such as tennis/futsal/netball/ basketball/volleyball/badminton.
- The active open space provision is to be consistent with Council's Land Dedication Policy and is to exclude any encroachment with the Upper Canal Corridor, stormwater or other infrastructure and/or environmental areas.

Passive Open Space

- Play spaces: in total, 28 new playgrounds should be provided in local parks and pocket parks across Appin Growth Area. Each play space should provide a range of play opportunities to meet the needs of different age groups. They often have a range of facilities, with around five or more options targeted towards 0-12-year olds. Some of these play spaces may be grouped by being delivered in larger open spaces and be co-located with outdoor courts or half courts to provide for a range of age groups and preferences Local play spaces should be within walking distance of homes and key destinations.
- 3 higher level play spaces should be provided in medium size (district) parks. They should have a larger range of facilities, or have custom designed play opportunities for different age groups and abilities (cater for ages 0-5, 6-12 and 13+). They are up to 2km or a 5-10min drive from people's homes. Typical components should include a substantial offering of play equipment and a non-structured play area. Ideally, will include special features such as an imaginative and creative area within a natural setting or an area for adult/carer amenity.
- Youth spaces should be provided and can be integrated as part of local parks. They can include skate/bike facilities, youth parkour, hard courts and informal fields.
- Outdoor fitness spaces of minimum 250 sqm should be provided. They must be free, accessible and provide outdoor recreation elements like outdoor exercise equipment, exercise/boot camp spaces and circuit paths

The passive open space provision is to be consistent with Council's Land Dedication Policy and is to exclude any encroachment with the Upper Canal Corridor, stormwater or other infrastructure and/or environmental areas.

6.4.6 Open Space and Recreation Facilities Nexus and Apportionment

In accordance to the benchmarking analysis applied, the need for open space and recreation within the release area is generated wholly by residential development and therefore these costs will be apportioned 100% to residential development.

6.5 Community and Cultural Facilities

6.5.1 Relationship Between Expected Types of Development and Demand for Additional Community Facilities

The anticipated size and characteristics of the resident population in Wilton and Appin Growth Area has been analysed by Cred in the Community Needs Study, Dec. 2023. The community facilities requirements for Appin Growth Area are also detailed in this report.

The following is summary of the information and approach used to arrive at the community and cultural facilities requirements of the growth area.

6.5.2 Existing Community Facilities Provision

The existing limited provision of local facilities reflects the peri urban nature of Appin, as there are currently no shire-wide or district level multipurpose community centres servicing this area.

In general, the Wollondilly Shire lacks regional facilities, with services in Campbelltown and to a lesser extent Liverpool, Penrith and Wollongong relied upon by residents of the Wollondilly Shire. While the Appin Growth Area will have a higher population than Wilton Growth Area, Wilton serves as the strategic centre for the region. Therefore, Cred Consulting recommended to locate most of the shire-wide infrastructure in Wilton to ensure convenient access for the rest of the LGA.¹⁵

Appin population is currently serviced by Picton Library which has been recently upgraded but still does not meet the required benchmarks to be a regional library for the whole Shire. On the other hand, the Wollondilly Arts Performance Centre in Picton, whose construction has started in 2023, has been planned to serve the population forecasted to 2036, without considering the development in Appin Growth Area.

Within Appin Village there is only one Council owned Community Hall. With a floor space area of 410 sqm, provides a single space with capacity for up to 270 people. The hall is available for community hire and is supported by amenities including a kitchen and accessible toilets. This facility is located on Sportsground Parade, adjacent to Gordon Lewis Oval, approximately 1km walking distance along local roads west of the existing village centre. This facility is unlikely to support the needs of the incoming population in Appin Growth Area.

Appin Growth Area will serve as a self-contained community, providing essential local amenities and facilities for the incoming population.

6.5.3 Community Facilities Demand Assessment and Requirements Based on Forecast Demographics

While Appin alone does not meet the population threshold to indicate a need for regional facilities, the population of the whole Shire will reach the threshold by 2040. These higher-level facilities requirements and provisions to serve over 50,000 people are discussed in the Community Needs Assessment prepared by Cred Consulting in December 2023.

In terms of facilities to be provided for 10,000 to 50,000 people, the same benchmarking adopted for Wilton Growth Area has been adopted for Appin. Consideration was also given to the incoming population analysis of planning proposals lodged for Appin, as described in the Social Infrastructure and Open Space Assessment Appin Precinct by Urbis.

¹⁵ Community Needs Study, Cred Consulting, December 2023. p6

A summary of the assessment of the new population needs based on available benchmarks and evidence are in Table 6.11.

Table 6.11 – Benchmark Requirements for Community Facilities – Appin GA Population: 55,950

Facility	Benchmark/evidence	Requirement	Provision
Facilities for Population between 50,000 - 100,000			
Shire-wide Central Library	1 per 100,000 people	1 unit	Demand met through planned provision in Picton Library.
Facilities for Population between 20,000 - 50,000			
District Level Library	1 per 35,000 to 65,000 people 35 m ² per 1,000 people	1-2 units 1,960 m ²	Combined Floor Area of 7,160 m ² . Co-located spaces including a central library, theatre and art gallery, large and flexible community hireable spaces, function centre, cultural spaces, youth and senior spaces.
Community Facilities			
Community facilities (all sub Categories)	80 m ² per 1,000 people	4476 m ²	
Integrated Multipurpose Facility	1 per 20,000 to 50,000 people	1-3 units	
Function and conference centre	1 per 20,000 to 30,000 people	2- 3 units	
Youth centre / youth spaces	1 for every 3,000 young people aged 13 to 19	1-2 units	
Senior spaces	1 per 15,000 to 20,000 people	3-4 units	
Cultural Facilities			
Cultural Facilities (all sub Categories)	20 m ² . per 1,000 people	1,119 m ²	
District level - Arts and cultural space	1 per 45,000 people	1 unit	
Theatre / Rehearsal space	1 per 30,000 to 50,000 people	1-2 units	
Facilities for Population between 10,000 - 20,000			
Local community centre/hall	1 per 10,000 people	5-6 units	5 Multipurpose Community Centres of approx. 500 m ² -600m ² each. Located within town centre, or co-located with sporting facilities. Located close to public transport.
Local level - Arts and cultural space	1 per 10,000 people	5-6 units	

Table 6.12 - Benchmark Requirements for Recreation Facilities – Appin GA Population: 55,950

Facility	Benchmark/evidence	Requirement	Provision
Indoor courts	1 per 10,000 people	6 units	1 indoor recreation centre (sports courts + aquatic centre)
Local level aquatic centre	1 per 30,000 people	2 units	
District level aquatic Centre	per 75,000 people	1 unit	10,000 m ² land with minimum ground floor area of 5,000 m ²
Indoor recreation centre	1 per 50,000 to 100,000 people	1 unit	

Summary of Community Facilities Provision in Appin Growth Area:

- One community hub with minimum of 1,960 m² for a branch library space, 3000 m² of community facility and additional 3,000 m² of cultural spaces (theatre and gallery spaces). The combined floor area is to of **7,160 m²** with a minimum ground floor area of 2,000 m². Co-located spaces including a branch library, theatre and art gallery, large and flexible community hireable spaces, function centre, cultural spaces, youth and senior spaces. ¹⁶Minimum piece of land required for this Community Hub is **13,000 m²**.
- 5 Multipurpose community Centres of 570 m² each. Minimum piece of **land** required for each of these centres is **1,400 m²**.
- One Indoor Dry & Wet Recreation Facility (sports courts + aquatic centre). Ideally located within walking distance of town centre, sports fields, and in walking distance (800m) to schools. This should include a minimum of a 25m indoor pool, a 50m outdoor pool, outdoor splash pad, minimum of 4 indoor multi-purpose courts available for casual hire or by groups. The remaining land area to be dedicated for amenities such as roads, parking, public transport stops and landscaping. Minimum piece of **land** required for this facility is **10,000 m²**. ¹⁷

In order to comply with IPART’s practice notes essential works list, only the cost of acquiring the land for community facilities have been considered for the calculation of contributions rates in Appin Growth Area.

6.5.4 Community and Cultural Facilities Nexus and Apportionment

In accordance to the benchmarking analysis applied, the need for community and cultural facilities within the release area is generated wholly by residential development and therefore the cost of acquiring these pieces of land will be apportioned 100% to residential development.

¹⁶ Community Needs Study, Cred Consulting, December 2023. p.68

¹⁷ Community Needs Study, Cred Consulting, December 2023. p69

6.6 Stormwater Management Infrastructure

6.6.1 Relationship Between Expected Types of Development and Demand for Stormwater Infrastructure

Wollondilly's Integrated Management Policy, Strategy and WSUD Guidelines have a defined outcome of zero impact to watercourses. These documents seek to protect waterway health ensuring the whole of the water cycle (including stormwater, wastewater and potable water) is managed to support the following:

- community liveability, greener neighbourhoods, recreation and amenity
- mitigating heat island effect
- local biodiversity
- water conservation, water reuse and recycling
- local industries including agriculture and other high-water users to promote local jobs
- climate change mitigation and resilience

Wollondilly Integrated Water Management Policy requires all new development to reduce the impact of stormwater and wastewater on waterways and support the delivery of the environmental and planning aspirations of the Wollondilly Community Strategic Plan.

All new developments must comply not only with the Wollondilly Integrated Water Management Policy and Strategy, but also with WSUD Guidelines and Engineering Design Specifications. Therefore, Stormwater runoff in the Appin Growth Area is proposed to be managed through a comprehensive Water Sensitive Urban Design (WSUD) approach. Developments are required to adopt a 'flexible and adaptable' delivery model, on the basis that there is an increasing need for water sensitive urban design (WSUD) to mitigate and respond to urban development and climate change and wherever possible, look for flexible options that enable smarter technology and solutions to be incorporated in coming years. Water Sensitive Urban Design (WSUD) includes assets that filter, collect or mitigate surface water runoff and wastewater from downstream receiving environments.¹⁸

Council's WSUD Guidelines detail future development scenario that aims to reduce runoff from impervious surfaces to a near natural condition. The scenario targets reduction in potable water demands by > 70% and reduction in stormwater runoff volume to an equivalent of between 2.5 and 3 ML / year / 1 ha of urban area.¹⁹

6.6.2 Stormwater Infrastructure Demand Assessment Based on WSUD Modelling and Net Developable Land

Some of the WSUD stormwater management infrastructure, such as infiltration swales, will be located within the road reserve. This contributions plan has accounted for those infrastructure costs within the 'Roads and Transport Infrastructure' items. Roads cross sections that include stormwater management infrastructure are available in Appendix A.

