

ITEM 7

WEST DAPTO STRATEGIC REVIEW - VISION, PLANNING PRINCIPLES AND STRUCTURE PLAN

In 2007-08, Council exhibited the draft West Dapto Urban Release Area Vision and accompanying draft planning documents. In 2008, the Growth Centres Commission reviewed Council's draft documents and prepared the West Dapto Release Area Structure Plan. In 2010, Stages 1 and 2 of the West Dapto Urban Release Area were rezoned to permit urban development, and in June 2018 Stage 5 Yallah-Marshall Mount was rezoned. Since 2010, Council has spent some \$60 million to improve access to Horsley and the release area.

It has been 10 years since the current Structure Plan was prepared and during this period there have been important changes to constraint information, planning practices and frameworks, infrastructure planning, funding environments and market conditions. Together these changes have led to the need to revisit the strategic planning of the release area.

The draft West Dapto Vision 2018 was prepared in the first half of 2018 to update the strategic direction for future development of the release area. On 23 July 2018, Council resolved to exhibit the updated draft West Dapto Vision document which incorporates the revised Structure Plan and Planning Principles. Council also resolved to exhibit minor amendments to the Wollongong Development Control Plan 2009, Chapter D16: West Dapto Urban Release (DCP) to support the Vision implementation. The draft Vision document and draft DCP amendments were exhibited between 30 July 2018 and 10 September 2018. Following the exhibition, Council staff considered all submissions received. A comprehensive Engagement Report is provided at Attachment 2 with full details of the engagement process, issues raised and Council's consideration of issues.

It is recommended that Council finalise the West Dapto Vision 2018 which has been updated to incorporate many changes in response to the issues raised during exhibition.

It is important to note that the fundamental urban residential development outcome will remain the same. West Dapto is still proposed as the region's largest strategic urban release area.

RECOMMENDATION

- 1 The West Dapto Vision 2018 Engagement Report be noted.
- 2 The West Dapto Vision 2018 which incorporates the West Dapto Structure Plan, Vision and Planning Principles be adopted as a policy document.
- 3 The minor amendments to the Wollongong Development Control Plan 2009, Chapter D16: West Dapto Urban Release be adopted to commence the implementation of the West Dapto Vision 2018.

REPORT AUTHORISATIONS

Report of: Chris Stewart, Manager City Strategy

Authorised by: Andrew Carfield, Director Planning and Environment - Future City and Neighbourhoods

ATTACHMENTS

- 1 West Dapto Vision 2018 including Structure Plan
- 2 West Dapto Vision 2018 Engagement Report
- 3 Wollongong Development Control Plan 2009, Chapter D16: West Dapto Release Area
- 4 West Dapto Structure Plan

BACKGROUND

West Dapto Urban Release Area History

West Dapto was identified for future development as part of the 1980 Regional Urban Development Program. Between the 1980s and 2000s, the Horsley area progressed to development as an area situated on higher elevation, connected across the rail line to Dapto by Bong Bong Road. In 2004, Council recommenced planning work to inform detailed strategic planning of the remaining release area. In 2007-08, Council exhibited the draft Vision, draft Local Environmental Study, draft Local Environmental Plan and draft Development Control Plan for the West Dapto Urban Release Area. In 2008, Council engaged the NSW Growth Centres Commission to review the draft Plans and proposed infrastructure requirements. In December 2008, Council endorsed the recommendations of the NSW Growth Centres Commission, including the current Structure Plan.

The NSW Government's Illawarra-Shoalhaven Regional Plan 2015 (Regional Plan) confirmed that West Dapto will continue to be a long-term focus for new housing in the region. It is estimated that the West Dapto Urban Release Area will provide around 19,500 dwellings once fully developed which could occur over a 50+ years with an additional population of around 56,500 people.

Planning Status

Stages 1 and 2 of the release area were rezoned for urban development in 2010 and include the areas of Kembla Grange to Wongawilli and the area west of Horsley. In 2012, the land around the proposed Huntley Golf Course was rezoned supporting some residential development. On 8 June 2018, Stage 5 located in Yallah and Marshall Mount, the southernmost stage, was also rezoned. Stage 3 (Cleveland) and Stage 4 (Avondale) are yet to be zoned for urban development. Development of the release area has commenced in the north to utilise existing services and promote development of the Kembla Grange employment lands. The development plan originally was to generally continue to gradually extend south. The pattern of development is also extending east to west to align with key water and utility infrastructure provision.

Council has adopted 10 Neighbourhood Plans into Chapter D16: West Dapto Urban Release Area of Wollongong Development Control Plan, 2009. The 10 Neighbourhood Plans allow for development applications to deliver in the order of 3,350 residential lots, the development of Bong Bong and Darkes Town Centre and Reddalls Road Industrial Area. These numbers will grow as Council continues to consider further draft Neighbourhood Plans.

Council has approved over 1,780 residential lots through subdivision development applications with a number of other subdivision development applications currently under assessment. Council has approved subdivision certificates releasing over 1,100 lots, many of which now have new houses built and occupied. The subdivisions, both planned and under construction, will continue the housing supply.

Infrastructure and Funding Challenge

The release area has faced considerable challenges around the funding and provision of infrastructure.

Since 2010, Council has spent some \$60 million on the West Dapto Initial Access Strategy to improve access to Horsley and the release area. The projects being funded from loans, grants, Section 94 Developer Contributions and general revenue. The projects include:

- Fairwater Drive (west) extension to Bong Bong Road – \$2.1 million.
- Fairwater Drive (east) extension to Cleveland Road, including Daisy Bank Drive - \$10.5 million.
- Cleveland Road upgrade and Mullet Creek bridge - \$6.7 million.
- Fowlers Road extension from Princes Highway to Marshall Street - \$1.4 million.
- Princes Highway – West Dapto Road intersection at Kembla Grange - \$3.4 million.
- Shone Avenue Stage 1 bridge - \$6.7 million and Stage 2 bridge \$6.5 million.

- Fowlers Road – Princes Highway to Fairwater Drive – Stage 1, including the small bridge \$16.7 million.

In July 2018, Council awarded the contract for the construction of Stage 2 Main Bridge of the Fowlers Road – Princes Highway to Fairwater Drive project. Works on Stage 2 commenced in August 2018. Construction also commenced on Wongawilli Road, and designs are being prepared to upgrade a number of other existing roads and for the construction of new roads.

In 2016, Council submitted a draft Section 94 Plan to the Independent Pricing and Regulatory Tribunal (IPART) to test its reasonableness. The draft Section 94 Plan recognised the full cost of infrastructure and proposed funding beyond the infrastructure cap (\$30,000 per lot imposed at the time). IPART assessed the draft Plan making 40 recommendations in October 2016. Council endorsed changes to the draft Plan on 3 April 2017 in line with IPART recommendations where possible sending the Plan to the Minister for Planning for review and sought access to State government funding to close the funding gap.

On 21 September 2017, Council received a letter of support for access to the Local Infrastructure Growth Scheme (LIGS) provided 31 of the 40 recommendations were met and requiring Council's commitment to review the Plan to address the remaining longer-term recommendations by 30 June 2019. On 24 November 2017, Council received advice that the draft Plan was supported and there would be access to LIGS funding. On 11 December 2017, Council adopted the Plan and it came into force on 22 December 2017. Council has now executed a funding agreement to receive Round 18 LIGS funding from the State. Funding of \$5 million is expected during the 2018/19 financial year.

Strategic Review

It is 10 years since the initial Structure Plan for West Dapto was prepared by the NSW Growth Centres Commission. The 2008 Structure Plan does not reflect decisions made by Council since 2008. The Structure Plan:

- Does not include Fowlers Road to Fairwater Drive extension, currently under construction.
- Shows the 2007 draft Vision for the Yallah-Marshall Mount precinct, not the adopted June 2018 urban zoning, including the Town Centre and the link road from Yallah Road to Avondale Road.
- Shows a number of smaller neighbourhood and village centres that have been removed or relocated.
- Does not show areas of bushland that have been resolved to be retained and does not show the latest understanding of flood behaviour, heritage sites or culturally significant features.

In 2018, Council reviewed and tested previous assumptions that informed the Structure Plan and sought public comment. It is important to note that the fundamental structure for the urban residential development outcome will remain the same. West Dapto is still proposed as the region's largest strategic urban release area. The general urban footprint remains the same with some refinement based on revised and improved data and understanding of the areas opportunities and constraints.

The successful delivery of this release area relies upon:

- a Adequate planning policies to guide development and infrastructure provision.
- b Adequate development contribution collection mechanisms.
- c Appropriate internal staff resourcing to be responsive to changes in development activity.
- d The development of appropriate internal processes and procedures to capture and accurately spend development contributions.
- e An equitable share of infrastructure funding from the State in recognition of the importance of the release area. West Dapto will contribute to the State's housing supply needs, implementing the State's Regional Plan.

Failure to address the above has potential significant risks for Council, the community and housing supply.

West Dapto is a challenging release area since it is heavily constrained by flood prone land, utility easements, important native vegetation and other constraints, which all limit development potential. The developable land represents approximately 45% of the total land within the release area.

Council has a goal to streamline the provision of diverse housing and employment opportunities within the West Dapto Release Area and consider the financial and physical delivery of infrastructure for the release area. This Strategic Review is needed to address the following matters:

- New State developed policy directions.
- Improve coordinated delivery of essential infrastructure.
- Fragmented ownership and different development fronts competing for resources.
- Historical incremental changes.
- Updated technical information regarding land use constraints and infrastructure options.

Revision of the West Dapto Structure Plan is crucial in addressing these matters. The *West Dapto Vision 2018* intends to:

- a Refresh the Vision, update the Structure Plan.
- b Reflect the intended outcomes into planning policy.
- c Inform the next review of infrastructure requirements and timing.
- d Guide the preparation of concept designs for key roads, stormwater and community infrastructure.
- e Identify constraints and opportunities to improve infrastructure provisions while advocating for the need to share infrastructure contributions.
- f Guide more certainty in determining the cost of infrastructure needed to support the communities and employment lands of West Dapto to achieve the vision and improved land use outcomes.