At the time of preparing this Contributions Plan there is no comprehensive Growth Area-wide Stormwater strategy or study available. Therefore, the reports prepared by the proponents' consultants as part of their planning proposals have been used as references, as follows:

- Calculations made for Appin (Part) Precinct in the Water Cycle Management Strategy Report - Appin (Part) Precinct by J. Wyndham Prince, October 2022 have been taken as a reference and extrapolated to the whole Growth Area to estimate stormwater

¹⁸ Wollondilly Integrated Water Management Policy, December 2020.

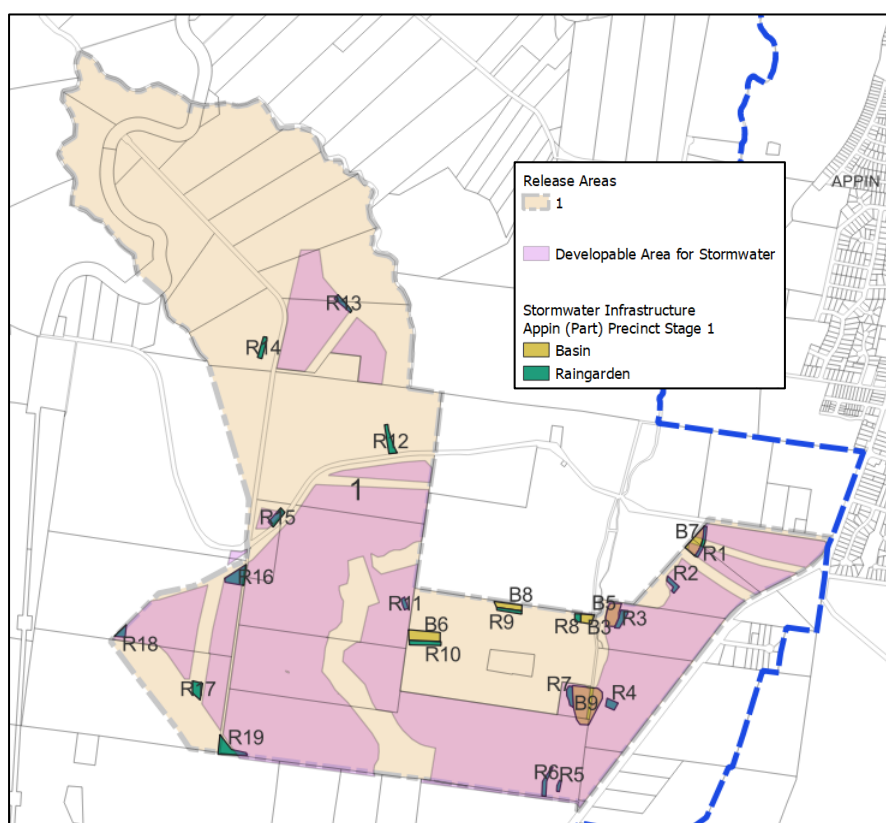
¹⁹ Water Sensitive Urban Design Guidelines, Wave Consulting, 2020.

management infrastructure land and works required. This report states that ' The MUSIC model setup has been undertaken consistent with Councils 'MUSIC Template' (2020), 'Integrated Water Management Strategy (2020) and 'WSUD Guidelines' (2020) as well as the 'NSW MUSIC Modelling Guidelines' (BMT WBM, 2015).'

Council mapped all the basins and raingardens identified on Figure 6-4 of such report and via georeferenced software calculated their area. The developable area of Appin (Part) Precinct- Stage 1 was calculated via the same method and estimated to be 183.2 Ha, while the total area required for basins and raingardens is 8ha. This represents 4.4% of the developable area within Stage 1

The following figure shows the Developable Area of Appin (Part) Precinct- Stage 1, basins and raingardens.

Figure 6.6 – Appin (Part) Precinct - Stage 1 - Developable Area, Basins and Raingardens.



Source: Wollondilly Shire Council based on Water Cycle Management Strategy Report - Appin (Part) Precinct by J. Wyndham Prince, October 2022

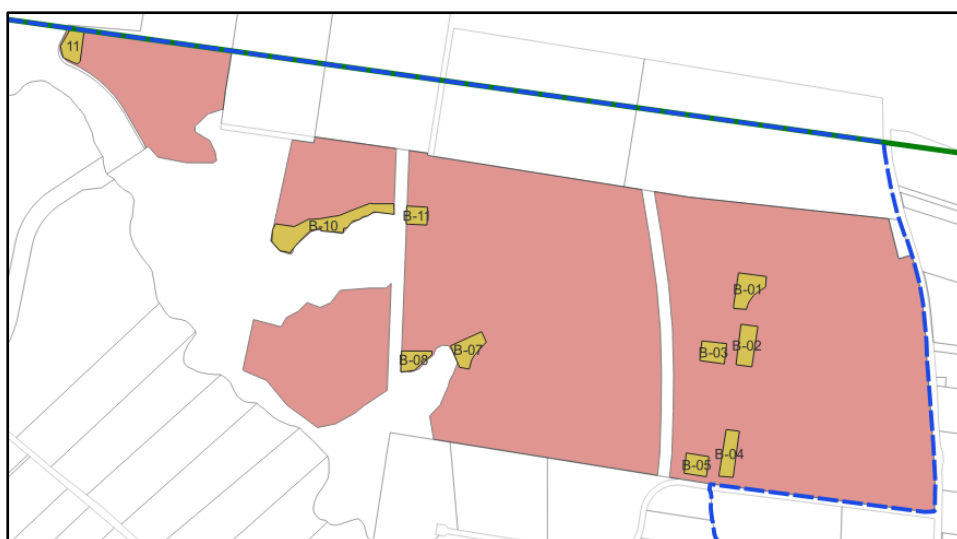
- WCMS & Flood Modelling Report North Appin proposal, commissioned by Ingham's Property Group to Craid & Rhodes, states that bioretention basins were sized to be approximately 450m² of bioretention per hectare.²⁰ 450sqm/10,000sqm represents

²⁰ WCMS & Flood Modelling Report North Appin proposal, Craid & Rhodes, June 2023. p33

4.5% of developable area and is in line with the calculations made from Appin (Part) Precinct - Stage 1

Council mapped all the basins and raingardens identified on Figure 6.6 of WCMS & Flood Modelling Report North Appin and via georeference software calculated their area. The developable area of North Appin Planning Proposal was calculated via the same method and estimated to be 223 Ha, while the total area required for basins and raingardens is 8.7ha. This represents 3.9% of the developable area within North Appin Planning Proposal. Figure 6.7 shows the Developable Area of North Appin Planning Proposal, basins and raingardens.

Figure 6.7 - North Appin Planning Proposal - Developable Area, Basins and Raingardens.



Source: Wollondilly Shire Council based on WCMS & Flood Modelling Report North Appin proposal by Craid & Rhodes, June 2023

A detailed stormwater strategy for all release areas and stormwater catchment areas in Appin has yet to be developed to define the infrastructure requirements for stormwater management. Until these studies and reports become available, Council acknowledges the current available studies and calculations. Council also recognises that the stormwater management strategy may require additional infrastructure outside of the road reserves. Based on the above calculations, 4.3% of the developable area will be allocated for stormwater management infrastructure across the entire Appin Growth Area until more detailed studies become available and this Contributions Plan can be refined.

6.6.3 Developable Area for Stormwater Requirements Analysis Purposes

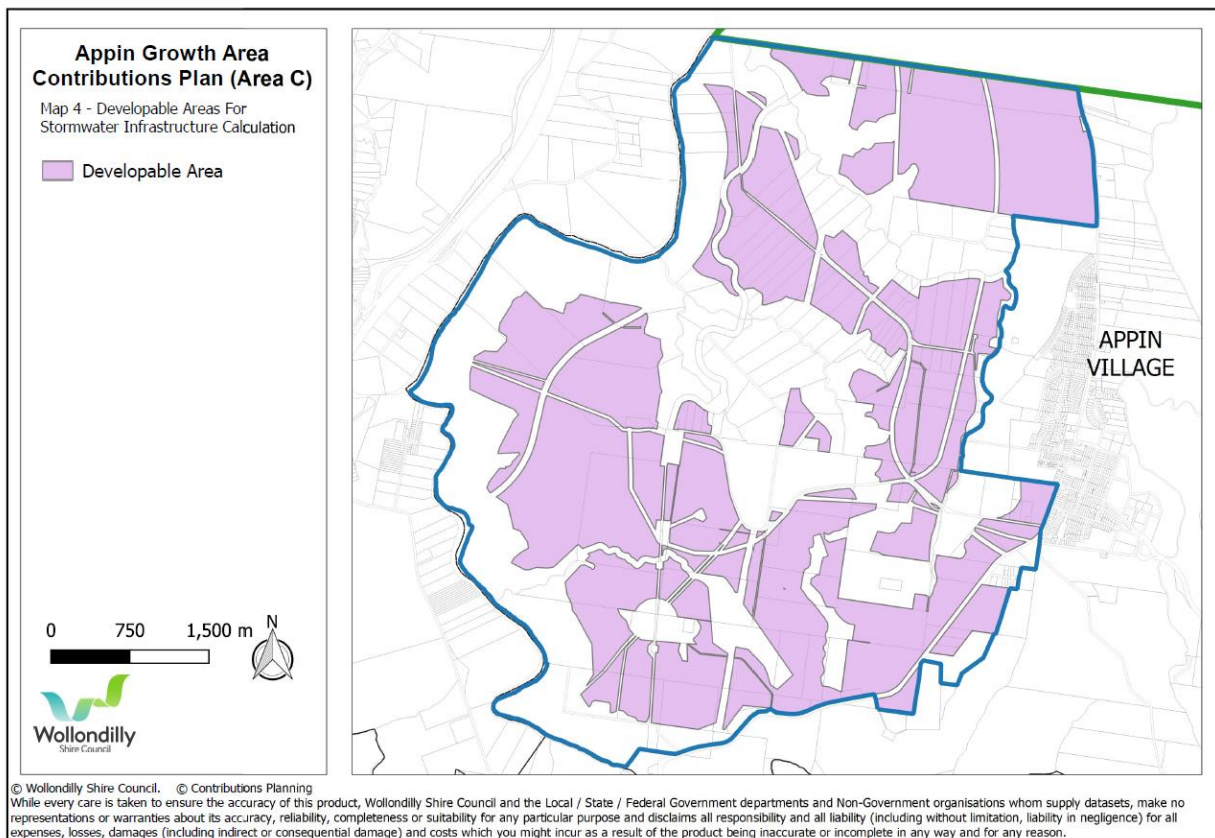
Certified Urban Capable land identifies where future urban development is likely to occur, subject to other approvals. Development in these areas does not require further biodiversity assessment under the BC Act or EPBC Act, if consistent with the CPCP and its approvals. It excludes land that does not have biodiversity approval under the BC Act and EPBC Act, protected koala corridors, and land that is also excluded from NSW strategic biodiversity certification and strategic assessment under the EPBC Act and will not receive any biodiversity approvals under the CPCP due to diverse factors.²¹