On 23 July 2018, Council considered a report on the draft Vision and Structure Plan. Council resolved that:

- 1 *The draft West Dapto Vision 2018 which incorporates the West Dapto Structure Plan, Vision and Planning Principles be exhibited for a minimum period of 42 days with notification in accordance with the project's Engagement Plan.*
- 2 *Minor amendments to the Wollongong Development Control Plan 2009, Chapter D16 West Dapto Urban Release to commence the implementation of the West Dapto Vision 2018 be exhibited concurrently with the draft West Dapto Vision for a minimum period of 42 days.*
- 3 *The West Dapto Vision 2018 documents be updated as required to reflect the resolution in Item A of tonight's meeting (concerning the proposed Kembla Grange Correctional Centre).*

At the same meeting, Council considered a Notice of Motion on the proposed Kembla Grange Correctional Centre and resolved to oppose the facility.

PROPOSAL

The West Dapto Vision 2018 (Attachment 1) updates the strategic direction for future development of the release area. Over the past 10 years, greater knowledge of West Dapto and its development has accumulated. The West Dapto Vision 2018 includes a Vision statement, Planning Principles and revised Structure Plan to ensure the strategic direction is guided by the best available information. The Vision has been finalised following extensive public consultation of the draft Vision from 30 July to 10 September 2018. Further detail regarding the exhibition is provided in the Consultation and Communication section of this report and in Attachment 2.

The release area has a projected development timeframe of 50 years. During that time, decisions regarding a range of planning instrument reviews, neighbourhood planning & development applications, community facilitation, infrastructure design and construction, and key conservation outcomes will be made. The West Dapto Vision 2018 has been prepared to guide those decisions and consists of three key components:

- 1 Vision.
- 2 Planning Principles.
- 3 Structure Plan.

The original 2007 Vision statement is largely still appropriate with minor improvements.

The Vision is underpinned by eight principles which are indicated in the following graphic. Employment principles have been introduced following exhibition feedback. The principles have also informed the new Structure Plan, which then spatially guides the implementation via planning documents and processes and infrastructure delivery. The Vision statement, Principles, Structure Plan and Implementation is explained further in the Vision document (Attachment 1). Detailed changes to the Vision document following the public exhibition phase are explained in detail in Attachment 2.

The Structure Plan is comprised of several layers, including:

Landuse Structure

- Development.
- Employment.
- Conservation.
- Transition.

Road Network

Centres

- Regional (Dapto).
- Town (Bong Bong, Darkes, Marshall Mount).
- Village (Wongawilli, Jersey Farm, Fowlers, Huntley, Avondale and Horsley – existing).

Open space

- Neighbourhood Parks (2-5 hectares).
- District Parks (5-8 hectares).

Riparian Corridors

Heritage

- Wollongong Local Environmental Plan, 2009 heritage items shown and other heritage curtilages .

Flood extent

- Informed by the latest Mullet Creek, Duck Creek and Marshall Mount Creek catchments information representing the 1% Annual Exceedance Probability.

Each layer of the Structure Plan is described in detail in Attachment 1.

Figure 1 shows the relationship of the strategic direction to be set by the Vision document and the implementation tools available to Council.

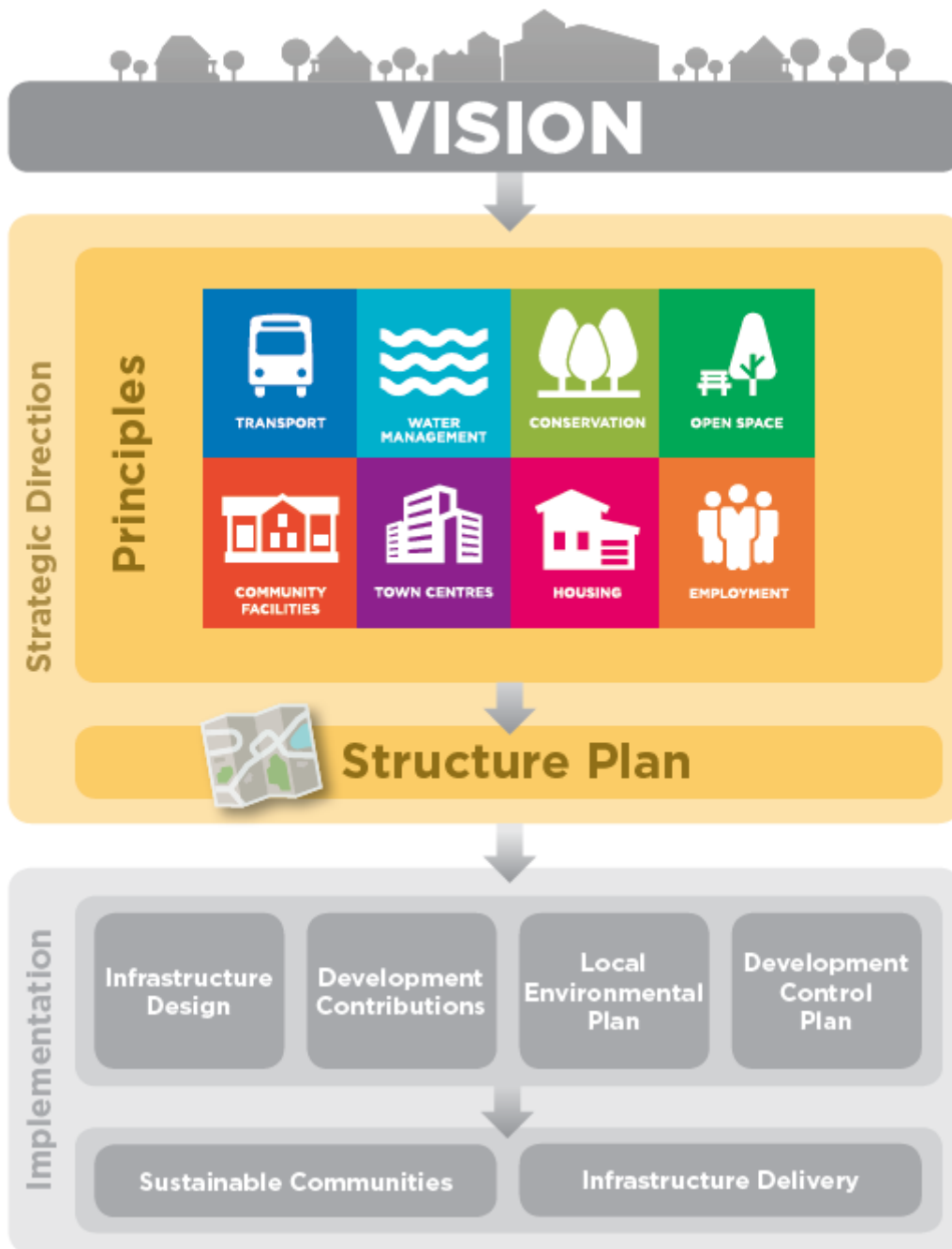


Figure 1 Structure and relationships of Planning Principles and implementation tools

Kembla Grange Correctional Centre no longer being investigated

On 14 September 2018, the NSW Government officially ruled out Kembla Grange as a Correctional Centre site. Council and much of the community opposed the initial investigation which the State commenced in April 2018.

CONSULTATION AND COMMUNICATION

The West Dapto Vision 2018 Engagement Report provides a comprehensive account of consultation and communication activities that informed preparation of the West Dapto Vision Document. The Engagement Report also includes Council staff responses to community feedback received during public exhibition of the draft between 30 July to 10 September 2018.

A Community Engagement and Communications Strategy was developed to guide the project through all stages. The Engagement Strategy organised the process and has been broken into phases. **Figure 2** illustrates the key phases of the project from an engagement perspective. The phases are discussed further below.

The project is now in Phase 3 of the strategy. There were a number of consultation sessions through Phase 2 of the project including reports to Executive Management Committee and Council meetings on 28 May 2018 and 23 July 2018.

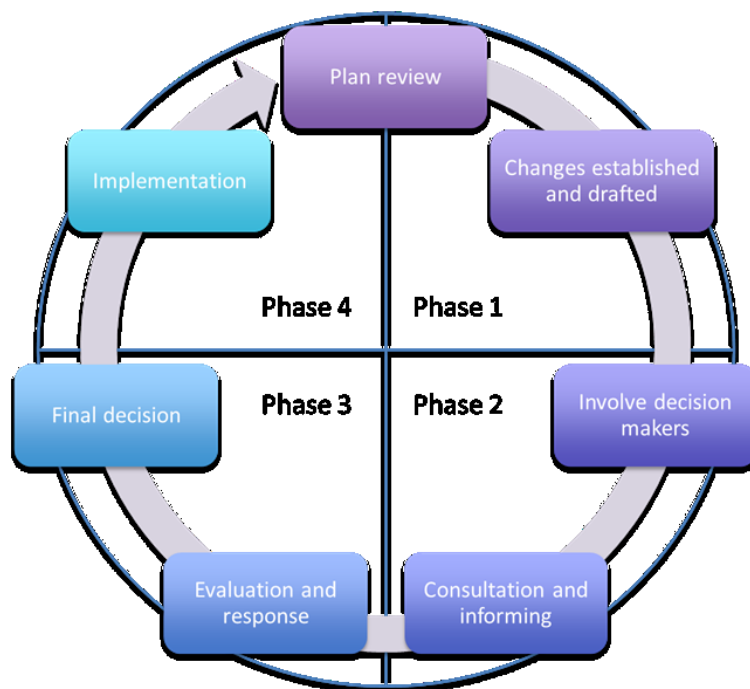


Figure 2: Engagement phasing

Phase 1 - complete

This phase marked the beginning of engagement with internal staff and key government agencies. There was a range of consultation conducted with key government agencies to assist in ensuring implementation is feasible, realistic and any changes were based on the most credible information at the time. Key agency consultation during the phase included NSW Department of Planning and Environment (DPE), Transport for NSW (including Roads and Maritime Service and Sydney Trains, Office of Environment and Heritage, and Department of Primary Industries. Development industry engagement through Urban Development Institute of Australia, Property Council through the DPE chaired Illawarra-Shoalhaven Urban Development Program Committee.

Phase 2 – Involve Decision Makers - complete

This phase marked the beginning of the more public discussion around the project. On 23 July 2018, Council resolved to take the project public and progress to exhibition and further consultation.

Phase 2 – Consultation and Informing - complete

This component of the project included a range of consultation techniques as outlined in the Engagement Report. Public exhibition was undertaken between 30 July 2018 and 10 September 2018.

This exhibition process allowed the community and interested parties the opportunity to understand Council’s vision for the urban release area guided by a revised Structure Plan, Vision statement and a set of Planning Principles. A number of specific forums were also provided by Council staff during the exhibition period to inform stakeholders of the draft West Dapto Vision document.

As the West Dapto Vision 2018 will be used in reviewing and updating planning instruments in subsequent phases of the project, there is an initial need to give life to revised information. This will be done through an update amendment to Wollongong Development Control Plan (DCP) 2009 Chapter D16: West Dapto Urban Release. This includes amendment to the Vision and inserting the revised Structure Plan as well as references to the Planning Principles into the DCP. A proposed amendment to the DCP was included as part of the exhibition material.

Phase 3 – Evaluation and Response – completing

At the end of the exhibition period, submissions received were considered and evaluated for actions and responses. All submissions received have been recorded, considered and evaluated. Several changes to the Vision document have been made in response to these Phase 3 considerations. Further detail of the Phase 3 process is provided in Attachment 2. The final Vision document includes post exhibition changes (refer Attachment 1).

A summary of the engagement activities, including participation, themes raised in submissions during Phase 2 and Council staff response to those issues is provided below. Refer to Attachment 2 for more detailed information.

Engagement activity	Participation
Number of meetings held with key stakeholders	8
Attendance at Neighbourhood Forum 8	25
Information session attendance numbers	22
Submissions received during the engagement period	32
Online Engagement. Measure and Explanation	Usage
Unique Site Visits – Total number of visits to the project page	802
Aware – Total number of users who viewed the project page	544
Informed – Total number of users who opened a hyperlink or read a document	347
Engaged – Total number of users who have actively contributed to the project	8

Themes raised in submissions	Theme summary	Council summary response
Environmental Biodiverse Areas	Importance of biodiverse areas and balance between development and the sustainability of a diverse natural habitat was recognised. Concern that changes to future conservation outcomes and development footprints will have implications for proposed bio certification.	Agree. However, no change to Structure Plan required as the importance is addressed through proposed principles. Council remains committed to achieving biocertification of the release area.

Themes raised in submissions	Theme summary	Council summary response
<p>Conservation Area Verges</p>	<p>Comments were received concerning the verges of developed land adjacent to conservation areas and transitional land to conservation land. Emphasis on the importance of space to establish delineation between urban and natural areas.</p>	<p>No change to Structure Plan required as addressed through principles. This is a Vision document implementation consideration. Where urban zoning has already occurred (Stages 1-2 & 5) transition opportunities would be considered during Neighbourhood Planning and DA processes. Where land is yet to be rezoned for urban development transition opportunities could be considered during the rezoning process, Neighbourhood Planning and DA processes.</p>
<p>Heritage</p>	<p>The preservation of both Aboriginal and European heritage was presented. There were requests to recognise the dairy industry heritage of the area.</p>	<p>Noted. Council considers representing and preserving the cultural heritage of the urban release area to be important. It is a requirement in the neighbourhood planning and development application process to consider Aboriginal cultural and other historical heritage of the area.</p>
<p>Flooding and Water Quality</p>	<p>Water management principles generally supported. Requests for more specific information regarding the management of stormwater quality and quantity, identification of site constraints and the impact on the health of Lake Illawarra. It was suggested the Vision document should also include other aspects such as drinking, recycled and waste water need to be included.</p>	<p>Agree. Revised Water Management principles included in Vision document (Attachment 1).</p>
<p>Town Centres</p>	<p>General support for the proposed reduction in the number of town and village centres. Some support for additional density in town and village centres. One submission received on behalf a town centre property owner did not support the relocation of Huntley Village town centre. One submission suggesting town centres have colour schemes.</p>	<p>Noted. Symbols only reflect indicative town and village centre locations. Where urban zoning has not already occurred the scale of each town centre is subject to future zoning processes.</p> <p>Bong Bong, Darkes and Marshall Mount town centres have already been zoned for town centre outcomes.</p>
<p>Transport</p>	<p>Principles for active and public transport well received. Discussion on how these principles were to be delivered with the suggestion that alignment of State government objectives was of particular importance. It was suggested the document should provide details relating to the connections to the broader transport network, including the M1.</p>	<p>The Structure Plan is a high level strategic document. Road and Maritime Services (RMS) and Council have an agreed in-principle strategy relating to the M1 around Dapto including longer terms southbound ramp at Emerson Road, and northbound at Tallawarra. Also, RMS is undertaking an independent strategy for the M1 between the University and Yallah.</p>

Themes raised in submissions	Theme summary	Council summary response
<p>Northern Transport Corridor</p>	<p>Landowners affected by the proposed North Transport Corridor were invited to provide comment. Comments were received from three businesses with land holdings and one community member who owns and operates farm land. Three land owners objected to the proposal.</p>	<p>Objections noted and considered. There has been extensive analysis of alternate options which were presented to Council. This work showed the extensive cost savings of the link compared to West Dapto Road only.</p> <p>The corridor has been refined post exhibition to address many of the specific issues raised.</p> <p>It is important to note that the Northern Transport Corridor still includes the upgrade of West Dapto Road to urban standard. Also, the original West Dapto Road alignment is fraught with engineering complexities (eg bridge/intersection design at Sheaffes/Darkes) and likely greater flooding impacts.</p>
<p>Employment</p>	<p>The Vision document and Structure Plan has little to say about employment and employment lands.</p>	<p>Agreed. The Vision document has been revised with inclusion of employment principles and clear identification of employment lands on the Structure Plan. Existing landuse zoning at West Dapto allows for more employment generating land uses in the future.</p>
<p>Various additional comments provided in Attachment 2</p>	<p>Refer Attachment 2</p>	<p>Refer Attachment 2</p>

Phase 3 – Final Decision – We are here

This report provides a summary report back to Council for a final decision to adopt the West Dapto Vision document (Attachment 1) and progress proposed amendments to the DCP (Attachment 3).

There has been and will continue to be consultation with all stakeholders during all phases through to and including implementation of the Vision. Additionally, other related projects will be established following the finalisation of the West Dapto Vision 2018 (signifying the end of Phase 3 and the beginning of Phase 4).

Phase 4 – Implementation

There are a number of projects that sit within Phase 4 – Implementation. These include:

- More holistic changes to the DCP and other relevant guidelines.
- Wollongong Local Environmental Plan amendments.
- More focused and detailed network planning for open space, transport and water management.
- Continued development of road concept plans and other essential infrastructure to the release area.
- Capital works programing for detailed designing and construction works.

- Financial planning and drafting of a revised West Dapto Section 7.11 Contributions Plan (new reference for Section 94 Plan).

There will be further engagement with stakeholders and consultation opportunities in conjunction with individual implementation projects outlined in the Vision for West Dapto. There will be planning projects such as Development Control Plan reviews, Local Environmental Plan amendments (through Planning Proposals), infrastructure contributions planning and policy reform as well as infrastructure design and construction projects, community development projects and environmental management projects (such as the directly relevant Biodiversity Certification project currently underway for the release area) all of which will have consultation requirements.

PLANNING AND POLICY IMPACT

This report contributes to the delivery of Our Wollongong 2028 goal “We Value and protect our Environment”, “We have an innovative and sustainable economy”, “We have a healthy community in a liveable city” and “We have sustainable, affordable and accessible transport”. It specifically delivers on the following:

Community Strategic Plan	Delivery Program 2018-2021	Operational Plan 2018-19
Strategy	3 Year Action	Operational Plan Actions
1.3.1 Manage land uses to strengthen urban areas and improve connectivity close to train stations and key transport routes.	1.3.1.2 Develop planning controls and Town Centre and neighbourhood Plans with regard to the economic, social and environmental impacts	Continue the review of the West Dapto Land Release area including the Vision, Structure Plans and Local Infrastructure Plans
2.1.5 West Dapto urban growth is effectively managed to balance employment and population growth.	2.1.5.1 In collaboration with key agencies, facilitate the West Dapto Taskforce to deliver the first stages of the West Dapto Urban Release Area	Continue to implement the Infrastructure Delivery Program to support the West Dapto Urban Release Area
Community Strategic Plan	Delivery Program 2018-2021	Operational Plan 2018-19
Strategy	3 Year Action	Operational Plan Actions
4.1.1 Provide residents with equitable access to information and opportunities to inform decision making.	4.1.1.2 Improve community understanding and awareness of Council decisions	Publish business papers to Council’s website and continue webcasting of Council meetings
5.1.4 Urban areas are created to provide a healthy and safe living environment for our community.	5.1.4.3 Policies and plans are developed, reviewed and implemented to encourage physical activity	Review West Dapto Recreation needs in line with the adopted Section 94 Plan including current concepts on Cleveland Road and West Dapto Road and ascertain recreation needs for Reed Park South
6.1.4 Integrated communities close to public transport and local services and facilities focused around existing train stations and town and village centres are planned for and encouraged.	6.1.4.1 Facilitate the integration of public amenities and transport with local communities	Actively participate in the interagency Project Control Group (PCG) to oversee the delivery of infrastructure in the West Dapto Urban Release Area

Illawarra-Shoalhaven Regional Plan 2015

The West Dapto Urban Release Area is identified in the Illawarra-Shoalhaven Regional Plan as a regionally significant urban release. There are a number of directions and actions in the Plan relevant to the release area and strategic review namely:

Illawarra – Shoalhaven Regional Plan	
Direction	Action
2.3. Deliver housing in new release areas best suited to build new communities, provide housing choice and avoid environmental impact.	2.3.1 Coordinate infrastructure delivery to support West Lake Illawarra and Nowra-Bomaderry release areas.
2.4 Identify and conserve biodiversity values when planning new communities.	2.4.1 Finalise biodiversity certification for West Dapto.
2.5 Monitor the delivery of housing to match supply with demand.	2.5.1 Monitor land and housing supply through the Illawarra Urban Development Program and incorporate the Shoalhaven Local Government Area.
3.3 Build socially inclusive, safe and healthy communities.	3.3.1 Review and update the Neighbourhood Planning Principles.
	3.3.3 Develop and implement strategies to invest in sporting and recreational infrastructure.
5.1 Protect the regions environmental value by focusing development in locations with the capacity to absorb development.	5.1.1 Avoid, minimize, and mitigate the impact of development on significant environmental assets.
	5.1.4 Create a consistent approach to protect important riparian areas in planning and development controls.