²¹ Appin & North Appin Precincts Urban Context Report, Urbis, November 2022. p29

For the purpose of calculating stormwater management infrastructure requirements, WSC has included all certified- urban capable land within Appin Growth Area, and excluded:

- Land zoned on WSC LEP 2011 as R2, R3, RE1, E1, E4, C2, SP2.
- State Heritage Land
- Appin SEPP heritage land
- LEP heritage land
- Easements
- Identified Transit Corridors
- Land on PR12185, due to its proximity to colliery
- Land rezoned via the WSC LEP amendment No. 38, as these are already approved developments, and have already been conditioned via DA/2021/144/1 & DA/2021/249/1 consents.
- Regional park, as it appears in the Department’s Structure Plan for Appin.

Figure 6.8 – Developable Area for Stormwater Infrastructure Calculation



Source: Wollondilly Shire Council

Further calculations have excluded the required land for active and passive open spaces, as well as land for future community facilities. Table 6.13 shows these calculations.

Table 6.13 – Developable Area for Stormwater Calculation Purposes – Appin Growth Area

Category	Area (ha)
Appin Growth Area	2,950
Exclusions*	(-1,450.0)
New local active and passive open space	(-139)
New land for community facilities	(-3)
Developable Area for Stormwater calculation purposes	1,358

The Developable Area for stormwater calculation purposes of the whole Appin Growth Area is 1,358Ha.

The area required for stormwater management infrastructure outside of the road reserve, for the whole of Appin Growth Area is assumed to be 1,358 Ha x 4.3% = 58 Ha.

6.6.4 Existing Stormwater Infrastructure Provision

The existing stormwater management infrastructure in Appin Growth Area is limited in scope and reflect the rural development in the area.

Appin Village is not considered part of Appin Growth Area for the purposes of this contributions plan and existing stormwater infrastructure within Appin Village is not included.

6.6.5 Stormwater Infrastructure Requirements

The land required for WSUD Stormwater Management facilities adopted in this plan is 4.3% of 1,358 Ha, which equals to 58 Ha, them being utilised for basins, raingardens or wetlands located outside of road reserves and required to support the WSUD strategy.

The cost of wetlands, basins, swales and raingardens have been prepared under the same assumptions as WSUD Scenario Modelling and Cost Estimation report by WMA Water, Oct 202, adopted by Council, and are:

Wetlands and Detention Basins

- Excavation is based on 0.75m per m² for the area of the wetland plus the volume of detention required;
- Landscaping is 80% of the reserve (20% not landscaped is paths etc. and open water in the wetlands);
- Maintenance Track is a 4m track to the sediment basin;
- Clay Liner is the area of the wetland; and
- Inlet & Outlet works include headwalls, rock beaching, dual outlet pit.
- Infiltration/Detention Swales
- large swale Excavation = area x 0.5 plus infiltration media volume
- Planting = swale area
- Additional asphalt = length of road (minus nature strip and swale area) x 7m
- Small swale excavation = 0.5m³/m
- Excavation for 5% large swales = swale area x 1.25m

Raingardens

- Raingarden excavation = area x 0.5 plus filter media

All stormwater management infrastructure included in this Plan is to be designed and delivered in accordance with Council's Engineering Specifications. Stormwater Management Infrastructure Nexus and Apportionment

New stormwater management infrastructure will be purely required as a result of the new development in Appin Growth Area.

The need for this infrastructure will be generated by both residential and non-residential development and therefore these costs will be apportioned based on the land area. This calculation and the resulting apportionment between residential and non-residential land uses are shown in Table 6.7.