Policy Optimisation - Phase 4 - Implementation

There are a range of policy amendments required as a result of adopting an updated strategic direction of the scale of the West Dapto Vision 2018. There will be a number of changes needed including:

- Development Control Plan amendments. There are numerous chapters of the DCP that require updating to reflect the West Dapto Vision 2018 beyond Chapter D16: West Dapto Release Area.
- The Wollongong Local Environmental Plan, 2009 (LEP 2009). Different elements of the LEP may require adjustments to reflect the intent and respond to the Vision document and its directions. Amendments will also occur over time in response to planning proposals. Those amendments will need to demonstrate consistency with the Vision.
- Section 7.11 (formerly Section 94 Development Contributions Plan) - A revised local infrastructure contributions plan will need to be written to finance and give life to implementing the Vision document. This is also in alignment with the recommendations of IPART for commitment to ongoing and regular reviews.
- Infrastructure planning - including acquisition plans, infrastructure scheduling, resource and delivery plans, collaboration plans for community asset developments and state infrastructure.
- Design work with concept and detailed designs needed to work towards construction of the essential infrastructure for the release area.
- Strategic Acquisition Strategy and planning to secure local infrastructure.
- Other policies and supporting procedures that need augmenting to reflect strategic leadership.

Ecological Sustainability

The West Dapto Vision 2018 will contribute and further formalise Council’s position to promote ecologically sustainable development principles.

RISK ASSESSMENT

Given the State government's decision in 2017 to phase out the Local Infrastructure Growth Scheme (LIGS) funding by June 2020 and remove the development contributions 'cap', Council will need to closely monitor a new risk that development (subject to the higher levies) may not remain feasible. This risk is also connected to the uncertainty of the 2009 draft West Lake Illawarra Special Infrastructure Contributions Plan (SIC), which remains under review by the NSW Department of Planning & Environment (now part of the proposed Illawarra and Shoalhaven SIC investigation). Infrastructure delivery efficiency has been considered in preparation of West Dapto Vision 2018. When implemented through Council's biennial review of the West Dapto Section 94 (now Section 7.11), the new Structure Plan in the Vision document presents further opportunities for efficiency in local infrastructure items, particularly roads.

FINANCIAL IMPLICATIONS

There are a range of financial implications associated with the West Dapto Vision 2018. There are changes that the document introduces that will improve cost effectiveness in some areas and may not in others. The full extents of the impacts will be quantified during the implementation phase. However, key changes such as the revised Northern Transport Corridor, presents a substantial infrastructure cost reduction which has been incorporated into the revised network shown on the Structure Plan 2018 (Attachments 1 and 5). The Vision document sets the direction for future implementation projects to quantify changes in infrastructure costs. This work will inform the preparation of a Section 7.11 (previously Section 94) Development Contributions Plan. This will be in line with the IPART recommendations in their assessment of the draft West Dapto Section 94 Contributions Plan 2015 (final Plan post IPART adopted by Council in December 2017) and the remaining IPART recommendations yet to be implemented, as required and outlined in the letter from the Minister for Planning dated 21 September 2017.

CONCLUSION

The West Dapto Vision 2018, informed by community feedback during exhibition of the draft, has been prepared as a means to updating and incorporating more recent studies and knowledge of the release area as well as reiterating desired outcomes across a number of areas. The Vision and principles set out to establish direction and provide guidance for future decision making in the release area. This post exhibition report recommends that the West Dapto Vision, Planning Principles and Structure Plan (contained in the West Dapto Vision 2018) be adopted as Council Policy.

This report also recommends initial minor amendments to update the revised West Dapto Structure Plan and include reference to the West Dapto Vision 2018 into the Wollongong Development Control Plan Chapter D16: West Dapto Release Area be adopted.

WEST DAPTO VISION 2018





West Dapto Vision

West Dapto will grow and develop as a series of integrated and connected communities. Set against the spectacular Illawarra Escarpment and a landscape of riparian valleys, these communities will integrate the natural and cultural heritage of the area with the new urban form.

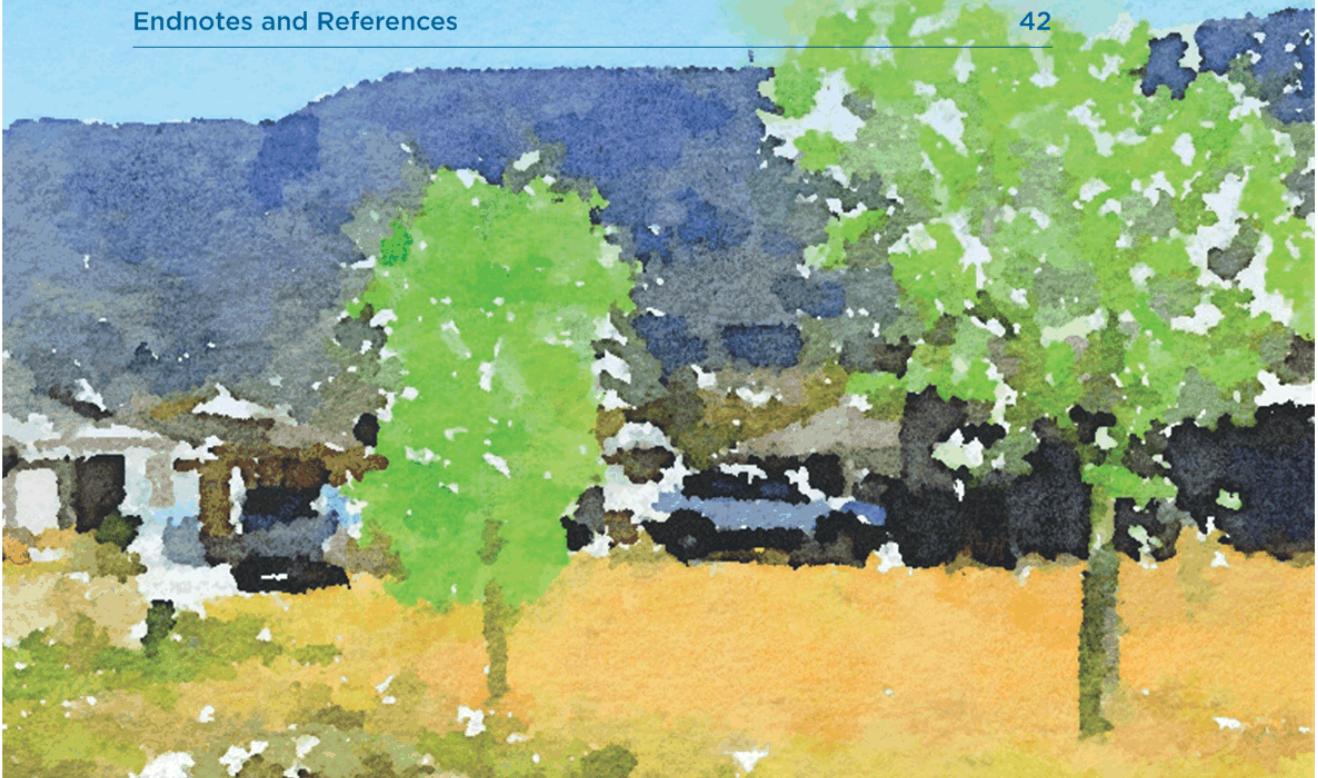
The communities will be healthy, sustainable and resilient with active and passive open space accessible by walkways, cycleways and public transport. To support these new communities, local centres will provide shopping services, community services and jobs while employment lands will facilitate further opportunities for the region.

West Dapto will be supported by a long-term strategy to oversee the timely implementation of infrastructure to deliver sustainable and high-quality suburbs with diverse housing choices.



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Urban Growth at West Dapto

The role of West Dapto in our Region

The NSW Government's Illawarra-Shoalhaven Regional Plan 2015 (Regional Plan) estimates that by 2050 the Illawarra-Shoalhaven region will have a population of about half a million people. It is expected that much of this population will live in the Wollongong local government area. The region's beachside lifestyle, its stunning natural environment and proximity to Sydney have combined to attract an increasing number of people seeking to make the region their home.

Direction 2.3 of the Regional Plan confirms that the major regional release areas of West Lake Illawarra (which includes West Dapto) and Nowra-Bomaderry will continue to be the long-term focus for greenfield housing in the region. It is therefore crucial that continued attention is given to appropriate structure and infrastructure planning for West Dapto.

Wollongong City Council estimates the West Dapto Urban Release Area will provide about 19,500 dwellings and an additional population of about 56,500 people once fully developed over 50-plus years. Final dwelling numbers may vary over time and will require continuous strategic review to ensure Council's planning caters for the changing nature of housing types, designs and densities that will occur decade to decade. The release area will also provide local employment opportunities, community and recreational facilities and the conservation of sensitive sites.

As well as being a key source of new housing for the Illawarra in the coming decades, the West Dapto Urban Release Area will establish designated employment lands and support the growth of Port Kembla. Planning will include measures to conserve and protect the Illawarra Escarpment and the quality of waterways which feed into Lake Illawarra.

The development of the West Dapto Urban Release Area is closely linked to the growth and development of the town centre of Dapto.

Dapto, located between the larger centres of Wollongong to the north and Shellharbour to the south, has evolved to provide a range of services and retailing opportunities. Future urban development west of Dapto will strengthen the Dapto town centre as a regional township and centre for employment. In line with the regional direction to encourage and facilitate "flexible employment lands", businesses and employers will have the option to base themselves within the physical and economic landscape of the release area.

The West Dapto Urban Release Area boundary is shown in **Figure 1** below.

Figure 1 West Dapto Urban Release Area.