7 INFRASTRUCTURE SCHEDULES

Map Ref	Local Infrastructure Item	Qty	Land Area (m2)	Land Type	Land Rate Indexed (\$)	Cost of Land (includes 5% acquisition allowance)	Works (unit)	Quantity Required	Works Rate Indexed (\$)	Cost of Works	On cost %	Contingency	Long Service Levy (%)	Total Costs of Works	Total Costs (Land & Works)	Funds Collected	RESIDENTIAL DEVELOPMENT						What establishes Nexus ?	Cost Source (land)	Cost Source (works)	Priority/Staging
																	Cost apportioned to residential development in this plan	Total cost apportioned to plan	Contribution catchment (persons)	Land Contribution Rate (\$/person)	Works Contribution Rate (\$/person)	Contribution rate (\$/person)				
Essential Works List																										
LP1.1.a	Local Open Spaces with Play Space - 3 x 4,000 sqm each	3	12,000	Low density residential land	\$ 350	\$ 4,410,000	m ²	12,000	\$ 361.69	\$ 4,339,087	15%	20%	0.25%	\$ 5,868,615	\$ 10,278,615	\$ -	100%	\$ 10,278,615	55,950	\$ 79	\$ 105	\$ 184	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 park every 800 dwellings approximately
LP1.1.b	Local Open Space With Play Space and Fitness Station - 1 x 4,000 sqm	1	4,000	Low density residential land	\$ 350	\$ 1,470,000	m ²	4,000	\$ 429.31	\$ 1,717,238	17%	20%	0.25%	\$ 2,356,909	\$ 3,826,909	\$ -	100%	\$ 3,826,909	55,950	\$ 26	\$ 42	\$ 68	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.2.a	Local Open Spaces with Play Space - 3 x 3,000 sqm each	3	9,000	Low density residential land	\$ 350	\$ 3,307,500	m ²	9,000	\$ 382.68	\$ 3,444,150	15%	20%	0.25%	\$ 4,658,213	\$ 7,965,713	\$ -	100%	\$ 7,965,714	55,950	\$ 59	\$ 83	\$ 142	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.2.b	Local Open Space With Play Space and Fitness Station - 1 x 3,000 sqm	1	3,000	Low density residential land	\$ 350	\$ 1,102,500	m ²	3,000	\$ 454.79	\$ 1,364,355	17%	20%	0.25%	\$ 1,872,578	\$ 2,975,078	\$ -	100%	\$ 2,975,078	55,950	\$ 20	\$ 33	\$ 53	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.3.a	Local Open Spaces with Play Space - 3 x 3,000 sqm each	3	9,000	Low density residential land	\$ 350	\$ 3,307,500	m ²	9,000	\$ 382.68	\$ 3,444,150	15%	20%	0.25%	\$ 4,658,213	\$ 7,965,713	\$ -	100%	\$ 7,965,714	55,950	\$ 59	\$ 83	\$ 142	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.3.b	Local Open Space With Play Space and Fitness Station - 1 x 3,000 sqm	1	3,000	Low density residential land	\$ 350	\$ 1,102,500	m ²	3,000	\$ 454.79	\$ 1,364,355	17%	20%	0.25%	\$ 1,872,578	\$ 2,975,078	\$ -	100%	\$ 2,975,078	55,950	\$ 20	\$ 33	\$ 53	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.4.a	Local Open Spaces with Play Space - 2 x 3,000sqm each	2	6,000	Low density residential land	\$ 350	\$ 2,205,000	m ²	6,000	\$ 382.68	\$ 2,296,100	15%	20%	0.25%	\$ 3,105,475	\$ 5,310,475	\$ -	100%	\$ 5,310,476	55,950	\$ 39	\$ 56	\$ 95	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.4.b	Local Open Space With Play Space and Fitness Station- 1 x 3,400 sqm	1	4,000	Low density residential land	\$ 350	\$ 1,470,000	m ²	4,000	\$ 454.79	\$ 1,819,141	17%	20%	0.25%	\$ 2,496,771	\$ 3,966,771	\$ -	100%	\$ 3,966,771	55,950	\$ 26	\$ 45	\$ 71	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP2.1.a	Local Open Spaces with Play Space - 3 x 5,000 sqm each	3	15,000	Low density residential land	\$ 350	\$ 5,512,500	m ²	15,000	\$ 343.51	\$ 5,152,666	12%	20%	0.25%	\$ 6,814,400	\$ 12,326,900	\$ -	100%	\$ 12,326,901	55,950	\$ 99	\$ 122	\$ 220	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 park every 400 dwellings approximately
LP2.1.b	Local Open Spaces- No Play Space - 3 x 5,000 sqm each	3	15,000	Low density residential land	\$ 350	\$ 5,512,500	m ²	15,000	\$ 166.50	\$ 2,347,536	15%	20%	0.25%	\$ 3,175,042	\$ 8,687,542	\$ -	100%	\$ 8,687,543	55,950	\$ 99	\$ 57	\$ 155	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP2.1.c	Local Open Space With Play Space and Fitness Station - 1 x 5,000 sqm	1	5,000	Low density residential land	\$ 350	\$ 1,837,500	m ²	5,000	\$ 414.09	\$ 2,070,448	15%	20%	0.25%	\$ 2,800,280	\$ 4,637,780	\$ -	100%	\$ 4,637,781	55,950	\$ 33	\$ 50	\$ 83	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP3.1.1	Local Open Spaces with Play Space - 2 x 5,000 sqm each	2	10,000	Low density residential land	\$ 350	\$ 3,675,000	m ³	10,000	\$ 343.51	\$ 3,435,110	15%	20%	0.25%	\$ 4,645,987	\$ 8,320,987	\$ -	100%	\$ 8,320,987	55,950	\$ 66	\$ 83	\$ 149	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 park every 300 dwellings approximately
LP4.1.1	Local Open Spaces with Play Space - 3 x 3,000 sqm each	3	9,000	Low density residential land	\$ 350	\$ 3,307,500	m ²	9,000	\$ 382.68	\$ 3,444,150	15%	20%	0.25%	\$ 4,658,213	\$ 7,965,713	\$ -	100%	\$ 7,965,714	55,950	\$ 59	\$ 83	\$ 142	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 park every 190 dwellings approximately
LP4.2.1a	Local Open Spaces with Play Space - 2 x 4,000 sqm each	2	8,000	Low density residential land	\$ 350	\$ 2,940,000	m ²	8,000	\$ 361.69	\$ 2,892,725	15%	20%	0.25%	\$ 3,912,410	\$ 6,852,410	\$ -	100%	\$ 6,852,411	55,950	\$ 53	\$ 70	\$ 122	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP4.2.1b	Local Open Spaces- No Play Space - 2 x 4,000 sqm each	2	8,000	Low density residential land	\$ 350	\$ 2,940,000	m ²	8,000	\$ 161.07	\$ 1,288,554	17%	20%	0.25%	\$ 1,768,540	\$ 4,708,540	\$ -	100%	\$ 4,708,540	55,950	\$ 53	\$ 32	\$ 84	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP4.3.1a	Local Open Spaces with Play Space - 2 x 5,000 sqm each	2	15,000	Low density residential land	\$ 350	\$ 5,512,500	m ²	15,000	\$ 343.51	\$ 5,152,666	12%	20%	0.25%	\$ 6,814,400	\$ 12,326,900	\$ -	100%	\$ 12,326,901	55,950	\$ 99	\$ 122	\$ 220	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP4.3.1b	Local Open Spaces- No Play Space - 1 x 5,000 sqm each	1	15,000	Low density residential land	\$ 350	\$ 5,512,500	m ²	15,000	\$ 166.50	\$ 2,347,536	15%	20%	0.25%	\$ 3,175,042	\$ 8,687,542	\$ -	100%	\$ 8,687,543	55,950	\$ 99	\$ 57	\$ 155	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP4.3.2	Local Open Spaces with Play Space - 1 x 5,000 sqm each	1	5,000	Low density residential land	\$ 350	\$ 1,837,500	m ²	5,000	\$ 343.51	\$ 1,717,555	17%	20%	0.25%	\$ 2,357,345	\$ 4,194,845	\$ -	100%	\$ 4,194,845	55,950	\$ 33	\$ 42	\$ 75	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.1.2	Medium Local Open Space - 1 x 40,100 sqm	1	40,100	Low density residential land	\$ 350	\$ 14,736,750	m ³	40,100	\$ 202.44	\$ 8,117,814	12%	20%	0.25%	\$ 10,735,810	\$ 25,472,560	\$ -	100%	\$ 25,472,560	55,950	\$ 263	\$ 192	\$ 455	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 medium park every 1,500 dwellings approximately
LP1.1.3	Medium Local Open Space - 1 x 40,000 sqm	1	40,000	Low density residential land	\$ 350	\$ 14,700,000	m ³	40,000	\$ 202.44	\$ 8,097,570	12%	20%	0.25%	\$ 10,709,037	\$ 25,409,037	\$ -	100%	\$ 25,409,037	55,950	\$ 263	\$ 191	\$ 454	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.2.2	Medium Local Open Space - 2 x 40,000 sqm each	2	80,000	Low density residential land	\$ 350	\$ 29,400,000	m ³	80,000	\$ 202.44	\$ 16,195,141	12%	20%	0.25%	\$ 21,418,074	\$ 50,818,074	\$ -	100%	\$ 50,818,074	55,950	\$ 525	\$ 383	\$ 908	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.3.2	Medium Local Open Space - 2 x 40,000 sqm each	2	80,000	Low density residential land	\$ 350	\$ 29,400,000	m ³	80,000	\$ 202.44	\$ 16,195,141	12%	20%	0.25%	\$ 21,418,074	\$ 50,818,074	\$ -	100%	\$ 50,818,074	55,950	\$ 525	\$ 383	\$ 908	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP1.4.2	Medium Local Open Space - 2 x 35,000 sqm each	2	70,000	Low density residential land	\$ 350	\$ 25,725,000	m ³	70,000	\$ 202.44	\$ 14,170,748	12%	20%	0.25%	\$ 18,740,815	\$ 44,465,815	\$ -	100%	\$ 44,465,815	55,950	\$ 480	\$ 335	\$ 795	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
LP2.1.2	Medium Local Open Space - 2x 49,600 sqm each	2	99,200	Low density residential land	\$ 350	\$ 36,456,000	m ³	99,200	\$ 192.04	\$ 19,050,075	12%	20%	0.25%	\$ 25,193,724	\$ 61,649,724	\$ -	100%	\$ 61,649,725	55,950	\$ 652	\$ 450	\$ 1,102	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 medium park every 1,500 dwellings approximately
LP4.1.2	Medium Local Open Space - 1 x 20,000 sqm each	1	20,000	Low density residential land	\$ 350	\$ 7,350,000	m ³	20,000	\$ 253.49	\$ 5,069,836	12%	20%	0.25%	\$ 6,704,858	\$ 14,054,858	\$ -	100%	\$ 14,054,858	55,950	\$ 131	\$ 120	\$ 251	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 medium park every 1,000 dwellings approximately
LP4.2.2	Medium Local Open Space - 1 x 50,000 sqm each	1	50,000	Low density residential land	\$ 350	\$ 18,375,000	m ³	50,000	\$ 202.44	\$ 10,121,963	12%	20%	0.25%	\$ 13,386,296	\$ 31,761,296	\$ -	100%	\$ 31,761,297	55,950	\$ 328	\$ 239	\$ 568	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
PF1.1.1	Active Open Space - 1 Double Playing Fields & Multipurpose courts	1	65,000	Low density residential land	\$ 350	\$ 23,887,500	m ²	65,000	\$ 247.53	\$ 16,089,392	12%	20%	0.25%	\$ 21,278,221	\$ 45,165,721	\$ -	100%	\$ 45,165,721	55,950	\$ 427	\$ 380	\$ 807	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 double playing field every 1,600 dwellings approximately
PF1.1.2	Active Open Space - 1 Double Playing Field & Multipurpose courts	1	65,000	Medium density residential land	\$ 400	\$ 27,300,000	m ²	65,000	\$ 247.53	\$ 16,089,392	12%	20%	0.25%	\$ 21,278,221	\$ 48,578,221	\$ -	100%	\$ 48,578,221	55,950	\$ 488	\$ 380	\$ 868	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
PF1.2.1	Active Open Space - 2 Double Playing Fields & Multipurpose courts	1	135,000	Medium density residential land	\$ 400	\$ 56,700,000	m ²	135,000	\$ 240.87	\$ 32,516,881	12%	20%	0.25%	\$ 43,003,575	\$ 99,703,575	\$ -	100%	\$ 99,703,576	55,950	\$ 1,013	\$ 769	\$ 1,782	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 2 double playing fields every 3,200 dwellings approximately
PF1.3.1	Active Open Space - 2 Double Playing Fields & Multipurpose courts	1	130,000	Medium density residential land	\$ 400	\$ 54,600,000	m ²	130,000	\$ 240.87	\$ 31,312,552	12%	20%	0.25%	\$ 41,410,850	\$ 96,010,850	\$ -	100%	\$ 96,010,851	55,950	\$ 976	\$ 740	\$ 1,716	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
PF1.4.1	Active Open Space - 2 Double Playing Fields + Multipurpose Courts	1	130,900	Low density residential land	\$ 350	\$ 48,105,750	m ²	130,900	\$ 240.87	\$ 31,529,331	12%	20%	0.25%	\$ 41,697,541	\$ 89,803,291	\$ -	100%	\$ 89,803,291	55,950	\$ 860	\$ 745	\$ 1,605	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
PF2.1.1	Active Open Space - 1 Double Playing Fields & Multipurpose courts	1	63,300	Low density residential land	\$ 350	\$ 23,262,750	m ²	63,300	\$ 247.53	\$ 15,668,592	12%	20%	0.25%	\$ 20,721,714	\$ 43,984,464	\$ -	100%	\$ 43,984,464	55,950	\$ 416	\$ 370	\$ 786	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 double playing field every 1,500 dwellings approximately
PF2.1.2	Active Open Space - 1 Double Playing Field & Multipurpose courts	1	60,000	Medium density residential land	\$ 400	\$ 25,200,000	m ²	60,000	\$ 247.53	\$ 14,851,746	12%	20%	0.25%	\$ 19,641,435	\$ 44,841,435	\$ -	100%	\$ 44,841,435	55,950	\$ 450	\$ 351	\$ 801	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
PF4.1.1	Active Open Space - 1 Double Playing Fields + Multipurpose Courts	1	60,000	Low density residential land	\$ 350	\$ 22,050,000	m ²	60,000	\$ 247.53	\$ 14,851,746	12%	20%	0.25%	\$ 19,641,435	\$ 41,691,435	\$ -	100%	\$ 41,691,435	55,950	\$ 394	\$ 351	\$ 745	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as development occurs - 1 double playing field every 1,000 dwellings approximately
PF4.2.1	Active Open Space - 1 Double Playing Field + Multipurpose Courts	1	50,000	Medium density residential land	\$ 400	\$ 21,000,000	m ²	50,000	\$ 247.53	\$ 12,376,455	12%	20%	0.25%	\$ 16,367,862	\$ 37,367,862	\$ -	100%	\$ 37,367,863	55,950	\$ 375	\$ 293	\$ 668	Cred's Report	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	
TOTAL OPEN SPACES INFRASTRUCTURE IN PLAN						\$ 535,211,250																				

Roads and Transport Infrastructure Schedule

Map Ref	Item description	Additional Width	Length (m)	Land Type	Land Rate (incl. 5% acquisition allowance) (\$/m2)	Cost of Land (incl. 5% acquisition allowance)	Works (unit)	Quantity Required	Works Rate Indexed(\$)	Cost of Works	On cost %	Contingency (%)	Long Service Levy (%)	Total Costs of Works	Total Costs (Land & Works)	Funds Collected	RESIDENTIAL DEVELOPMENT					NON-RESIDENTIAL DEVELOPMENT					What establishes Nexus?	Cost Source (land)	Cost Source (works)	Priority/Staging		
																	Apportionment factor to residential development	Apportioned Cost (Residential)	Contribution catchment (persons)	Land Contribution Rate (\$/person)	Works Contribution Rate (\$/person)	Contribution rate (\$/person)	Apportionment factor to non-residential development	Apportioned Cost (Non-Residential)	Contribution catchment (hectares)	Land Contribution Rate (\$/hectares)					Works Contribution Rate (\$/hectares)	Contribution rate (\$/hectares)
Essential Works List																																
AT1.1.1	Brooks Point Road	0	400	Low density residential land	\$ 350	\$ -	m	400	\$ 9,125.14	\$ 3,650,055.96	15%	20%	0.25%	\$ 4,936,701	\$ 4,936,701	\$ -	99.64%	\$ 4,918,722	55,950	\$ -	\$ 88	\$ 88	0.23%	\$ 11,520	3.2	\$ -	\$ 3,635	\$ 3,635	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
AT1.1.2	Brooks Point Rd & Appin Road Intersection Upgrade	0	0	Low density residential land	\$ 350	\$ -	Item	1	\$ 1,812,974.96	\$ 1,812,974.96	17%	20%	0.25%	\$ 2,488,308	\$ 2,488,308	\$ -	99.64%	\$ 2,479,246	55,950	\$ -	\$ 44	\$ 44	0.23%	\$ 5,807	3.2	\$ -	\$ 1,832	\$ 1,832	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
AT1.1.3	Wilton Road Upgrade (to collector road)	0	2,430	Low density residential land	\$ 350	\$ -	m	2,430	\$ 6,749.69	\$ 16,401,748.45	12%	20%	0.25%	\$ 21,691,312	\$ 21,691,312	\$ -	99.64%	\$ 21,612,314	55,950	\$ -	\$ 386	\$ 386	0.23%	\$ 50,617	3.2	\$ -	\$ 15,973	\$ 15,973	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
AT1.3.1	Brooks Point Road Upgrade- Transit Corridor Link	4.3	800	Medium density residential land	\$ 400	\$ 1,444,800	m	800	\$ 6,749.69	\$ 5,399,752.58	12%	20%	0.25%	\$ 7,141,173	\$ 8,585,973	\$ -	99.64%	\$ 8,554,704	55,950	\$ 26	\$ 127	\$ 153	0.23%	\$ 20,036	3.2	\$ 1,064	\$ 5,259	\$ 6,323	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
AT2.1.1	New Collector Road - North Appin	22.8	750	Medium density residential land	\$ 400	\$ 7,182,000	m	750	\$ 11,287.65	\$ 8,465,739.32	12%	20%	0.25%	\$ 11,195,940	\$ 18,377,940	\$ -	99.64%	\$ 18,311,009	55,950	\$ 128	\$ 199	\$ 327	0.23%	\$ 42,886	3.2	\$ 5,289	\$ 8,245	\$ 13,534	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
AT4.2.1	Macquariadale Road Upgrade between corridors	1.4	580	Low density residential land	\$ 350	\$ 298,410	m	580	\$ 6,749.69	\$ 3,914,820.62	15%	20%	0.25%	\$ 5,294,795	\$ 5,593,205	\$ -	99.64%	\$ 5,572,835	55,950	\$ 5	\$ 94	\$ 100	0.23%	\$ 13,052	3.2	\$ 220	\$ 3,899	\$ 4,119	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
ATR4.2.2	Roundabout along Macquariadale Road	1	100	Low density residential land	\$ 350	\$ 36,750	Item	1	\$ 872,839.47	\$ 872,839.47	22%	20%	0.25%	\$ 1,241,614	\$ 1,278,364	\$ -	99.64%	\$ 1,273,709	55,950	\$ 1	\$ 22	\$ 23	0.23%	\$ 2,983	3.2	\$ 27	\$ 914	\$ 941	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
AT4.3.1	New Collector Road - South Appin	22.8	900	Medium density residential land	\$ 400	\$ 8,618,400	m	900	\$ 11,287.65	\$ 10,158,887.19	12%	20%	0.25%	\$ 13,435,128	\$ 22,053,528	\$ -	99.64%	\$ 21,973,211	55,950	\$ 153	\$ 239	\$ 393	0.23%	\$ 51,463	3.2	\$ 6,346	\$ 9,893	\$ 16,239	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
ABS1.1	Bus Shelters (every 400m) (not identified on map)	0	0				Item	28	\$ 31,136.97	\$ 871,835.05	22%	20%	0.25%	\$ 1,240,185	\$ 1,240,185	\$ -	99.64%	\$ 1,235,669	55,950	\$ -	\$ 22	\$ 22	0.23%	\$ 2,894	3.2	\$ -	\$ 913	\$ 913	Structure Plans and Transport Reports	AEC Group (12 Sep 2023)	Altus Group (17 Nov 2023)	as dev occurs
TOTAL ROADS AND TRANSPORT INFRASTRUCTURE IN PLAN					\$ 17,586,360					\$ 68,665,197				\$ 86,245,517				\$ 85,931,419	\$ 313	\$ 1,221	\$ 1,536		\$ 201,257	\$ 12,946	\$ 50,563	\$ 63,569						

Stormwater Management Infrastructure Schedule

Ref	Local Infrastructure Item	Net Developable Area (m2)	Land Area (m2)	Land Rate (\$/m2 Indexed)	Cost of Land (includes 5% acquisition allowance)	Works (unit)	Quantity Required	Works Rate (\$/m2 Indexed)	Cost of Works	On cost %	Contingency	Long Service Levy (%)	Total cost of Works	Total Costs (Land & Works)	RESIDENTIAL DEVELOPMENT						NON-RESIDENTIAL DEVELOPMENT						Cost Source (land)	Cost Source (works)	Priority/Staging
															Apportionment factor to residential development	Apportioned Cost (Residential)	Contribution catchment (persons)	Land Contribution Rate (\$/person)	Works Contribution Rate (\$/person)	Contribution rate (\$/person)	Apportionment factor to non-residential development	Apportioned Cost (Non-Residential)	Contribution catchment (hectares)	Land Contribution Rate (\$/hectares)	Works Contribution Rate (\$/hectares)	Contribution rate (\$/hectares)			
STW	Combined Basin & Raingarden Facilities	13,576,500	583,790	\$ 81	\$ 49,510,597	m ²	583,790	\$291	\$ 170,046,962	12%	20%	0.25%	\$ 224,887,107	\$ 274,397,705	99.64%	\$ 273,398,366	55,950	\$ 882	\$ 4,005	\$ 4,887	0.23%	\$ 640,316	3.17	\$ 36,459	\$ 165,603	\$ 202,062	AEC Group (12 Sep 2023)	Atlas Group (17 Nov 2023)	as dev occurs
TOTAL STORMWATER MANAGEMENT INFRASTRUCTURE IN PLAN			583,790		\$ 49,510,597								\$ 224,887,107	\$ 274,397,705		\$ 273,398,366	\$ 55,950	\$ 882	\$ 4,005	\$ 4,887		\$ 640,316	3.17	\$ 36,459	\$ 165,603	\$ 202,062			

APPIN GROWTH AREA CONTRIBUTIONS PLAN 2024



Plan Administration

Ref	Local Infrastructure item	Rate	Total cost of works in plan (\$)	Total Administration cost (\$)	RESIDENTIAL DEVELOPMENT				NON RESIDENTIAL DEVELOPMENT			
					Apportionment factor (residential) (%)	Apportioned Cost (Residential)	Contribution catchment (persons)	Contribution rate per person (residential)	Apportionment factor (Non-residential) (%)	Apportioned Cost (Non-Residential)	Contribution catchment (hectares)	Contribution rate per hectare (non-residential)
ESSENTIAL WORK LIST												
Plan Administration												
PA1	Based on capital works cost - Roads and Transport & Stormwater Infrastructure	1.5%	\$293,552,264	\$4,403,284	99.64%	\$4,387,248	55,950	\$79	0.23%	\$10,275	3.17	\$3,243
PA2	Based on capital works cost - Open Spaces Infrastructure	1.5%	\$440,358,553	\$6,605,379	100.00%	\$6,605,379	55,950	\$119	-	-	-	-
	Sub Total		\$733,910,817	\$11,008,663		\$10,992,627		\$198		\$10,275		\$3,243
TOTAL			\$733,910,817	\$11,008,663		\$10,992,627		\$198		\$10,275		\$3,243