**19,500 new homes
and the supporting
public infrastructure**

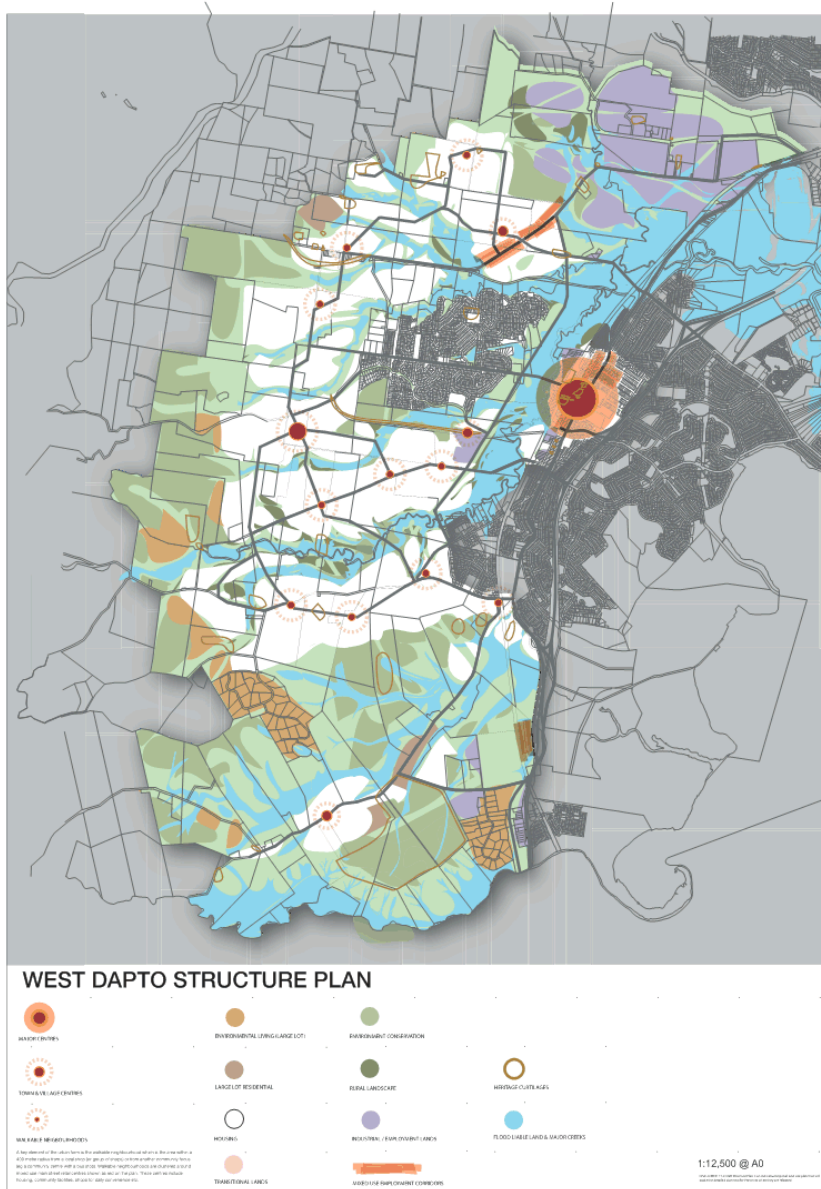
The 2008 Structure Plan

It has been 10 years since the initial Structure Plan for West Dapto was prepared. It is timely to review the Structure Plan and test previous assumptions that informed the plan. It is important to note that the fundamental structure and outcome remains the same. West Dapto is still proposed as the region's largest strategic urban release area. The general urban footprint remains the same with some refinement based on revised and improved data and understanding the area's opportunities and constraints.

Progress at West Dapto and Implementing the Vision

The establishment of about 19,500 new dwellings and providing the supporting public infrastructure is a major undertaking. To ensure a measured, sustainable development schedule, it will be rolled out in stages over more than 50 years. The existing five stages of the urban release area are reflected in the revised structure.

Stages 1 and 2 were rezoned for urban development in 2010 and include



West Dapto is still proposed as the regions largest strategic urban release area.

Figure 2
2008 West Dapto Structure Plan (GCC, 2008).
Extract from Wollongong DCP, 2009.

Kembla Grange to Wongawilli and the area west of Horsley. Stage 3 of the urban release area is Cleveland and Avondale is Stage 4. Development has commenced in the north to make use of existing services and promote development of the Kembla Grange employment lands. Development will gradually extend south while also widening east to west. Initial strategic development staging is shown in Figure 3. Stage 5 (Yallah/Marshall Mount) and the Dapto Town Centre precincts will develop separately.

We've continued to drive change around West Dapto with construction of a four-lane road from Horsley's Fairwater and Daisy Bank Drive to the Fowlers Road/Princes Highway intersection well underway. These exciting projects will continue into this financial year (Wollongong City Council, June 2017, 2017-18 Annual Plan).

To support the Vision, Council is committed to:

- managing the development program for West Dapto to achieve economic, environmental and socially sustainable urban development for the current and future residents of Wollongong.
- developing vibrant, safe, sustainable and liveable neighbourhoods that provide for community well-being and are supported by essential facilities.
- achieving long-term sustainability through the design and development of our new communities by:
 - meeting housing supply needs through a diversity in housing product.
 - encouraging well integrated and connected neighbourhoods with appropriate land uses.
 - protecting and enhancing ecological and cultural features throughout the release area.
 - maximising the potential for local employment opportunities.
 - developing a long-term strategy to oversee the implementation of infrastructure, and ensuring cost effective and efficient infrastructure provision using a collaborative and transparent approach between Council and the NSW Government.

Planning progress

Since the rezoning of stages 1 and 2 in 2010, Council has adopted numerous

neighbourhood plans into Chapter D16: West Dapto Urban Release Area of Wollongong Development Control that will facilitate creation of residential lots, the development of Bong Bong and Darkes Town Centre and Reddalls Road Industrial Area. Council continues to consider further draft neighbourhood plans and assess subdivision applications.

Since 2010, numerous subdivision development approvals have been granted leading to the issue of some 1,000 subdivision certificates. Ongoing development assessments will continue and this number will grow. On 8 June 2018, Stage 5 (Yallah / Marshall Mount) was rezoned for urban development.

Infrastructure delivery progress

The significant increases in 2018-19 to 2020-21 include amounts for West Dapto Access Strategy projects such as the Fowlers Road extension to Fairwater Drive and other major transport projects (Wollongong City Council, June 2017, Annual Plan).

Ongoing infrastructure delivery continues at West Dapto. Since 2010 Council has committed significant road infrastructure funding towards projects that have either been constructed or are currently under construction. Projects include:

- Shone Avenue upgrade to road and bridges Stage 1 & 2
- Fairwater Drive extension to Cleveland Road (Daisy Bank Drive)
- Cleveland Road bridge and school drop-off area
- Fowlers Road connection and bridges
- West Dapto Road (Kembla Grange) intersection upgrade
- Bong Bong Road upgrade including Glenlee Drive roundabout upgrade
- Darkes Road safety and alignment upgrades
- Wongawilli Road upgrade

We are continuing to design other key road projects, including:

- Yallah Road and Marshall Mount Road
- Cleveland Road
- Jersey Farm Road
- West Dapto/Sheaffes/Darkes Road
- Avondale/Huntley Road

Council's commitment to the vision

is reflected in **planning principles** intended to guide all land use planning decisions associated with the urban release area. The principles are discussed in further detail in the body of this report. The principles have been used to review the 2008 West Dapto Structure Plan shown at Figure 4.1, Chapter D16: West Dapto Urban Release Area of Wollongong Development Control Plan, 2009 (see also **Figure 2** of this document). Structure Plan 2018 is presented at the **Implementing the Vision** section of this report. The planning principles will promote best

practice outcomes without replacing legislative obligations.

Essential infrastructure required to deliver the vision will rely on a coordinated approach to funding and delivery through a combination of development contributions from Council, State stakeholders and, in some cases, additional means such as public-private partnerships.

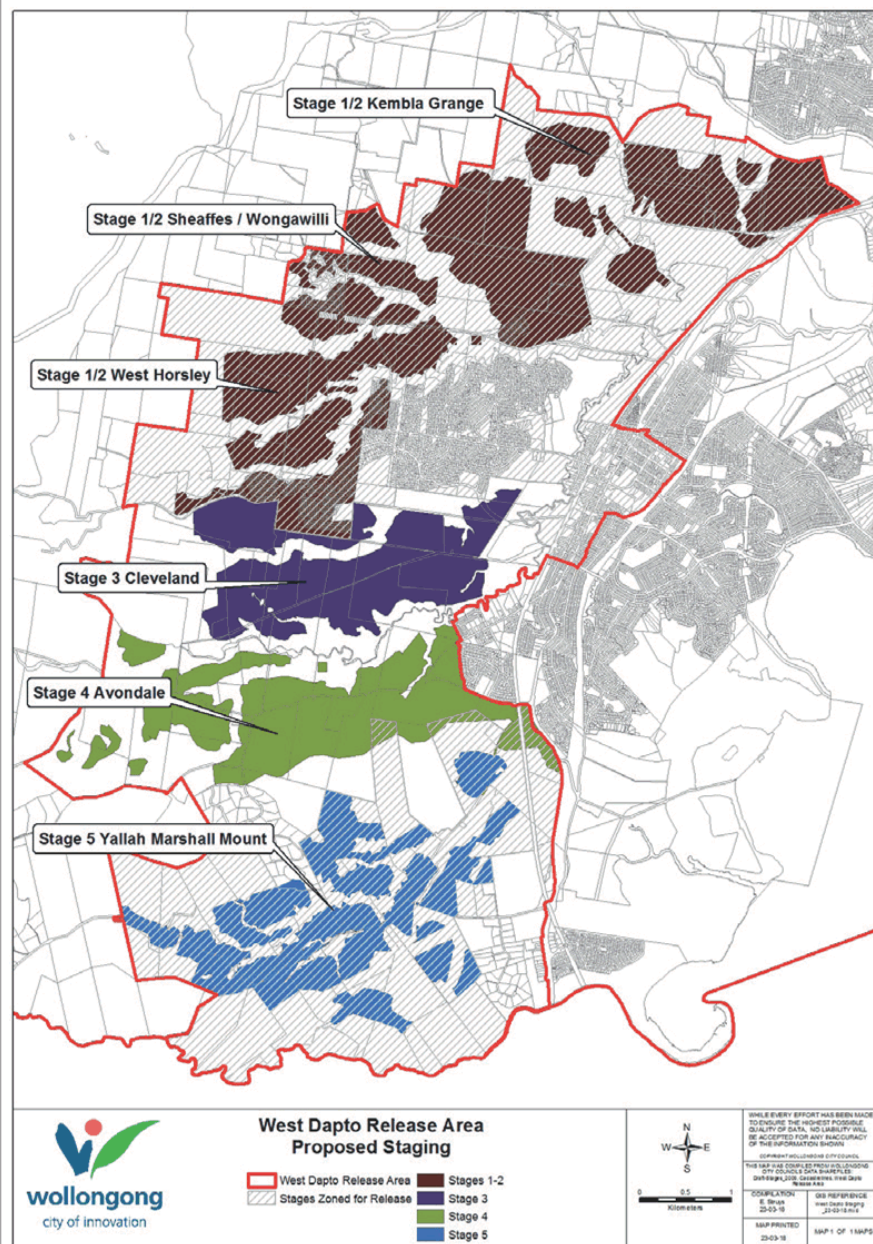


Figure 3
West Dapto Staging Plan. Modified from West Dapto Section 94 Plan, 2017.

Revising the Structure Plan

A structure plan guides the future strategic direction of an urban release area. All spatial planning decisions flow from the strategic guide. As a guiding tool, the plan is high level and relies on subsequent planning decisions and statutory tools under the NSW Environmental Planning and Assessment Act, 1979 to add more detail. These tools include but are not limited to the Wollongong Local Environmental Plan, Wollongong Development Control Plan, neighbourhood planning and ultimately development applications. Implementing a structure plan goes beyond planning tools. Infrastructure planning, design, funding and delivery are essential components. Engagement of all relevant stakeholders when developing the structure is crucial to ensure the strategic vision is understood and has an opportunity to come to life.

Several key inputs and factors have evolved informing the revised Structure Plan, including but not limited to:

- improved understanding of road network requirements and travel behaviour tested through Council's in-house TRACKS model and informed by engineering design.
- demographic changes and changes to social and cultural settings as well as broader changes to living standards shaping trends in housing markets; need for an increase in housing diversity, choice and affordability; and increased demand and pressure on housing supply throughout the region and NSW.
- changing State planning policy setting influencing urban outcomes requiring more rigour during subdivision planning and assessment.
- improved understanding of flood behaviour through the 2018 Mullet Creek Flood Model update.
- rezoning of Stage 1 & 2 and Stage 5 of the initial Structure Plan; progressive preparation of neighbourhood plans within Stage 1 and 2 and subsequent LEP amendments as needs identified; and the ongoing lodgement and approval of development applications and progressive housing construction.
- better understanding of the role of town

and village centres and their strategic location through two key studies (2014, Urbacity report and 2016, SGS, Dapto Town Centre Study).

- more detailed knowledge of biodiversity and environmental setting (updated vegetation map, threatened species survey and Biodiversity Conservation Options, 2013).
- progress in infrastructure planning and delivery.
- changing infrastructure funding environment.

The Structure Plan has also been informed by the West Dapto Principles listed within this document. All feedback Council received during exhibition of the draft plan was considered in the finalisation of the plan.

In summary, the key changes between the 2008 Structure Plan (shown at Figure 2) and the 2018 plan (shown at Figure 10) include:

- 2010 urban zoning of Stages 1 and 2 (rezoned as one stage). The revised Structure Plan reflects the rezoned land.
- June 2018 urban zoning of Stage 5 (Yallah/Marshall Mount). The revised Structure Plan reflects the rezoned land.
- Revised road network strategy informed by Council's TRACKS model, progress in infrastructure design and strategic costing.
- Revised flood layer 1% Annual Exceedance Probability (AEP). Informed by the 2018 Mullet Creek Flood Model update.
- Revised biodiversity survey, assessment and conservation initiatives. Council progress in data collection and mapping to formulate a biodiversity strategy with updated development patterns.
- Revised and consolidated town and village centres to more efficiently serve the growing community (eight new centres compared with 14 proposed in 2008).
- Inclusion of the significant access road project at Fowlers Road/ Fairwater Drive.
- Important heritage items included in the 2018 Structure Plan to ensure future planning decisions consider the implications. Other heritage values, specific heritage controls and required considerations will be provided in more detail via Council's plans and policies, including the Wollongong Local Environmental Plan, 2009, and the Wollongong Development Control Plan, 2009.

About West Dapto Planning Principles

The West Dapto Planning Principles are intended to guide land use planning decisions associated with the urban release area.

The principles are guiding review of the existing West Dapto Structure Plan and Master Plan. Changes to the Structure Plan and Master Plan will be implemented via:

1. Council-sequenced and developer-proposed rezoning of land through amendment of Wollongong Local Environmental Plan, 2009.
2. Review and update of the West Dapto chapter D16 of Wollongong Development Control Plan, 2009.
3. Development of new development contributions plans (with both Council Contributions Plan, and Department of Planning and Environment's (DPE) Special Infrastructure Contributions (SIC) supporting the Structure Plan.
4. Continued assessment and determination of development applications within the urban release area.

What is a strategic planning principle?

A planning principle is a statement of a desirable outcome from a chain of reasoning. Planning principles can guide outcomes and provide a list of appropriate matters to be considered in making a planning decision. While planning principles are stated in general terms, they are applied to promote consistency and diligence around planning and design considerations.

Planning principles are not legally binding and they do not prevail over Council's plans and policies. They inform changes to Council plans and policies and guide changes in process, their application and outcomes. The principles must be considered in conjunction with existing relevant legislation.

Planning principles assist when making a planning decision, especially:

- where there is a void in policy;

- where policies expressed in qualitative terms allow for more than one interpretation;
- where policies lack clarity and consistency; and
- where policies lack detail, are dated against sciences or need improvement as a result of undesirable development outcomes.

Sustainable and liveable communities

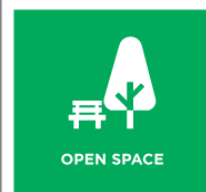
Council's vision for the West Dapto Urban Release Area is reflected in contemporary needs for sustainable and liveable communities. Sustainable development, spatial planning and urban design principles reflect broader approaches to sustainability in state legislation and will inform decisions, processes and guide relevant policy content and reform. Urban design and non-urban land use principles together with the revised Structure Plan and implementation documentation will lead to designs sympathetic to landscape features and unique characteristics.

The West Dapto Urban Release Area has many environmental, social and economic challenges that require careful consideration to ensure efficient and sustainable delivery of urban development. These factors include the unique topography, water management (including flooding), fragmented land ownership, threatened species and ecological communities, Aboriginal and European heritage, accessibility and the cost of infrastructure. Careful consideration needs to be given to understand the release area's full potential for urban development.

It is important to note that promoting sustainable outcomes is intrinsic in all the West Dapto Urban Release Area principles, outlined below, and a key outcome through the collective implementation of all planning principles.

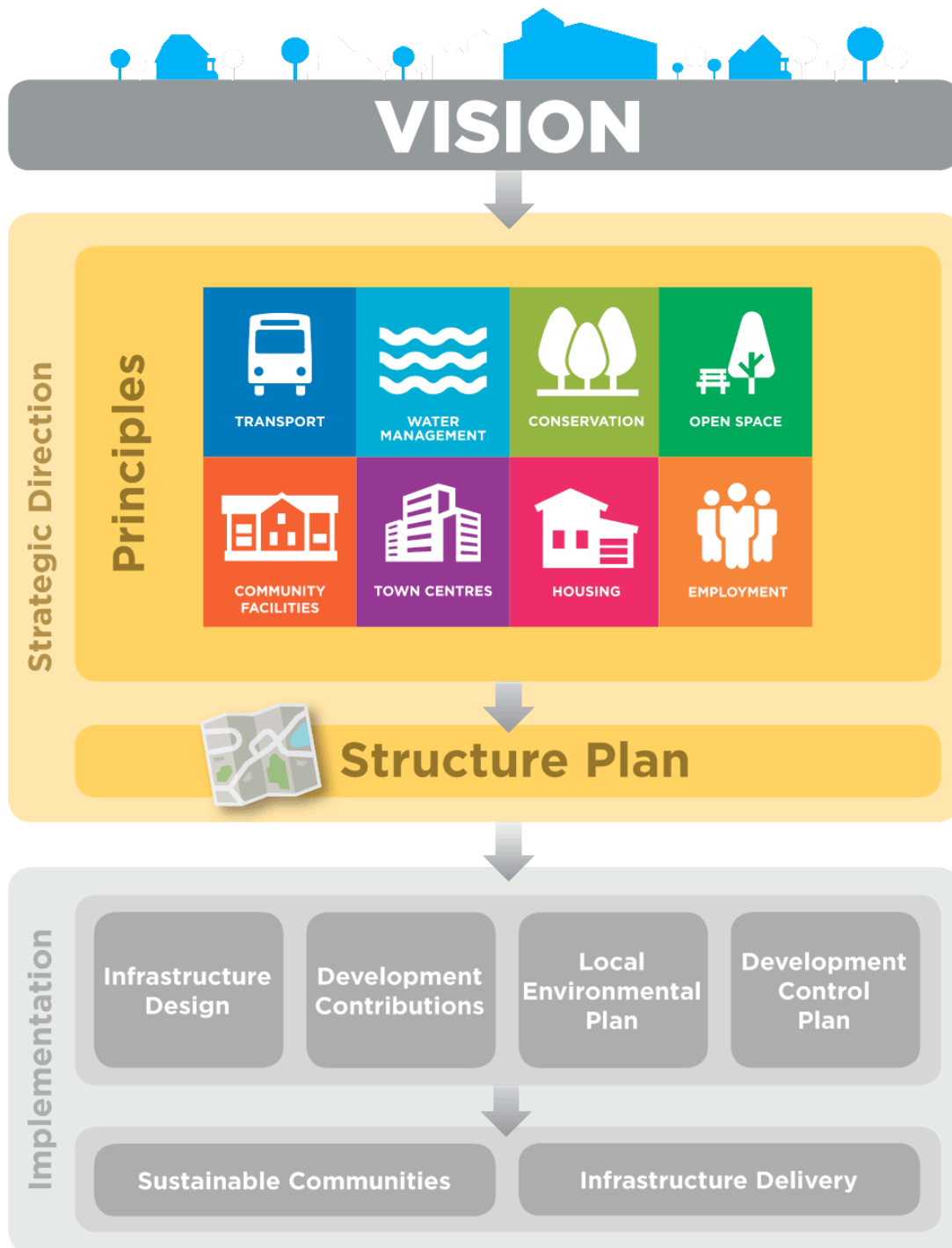
The West Dapto Urban Release Area principles

The Principles' order of appearance does not denote any form of priority but outlines interrelated land features which require detailed consideration in development proposals. **Figure 4** outlines the principles and their key components. Each principle is detailed in the following sections of this report.