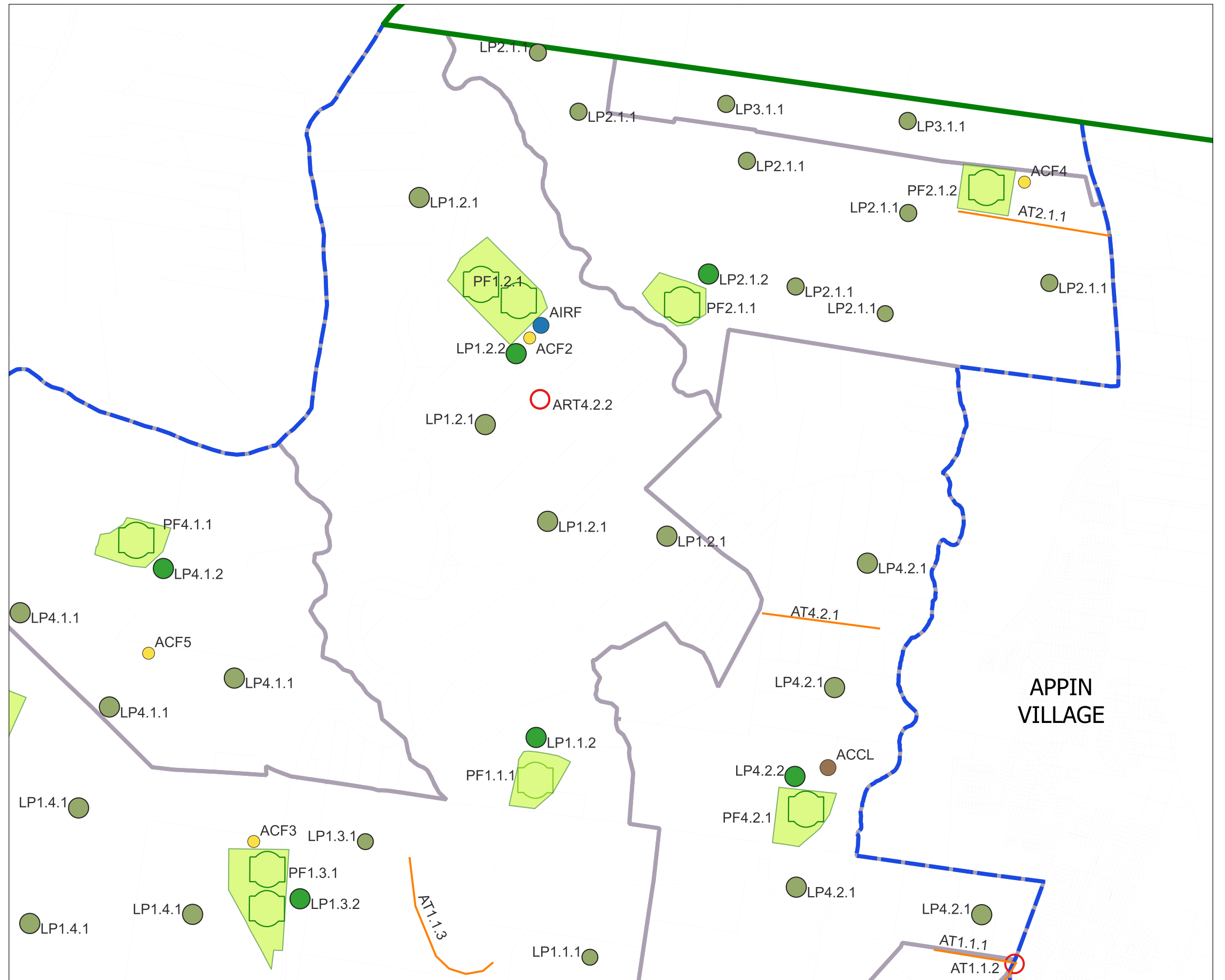
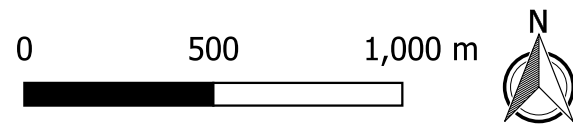
8 INFRASTRUCTURE LOCATION MAPS



Appin Growth Area Contributions Plan (Area C)

Map 1

- Appin Growth Area Boundary
- Release Areas**
- Release Area Boundary
- Open Space Infrastructure**
- Double Playing Field
- Active - Sportsground
- Passive- Medium Park
- Passive- Small Park
- Roads and Transport Infrastructure**
- New or Upgraded Roads
- Intersection Upgrade
- Community Facilities**
- Community Centre
- Community Hub & Library
- Cultural Centre & Library



APPIN VILLAGE

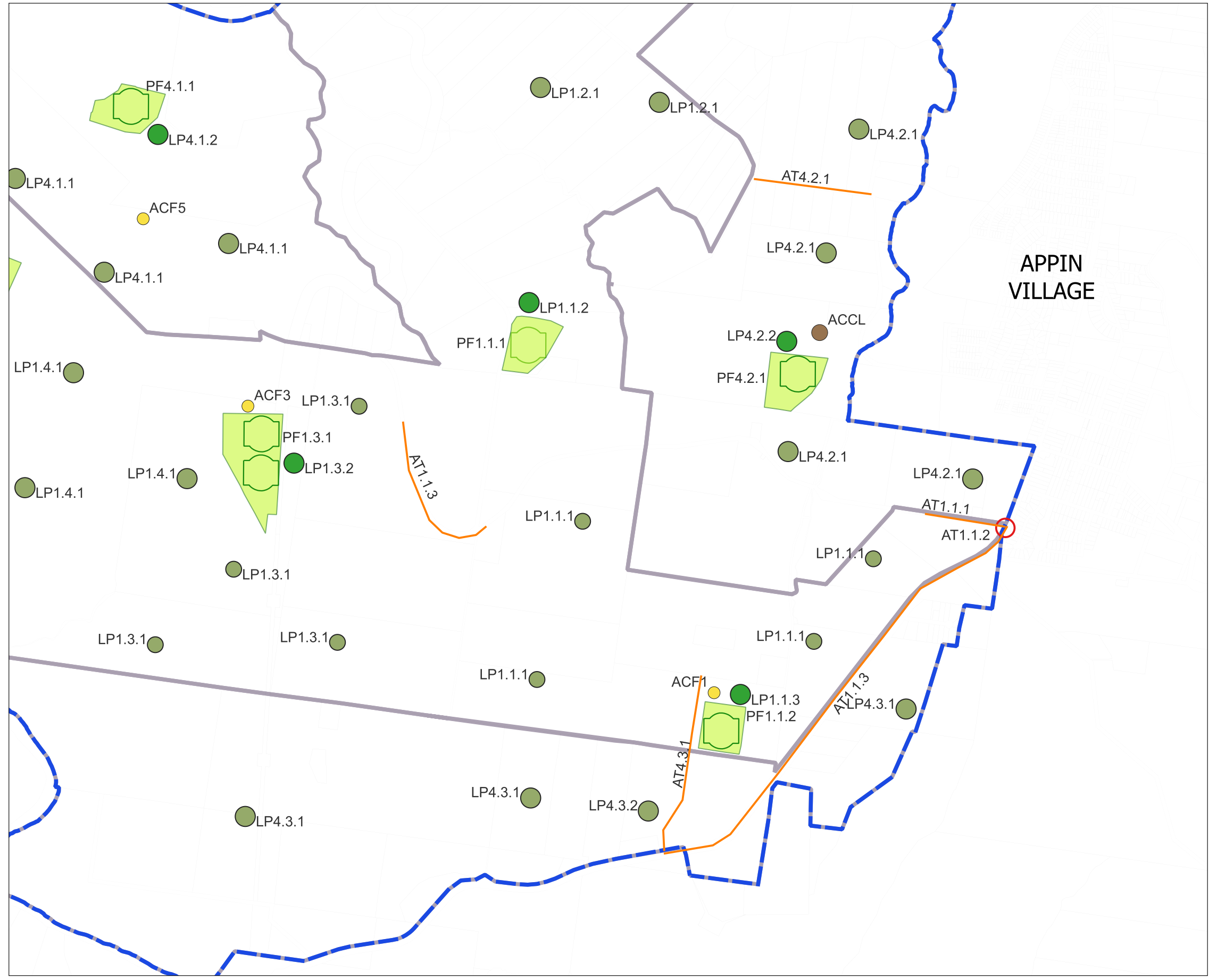
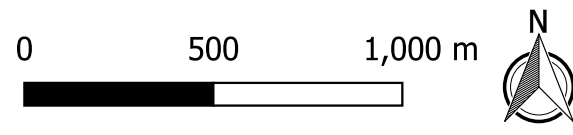
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Appin Growth Area Contributions Plan (Area C)

Map 3

- Appin Growth Area Boundary
- Release Areas**
- Release Area Boundary
- Open Space Infrastructure**
- Double Playing Field
- Active - Sportsground
- Passive- Medium Park
- Passive- Small Park
- Roads and Transport Infrastructure**
- New or Upgraded Roads
- Intersection Upgrade
- Community Facilities**
- Community Centre
- Community Hub & Library
- Cultural Centre & Library



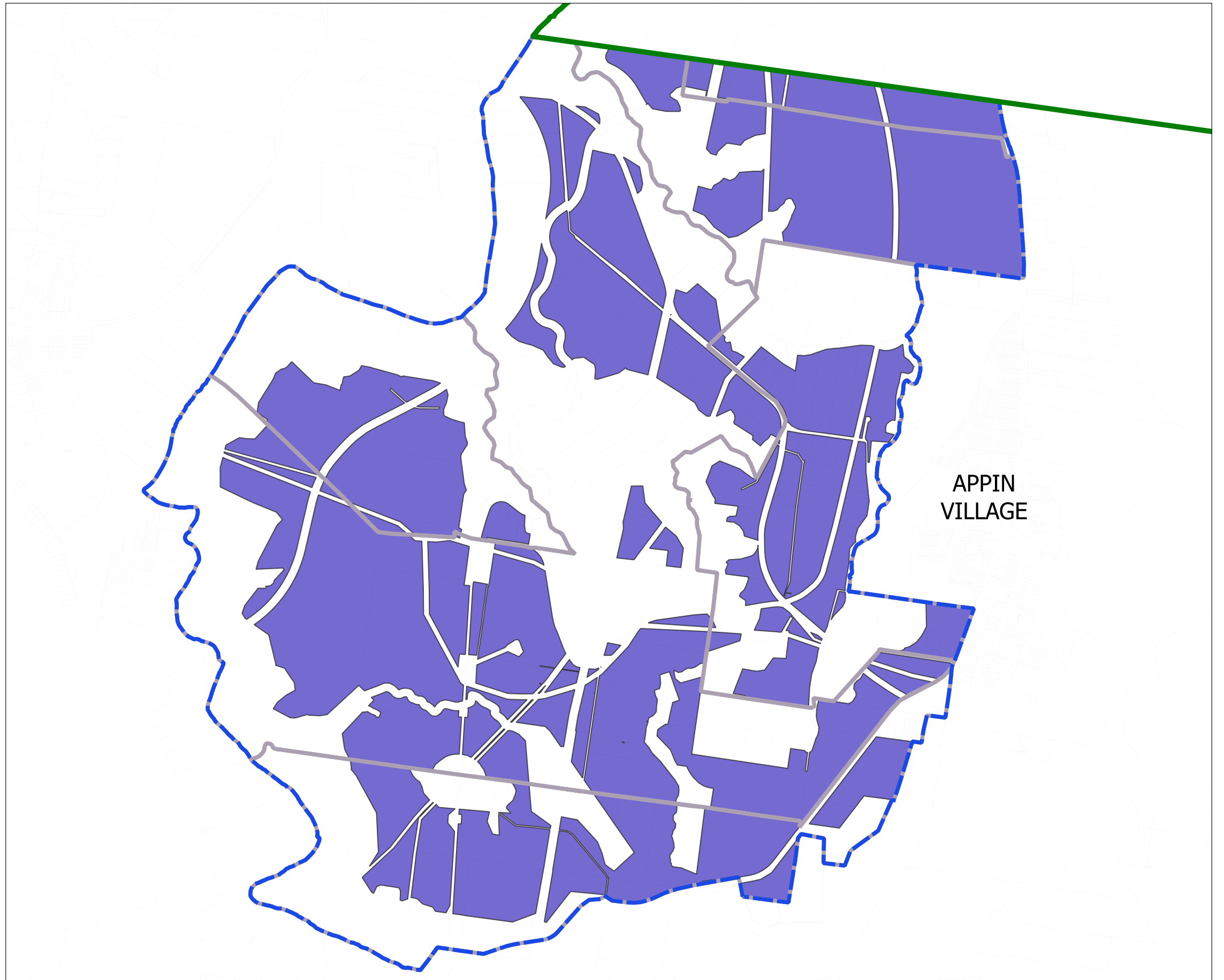
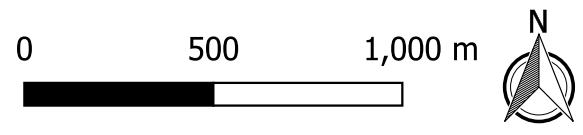
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Appin Growth Area Contributions Plan (Area C)