Many of the principles are supported by quantitative measures to ensure the desired outcome can be achieved. The appropriate place for these measures will be explored during implementation (see **Figure 4**).

Figure 4
Structure and relationships of principles to planning tools



Transport Principles

1.1 ROAD NETWORK

The future road network for the West Dapto Urban Release Area will be the 'backbone' of the community, providing for all types of access and movement through the release area. The road network form and provision contribute significantly to achieving the vision of long-term sustainability.

An integrated transport system is proposed that caters for the private car as well as freight, public transport, pedestrians and cyclists. Road types have been developed based on a functional hierarchy, where the road designs support the transport modes in various ways. The road network has been developed to cater for planned land use and deliver a safe, connected and efficient transport framework that compliments the natural environment and facilitates sustainable transport outcomes.

PRINCIPLE 1

Supportive land use patterns

- 1.1 Plan higher residential densities and mixed land use in and adjacent to town and village centres and major public transport nodes to reduce reliance on the private car and reduce overall road network requirements and costs.
- 1.2 Plan the co-location of compatible land uses to reduce reliance on the private car and reduce overall road network requirements and costs.

PRINCIPLE 2

A safe, connected and legible road network for all users

- 2.1 Provide a road network based on the modified grid layout to maximise accessibility and efficiency.
- 2.2 Implement a clear hierarchy of road types that meets relevant transport requirements and road function, creating a highly legible road network for all users.

- 2.3 Ensure the major road network supports the town and village centres hierarchy within West Dapto.
- 2.4 Ensure a balanced and integrated road system, catering not only for the private car but for freight, public transport (buses), pedestrians and cyclists.
- 2.5 Implement driveway access restrictions and manage on-road parking on the higher-order roads (access-denied roads) to improve traffic efficiency and pedestrian/cyclist safety and amenity.
- 2.6 Implement intersection designs appropriate to the road types, surrounding land use and environment.
- 2.7 Ensure built form controls on adjacent properties deliver active frontages to maximise passive surveillance and personal safety in the road environment.
- 2.8 Ensure roads and intersections are designed to meet relevant standards and best practice guidelines.

PRINCIPLE 3

Design roads to compliment the environment

- 3.1 Ensure roads fit with the landform (topography), complement local character/land use and minimise visual, ecological and noise impacts.
- 3.2 Ensure road alignments take advantage of views and visual stimuli for the motorist to enhance legibility, sense of place and create a positive experience in movement.
- 3.3 Consider the role of road networks in structuring precincts, including both transport and community needs to maximise liveability and quality urban outcomes.
- 3.4 Incorporate Water Sensitive Urban Design (WSUD) into transport infrastructure design and consider options to increase permeability of hard surfaces.

PRINCIPLE 4

Quality infrastructure

- 4.1 Use robust and durable materials, quality finishes and ancillary infrastructure with neat, uncomplicated designs that minimise maintenance requirements and discourage vandalism.



- 4.2 Consider the use of innovative technologies in road and transport infrastructure design, construction and operation.

PRINCIPLE 5

Road network to support sustainable transport outcomes

- 5.1 Staging of additional car based infrastructure to encourage public/active transport and maximise use of existing infrastructure.
- 5.2 Use an established 15% transport mode shift target when planning for road network requirements within West Dapto to reduce car dependence.
- 5.3 Ensure that roads are designed to provide a high level of safety, access and amenity for pedestrians, cyclists and public transport (bus) services.

1.2 BRIDGE AND CULVERT DESIGN

PRINCIPLE 1

Good design is context sensitive design

Design that is sensitive to context is valued by communities. Bridges/culverts that are functional and fit the landscape are good for community pride and local identity.

- 1.1 Consider locational context and functional requirements in the design process.
- 1.2 Bridge/culvert alignment should integrate with environmental and local constraints.
- 1.3 Ensure storm immunity standards are met and design/construction provides longevity to minimise maintenance requirements.
- 1.4 Design and finishes should respond to and incorporate the character of the area.

Detailed objectives, associated outcomes and specific guiding requirements for bridge and culvert delivery will be developed as part of the next steps in implementing the West Dapto Vision Document. The 'next steps' process is shown in Figure 4 of the Vision Document.

1.3 PUBLIC TRANSPORT

The establishment of efficient and attractive public transport options for West Dapto is imperative to achieve sustainable growth outcomes. This importance is echoed in many Council and State Government documents, including the Illawarra Regional Transport Plan and Illawarra - Shoalhaven Regional Plan. The new land release area in West Dapto presents an opportunity to promote 'best practice' in public transport and non-motorised modes, reducing reliance on the private car, contributing to a mode shift target and creating a more resilient, interesting and liveable community.

To this end, high-level principles have been developed that will be used to inform & guide public transport planning for the new growth area, to ultimately ensure that the vision for sustainable transport in West Dapto is achieved. These principles are set out below.

PRINCIPLE 1

Supportive land use patterns

- 1.1 Plan residential land use and higher residential densities close to town, village centres and major public transport nodes.
- 1.2 Locate major generators of travel demand in, or close to, accessible centres that are well serviced by public transport.
- 1.3 Ensure plans allow for a variety of land uses around public transport nodes and in centres so that services are centralised.

Ensure that roads are designed to provide a high level of safety, access and amenity for pedestrians, cyclists and public transport (bus services).

PRINCIPLE 2
**Effective bus network,
service provision &
integration**

- 2.1 Provide coordinated, frequent and reliable bus services to destinations within and surrounding West Dapto.
- 2.2 Create an efficient, seamless travel experience through integrated ticketing, minimising transfer times and intuitive and easily accessible service information.
- 2.3 Ensure street networks are interconnected and allow access for bus services.
- 2.4 Ensure the bus network is highly accessible and services the majority of residences, town and village centres, employment areas, sporting facilities and Dapto Railway Station.
- 2.5 Incorporate bus priority measures as necessary to ensure highly efficient, prioritised bus transport.

PRINCIPLE 3
Quality infrastructure

- 3.1 Provide comfortable, attractive, safe and secure buses and bus-related infrastructure with clear timetable/service information, catering for all users, including disabled/elderly.
- 3.2 Ensure pedestrian and cycle links to bus stops are of a high standard (refer also Active Transport Principles).

- 3.3 Encourage the use of innovative and efficient public transport technology.

PRINCIPLE 4
**Early provision of public
transport**

- 4.1 Introduce bus services 'just ahead of time' to gain early community acceptance and set travel behaviour patterns from the start of new land release development.
- 4.2 Encourage staging of development in a contiguous manner with adequate roads and footpaths to make the early provision of bus services feasible and to allow bus networks to be efficiently staged.

PRINCIPLE 5
**Working with State
Government to provide
& improve public
transport services**

- 5.1 Work with State Government to help plan and deliver improvements to the public transport system in and around West Dapto, including bus networks and service levels that meet or exceed Transport For NSW's Integrated Public Transport Service Planning Guidelines. Complete a major interchange upgrade at Dapto Station that provides the highest level of multi-modal accessibility, efficiency and convenience.

*Dapto High School
Bus Interchange
(\$2.4 million).
Bus stops and
drop-off areas,
increasing access
and safety.*



PRINCIPLE 6

Promotion & incentives

- 6.1 Build community awareness and promote benefits of public transport in West Dapto (eg. travel packs, website, branding of buses etc.).
- 6.2 Investigate incentives for use of bus services.
- 6.3 Encourage significant employment-generating developments to implement workplace travel plans.
- 6.4 Use the location, supply and availability of parking to discourage car use and support public transport.

1.4 ACTIVE TRANSPORT

Walking and cycling (referred to as Active Transport) will be an important component of the future West Dapto transport system, contributing significantly to achieving the vision of a 'sustainable' community. Design and planning for the West Dapto Urban Release Area has emphasised the notion of walkable communities which enable sustainable healthy living to occur. Walking is also an important factor in the success of public transport.

The future strategy for walking and cycling at West Dapto will require local solutions. Best practice planning for active transport at the local level will deliver convenient and attractive travel options, especially for short trips. This will not only assist in reducing reliance on, and impacts of, private car use but will also contribute to the health and vitality of the community. Principles for active transport are set out below:

PRINCIPLE 1

Supportive land use patterns

- 1.1 Plan residential land use close to town and village centres and major public transport nodes, with higher residential densities adjacent to these locations to maximise walking and cycling catchments.

- 1.2 Encourage careful siting and co-location of land uses to maximise walking and cycling options.
- 1.3 Promote shared parking across uses in town/village centres to encourage walking when undertaking multiple activities. Avoid fragmented parking to maximise use of spaces and improve walkability through more compact town centre layouts and fewer driveway crossings.

PRINCIPLE 2

Connected, functional pedestrian & cycle network

- 2.1 Provide a convenient and legible movement network for pedestrians (including those with disabilities) and cyclists, ensuring excellent connectivity and directness between residences and attractors such as schools, shops, public transport nodes, sports ovals and employment centres.
- 2.2 Include footpaths/shared paths on all roads in the road hierarchy except laneways and minor access streets (refer to Roads Principles).
- 2.3 Take advantage of easements, riparian areas and open spaces to create convenient pedestrian and cycle links (or short-cuts) that maximise accessibility between different precincts /land uses.
- 2.4 Implement a directional (often referred to as way finding) strategy to provide clear and coordinated information for access to facilities and services within the West Dapto Urban Release Area and surrounds.
- 2.5 Provide safe and secure bicycle parking or storage facilities at key destinations in town and village centres, sports ovals, community facilities, transport interchanges and key open space areas.
- 2.6 Encourage bicycle parking and end-of-trip facilities as part of the development of employment and commercial land uses.
- 2.7 Ensure the West Dapto cycleway network integrates with the surrounding regional cycle routes.