Map 4

- Appin Growth Area Boundary
- Release Areas
 - Release Area Boundary
- Stormwater
 - Developable Area for Stormwater



APPIN VILLAGE

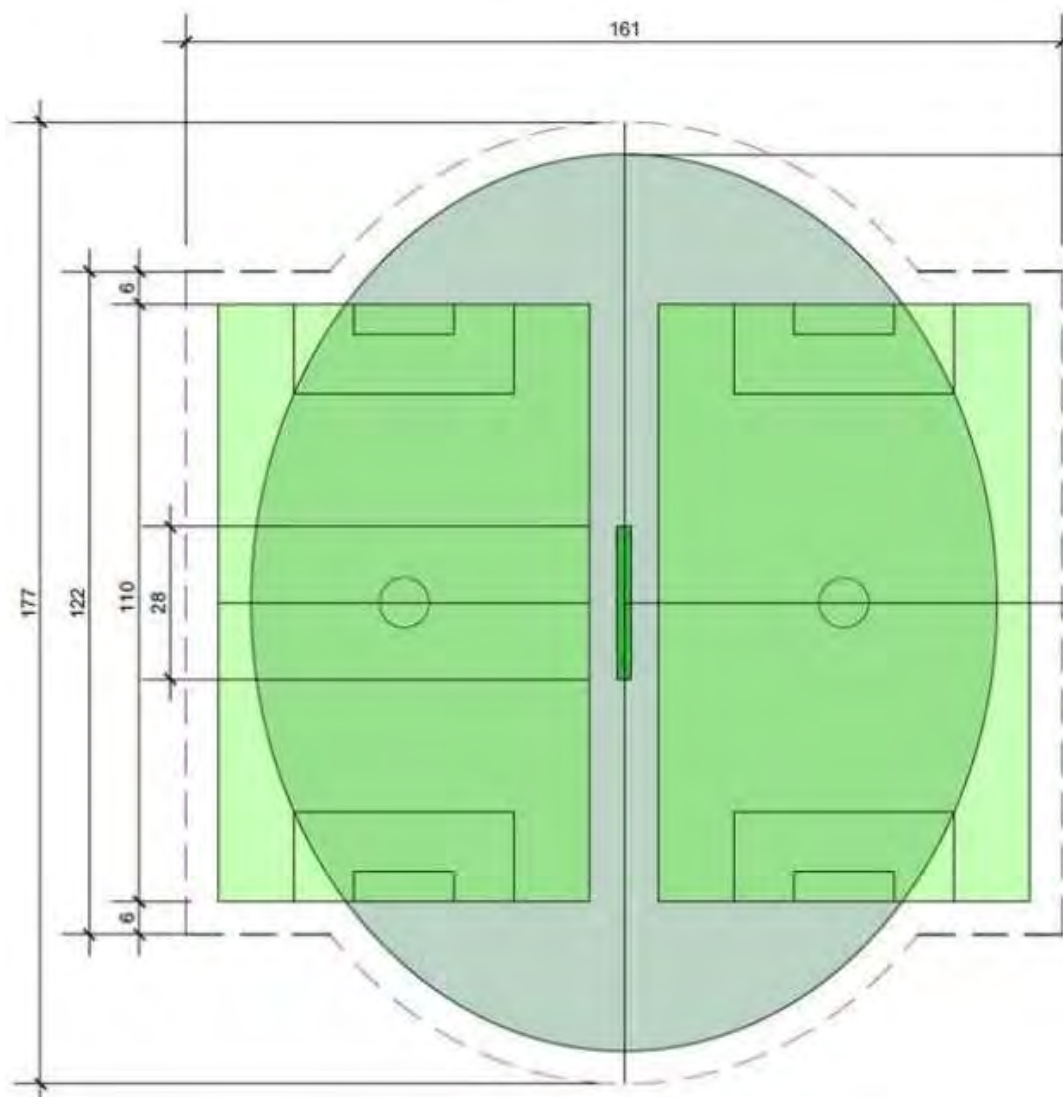
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[Appendix A- Infrastructure Design Guidelines](#)

Active Open Spaces

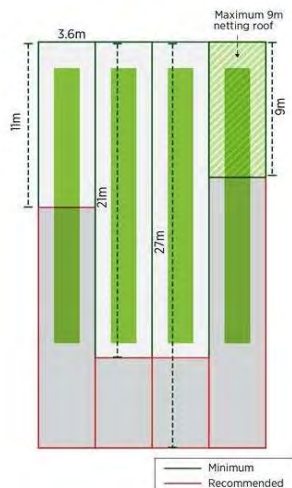
Double Playing Field Layout

Typical layout multi-sportsfield layout for Cricket, AFL and Soccer- *Transport Canberra and City Services (TCCS) publication - Design Standards for Urban Infrastructure, 24- Sportsground Design*



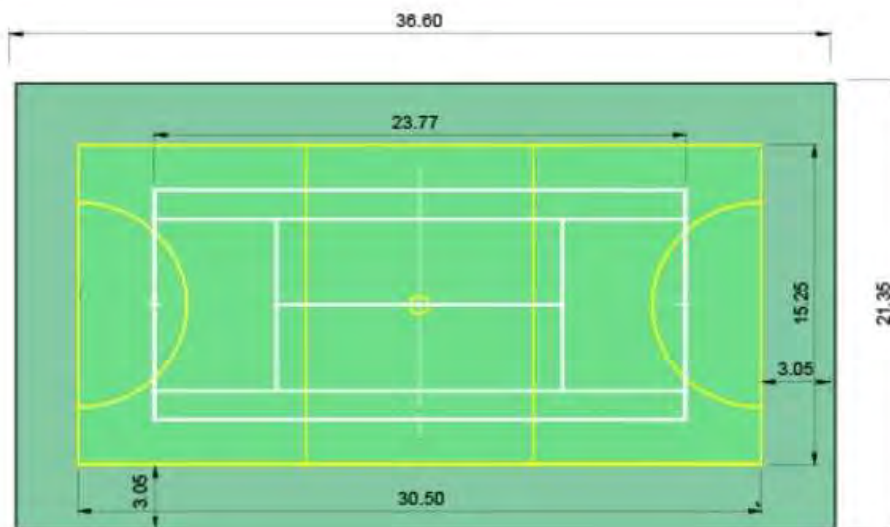
Cricket Practice Nets

Sports Dimensions Guide For Playing Areas, Department of Sports and Recreation, Government of Western Australia.



Courts

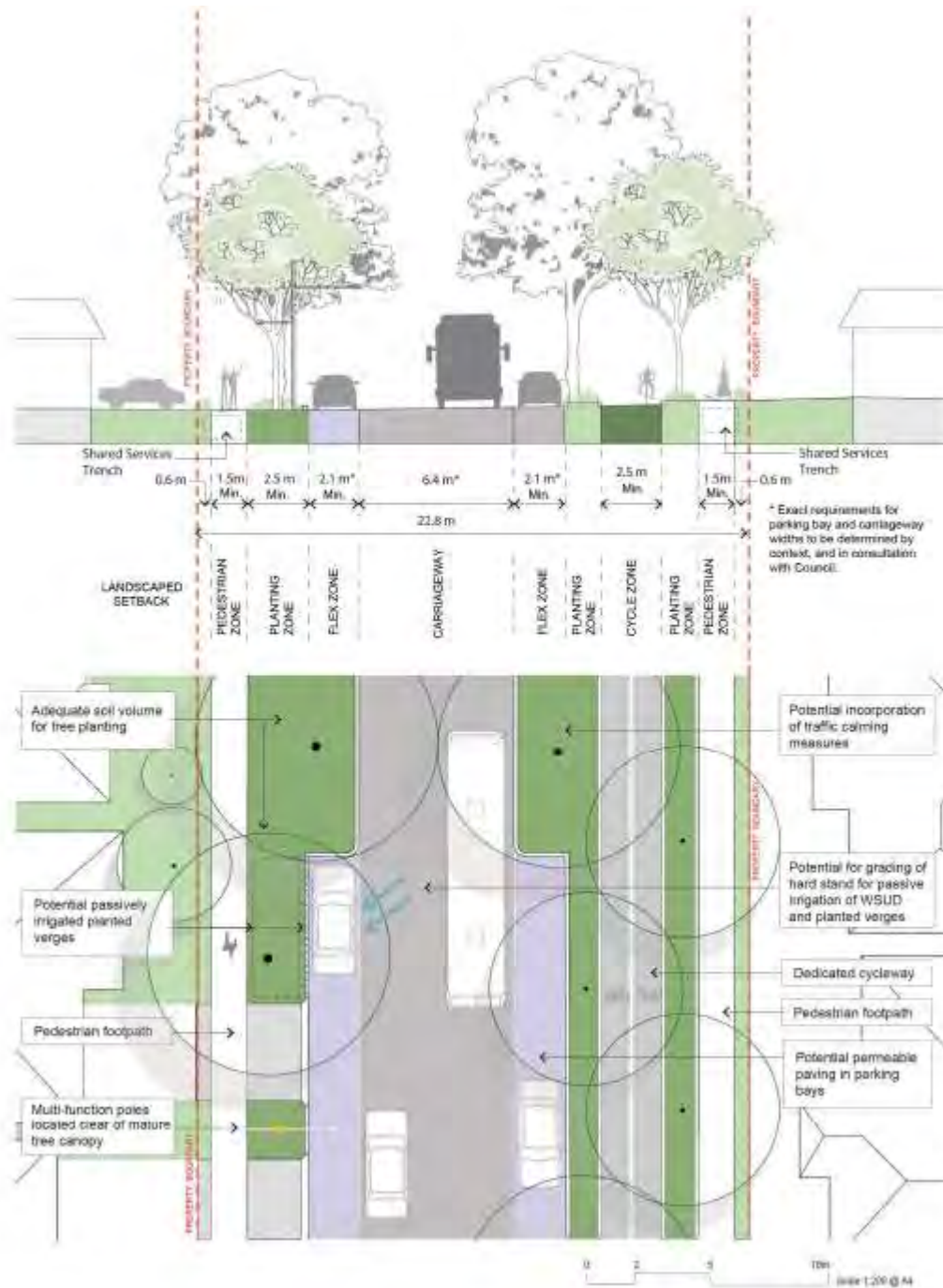
Multipurpose Court-Tennis and Netball Court - Sports Dimensions Guide For Playing Areas, Department of Sports and Recreation, Government of Western Australia, June 2016



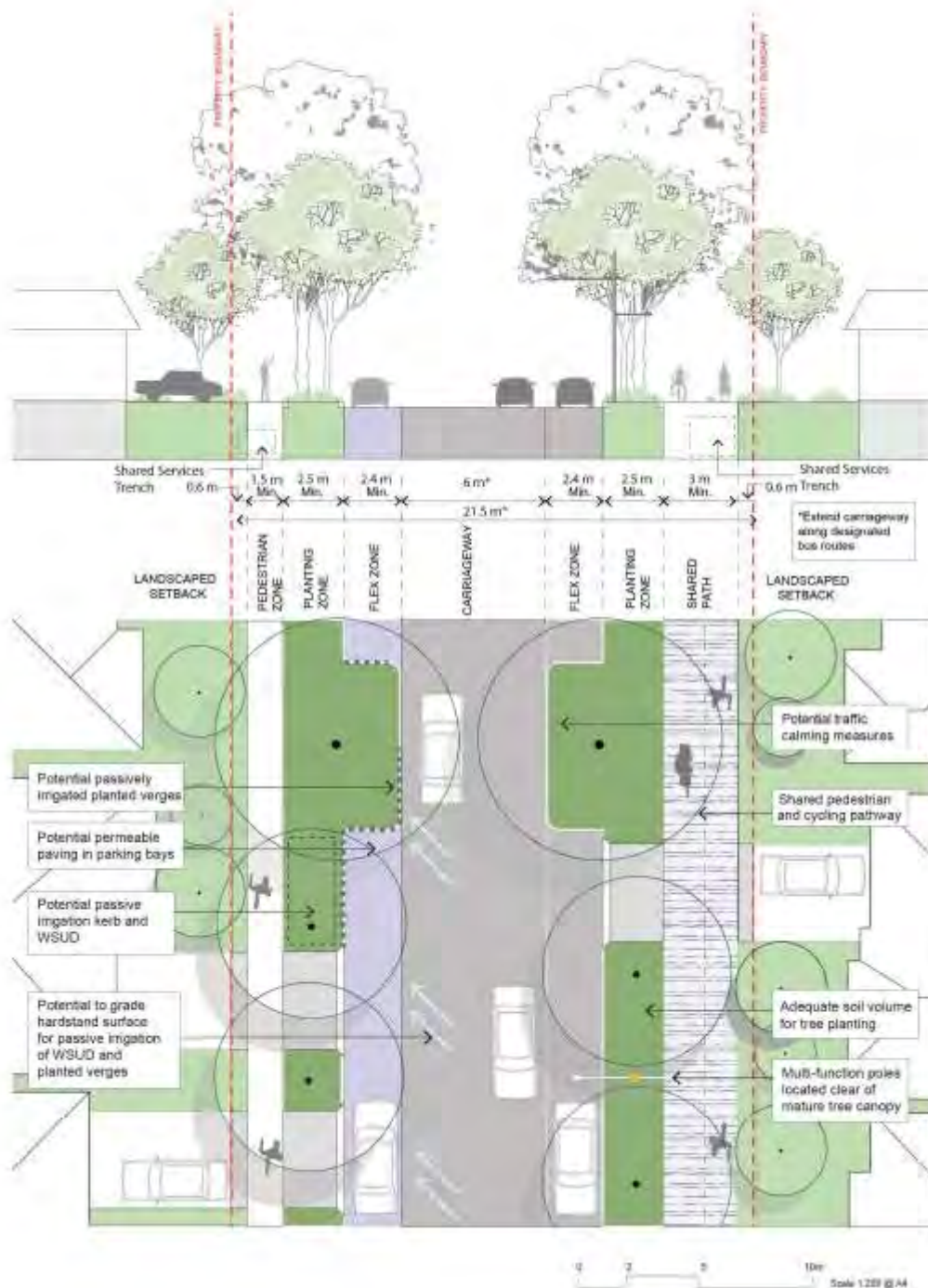
Roads Cross Sections

from Wilton Growth Area Development Control Plan (DCP)

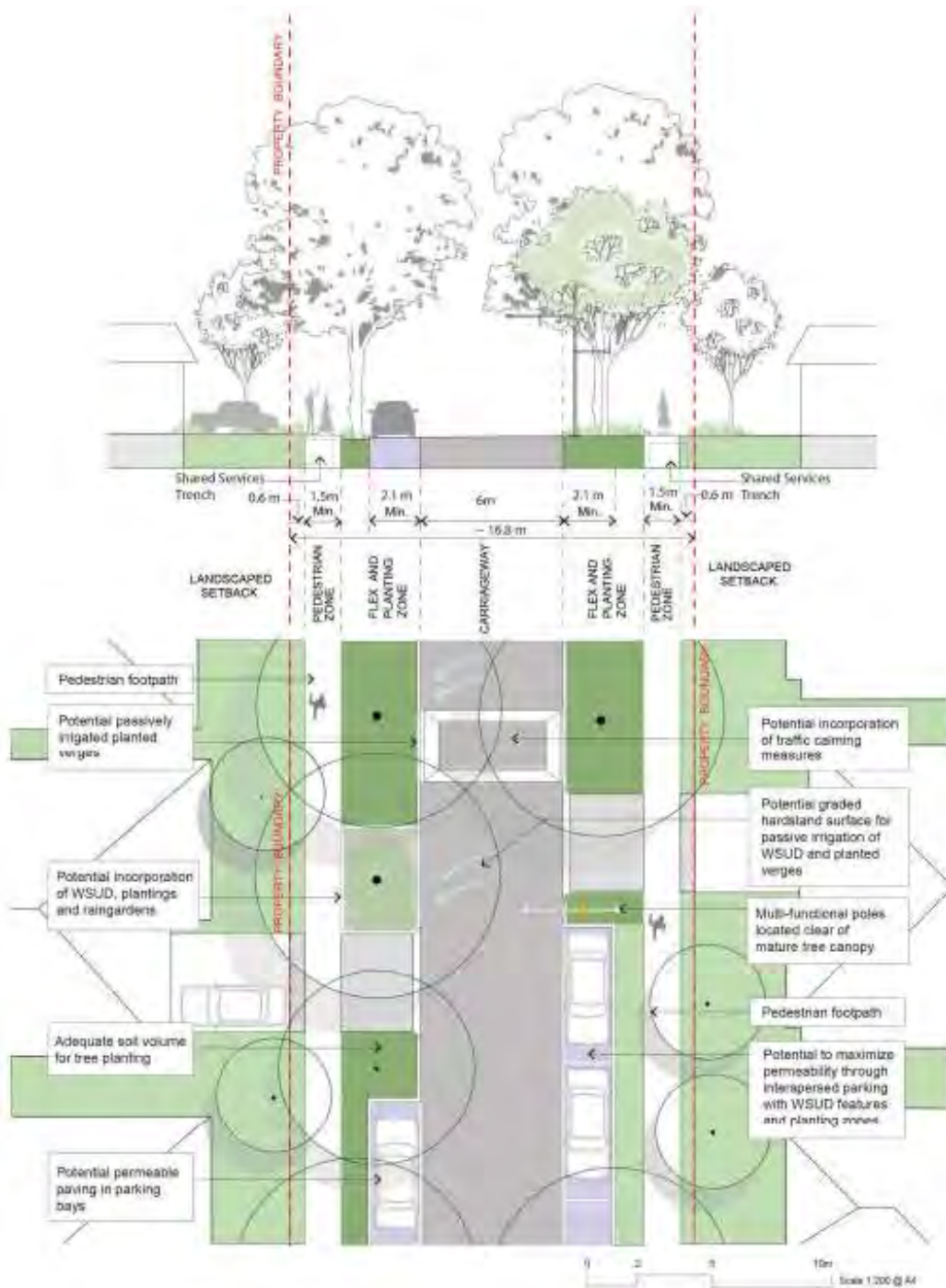
Typical local collector road



Typical Primary Local Street



Typical Local Street





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