PRINCIPLE 3

Attractive and safe environment

- 3.1 Design streets using current 'best practice' to provide a high level of pedestrian and cyclist amenity and safety, creating public space where people want to be.
- 3.2 Provide convenient and safe road crossing points, traffic calming (where appropriate) and tree planting to enhance the pedestrian and cycle environment.
- 3.3 Ensure built form controls on adjacent properties deliver active frontages to maximise passive surveillance and accessibility to/ from the path network.
- 3.4 In high pedestrian demand areas such as town and village centres, further increase pedestrian amenity and safety through path widening, driveway access controls and other site-specific actions to improve pedestrian priority.
- 3.5 Incorporate Crime Prevention Through Environmental Design (CPTED) principles in the planning of walking and cycling facilities.

- 3.6 Consider innovative technologies for lighting key off-road paths, including solar lighting and luminescent pathway materials.
- 3.7 Construct pedestrian and cycle infrastructure according to current 'best practice', with attractive and durable materials and well-designed landscaping treatments (refer also to Roads Principles).
- 3.8 Incorporate supporting infrastructure such as seats, bike rails, shade structures, bubblers and viewing/ rest areas into the active transport network where appropriate.

PRINCIPLE 4

Promotion of active transport

- 4.1 Encourage significant employment-generating developments to implement workplace travel plans.
- 4.2 Prepare household travel information packs for new homebuyers.
- 4.3 Support active transport community events and promotions.
- 4.4 Support the establishment of bike share services.

Walkable communities which enable sustainable healthy living to occur.





Water Management Principles

The water management principles are the integration of common floodplain and stormwater management principles.

In isolation, floodplain management is the consideration of the consequences of flooding as it relates to human occupation of the floodplain and establishing corrective and preventative measures for reducing flood damage and risk to life.

Stormwater management is the practice of collecting, conveying and reusing quality treated stormwater runoff primarily from urban development with minimal nuisance, while also protecting receiving waters and the surrounding environment.

The approach taken is to consider integrated water management principles in order to achieve a better overall 'water management' strategy for the West Dapto Urban Release Area and also provide high level guidance for new development.

PRINCIPLE 1

Integration of floodplain and stormwater management

Integrate floodplain and stormwater management into the urban development process.

PRINCIPLE 2

Improved water quantity management

Improve the management of water quantity relating to urban development inclusive of stormwater, wastewater, water supply and recycled water.

PRINCIPLE 3

Sustainable floodplain development

Create sustainable development around and within the floodplain.

PRINCIPLE 4

Preservation of floodplain function and natural corridors

Preserve the natural function of the floodplain, natural waterways and riparian corridors.



PRINCIPLE 5
Protection from flooding

Protect people and property from flooding in a strategic way.

PRINCIPLE 6
Protect water quality

Protect water quality of surface and groundwater from urban development and any adverse effects on water quality to downstream watercourses and Lake Illawarra.

PRINCIPLE 7
Integrate stormwater with the environment

Integrate stormwater management into the natural and urban land form in an unobtrusive way.

PRINCIPLE 8
Efficient and sustainable infrastructure

Provide efficient and sustainable stormwater infrastructure for the urban release area.

PRINCIPLE 9
Preserve/enhance the environment

Preserve the natural environment and enhance where possible in keeping with stormwater quantity and quality management objectives and targets.

PRINCIPLE 10
Promote liveability using water

Promote liveability and amenity for the community by using water in all environments.

The water management principles are intended to link the overall vision to Council's desired outcome for the West Dapto Urban Release Area. This link will be further achieved by the use of tools including detailed reports and updated statutory policies. The detailed reports and policies will include a Floodplain Risk Management Study and Plan, Water Cycle Management Study and Plan, updated Wollongong Local Environmental Plan, 2009, Wollongong Development Control Plan, 2009 and the Lake Illawarra Coastal Management Program (CMP) to support the implementation of the West Dapto Vision. These documents will be developed as part of the next steps in implementing the West Dapto Vision document. The Lake Illawarra CMP is currently being developed by Wollongong and Shellharbour City Councils with support from the NSW Office of Environment and Heritage. The next steps process is shown on **Figure 4** and described under the section - **Implementing the Vision**.

Looking east from Wongawilli towards Lake Illawarra.





Conservation Principles

ENVIRONMENT CONSERVATION

In adopting the concept of ecologically sustainable development, regionally significant releases such as the West Dapto Urban Release Area present opportunities to preserve remnant vegetation and enhance ecological connectivity (structural and functional). This section identifies the strategic environmental priorities to guide planning and development of the West Dapto Urban Release Area, integrating conservation priorities with opportunity for a future West Dapto Biodiversity Conservation Strategy (BCS) and Biodiversity Conservation Strategy Structure Plan (BCSSP).

A BCS provides opportunity for Council to achieve biodiversity certification (bio certification) in a coordinated approach for the whole release area, improving the overall conservation outcomes beyond what would be achievable site by site. Council will work closely with the NSW Office of Environment and Heritage and Department of Planning and Environment to achieve this strategic outcome. The principles should also be used to guide site-by-site considerations.

PRINCIPLE 1 Prioritise areas that offer high environmental value for conservation

Consider information that identifies areas of threatened ecological communities or stands of habitat greater than 4ha (considered to present high environmental value in terms of habitat size and location) and avoid impacts as a result of land use changes to these areas.

PRINCIPLE 2 Connectivity of habitat areas

Connecting patches of habitat that have high biodiversity value will provide opportunity for ecological migration over time as well as opportunity for improvement to habitat quality and values. These are more commonly known as biodiversity corridors providing strategic connection of larger and better condition patches of vegetation either by re-establishing continuous native vegetation cover or designing stepping stones of habitat that traverse local corridors.

PRINCIPLE 3 Protect Environmental Values

Provide complimentary land uses alongside conservation sites to assist in improving and protecting the ecological function of the site and enhancing its resilience.

Secure areas that present high environmental value as areas for conservation and long-term management (ideally through a bio certification process).

Figure 5 illustrates key conservation documents and their relationships. The BCS will provide the direction and framework while the BCSSP will outline the actions to guide the implementation of conservation measures. Implementation of these documents and achieving biocertification creates opportunity to improve biodiversity values of the West Dapto Urban Release Area.

Further detail, including environment and heritage conservation objectives, the role of West Dapto Environmental Principles, bio certification process and conservation priority areas will be developed as part of the next steps in implementing the West Dapto Vision.

HERITAGE CONSERVATION

Heritage values present great opportunities to enhance cultural understanding and social enrichment of the release area. The Australian Heritage Commission (2000) states the aim of both natural and cultural heritage conservation is to retain the significance of place (Australian Government, Department of Environment and Energy, 2017). Impacts on the heritage





significance of the area are key considerations at each planning stage. Land use changes should retain, promote and integrate heritage values. The principles for West Dapto aim to incorporate heritage conservation and promote consideration of the significance of place to encourage heritage protection.

PRINCIPLE 1
Prioritise the Conservation of Heritage Items and sites of Aboriginal Heritage Significance

Listed heritage items and sites of Aboriginal, cultural and/or archaeological significance should be retained and conserved within new development areas with appropriate curtilages and visual settings. Development planning should account for the significance of sites and places and consider retention of key sites that contribute to the historic setting of newly developing neighbourhoods.

PRINCIPLE 2
Respect the Cultural Landscape

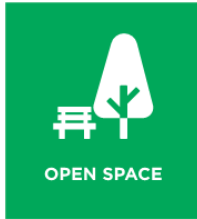
The West Dapto Urban Release Area has a rich and diverse history of Aboriginal and non-Aboriginal occupation. The area retains a range of key landscape elements, landforms, natural features such as creeks and ridgelines,

important views and visual connections. It has historic road and transport corridors that are important and unique aspects of the area, contributing to its character and significance by telling the story of development. Proposed development should be guided by an understanding of, and respect for, significant features of the natural landform and the historic setting. New communities should be assisted to understand and appreciate the unique visual and physical connections between places and features within and outside of their development areas.

PRINCIPLE 3
Embed Local History and Character in New Communities

Developments should strive to feature historic sites and places of significance to provide a unique sense of identity and character for developing neighbourhoods. The adaptation and re-use of historic buildings in an appropriate manner that provides for their conservation and integration into new developments is encouraged. The use of historically relevant street names, integration of interpretation and the celebration of aspects of a site's indigenous and post-settlement history are encouraged to ensure that the rich history of the area is celebrated and recognisable in the identity of developing communities.

Figure 5
West Dapto's strategic environmental conservation documents



Open Space & Recreation Principles

This section establishes the open space principles for the West Dapto Urban Release Area. This section should be read in conjunction with Community Facilities and will contribute to delivering against the Urban Greening Strategy. An overarching framework with **four inter-related principles** is designed to achieve the open space objective for the West Dapto Urban Release Area. Open space need to be considered spaces that are designed responding to principles to ensure they provide for a resilient community.

PRINCIPLE 1 Functionality

- Appropriate size and flexible footprint for multiple functions and uses (*Hierarchy of facilities*).
- Open space and recreation outcomes are not compromised by other competing functional elements. For example flooding and water management, traffic and road infrastructure, cultural heritage and biodiversity.

PRINCIPLE 2 Accessibility

- Walkable distances from residential areas, universal design principles used for facilities with a focus on 'play' and diverse experience (*resident catchments*).
- There is a well-distributed network of accessible (in both location and design), attractive and useable public open spaces and natural areas within the existing and future neighbourhoods of West Dapto.

PRINCIPLE 3 Connectivity, movement and flow

- Connected spaces with shared paths to other facilities, places of interest and centres (open or riparian corridors, heritage sites and urban bushland).

- The open space areas are highly connected to create a network of open space with a range of functions to complement the existing landscape features.

PRINCIPLE 4 Value and amenity

- Future uses complement and add to existing values (an active play facility may jeopardise a threatened ecological community, water management may restrict active use etc.).
- That public open space and natural areas will provide opportunity for interaction filling a variety of recreational, sporting, play, the physical and social needs of the community.

HIERARCHY AND CATCHMENTS

Based on the principles of functionality, accessibility, connectivity and community values, there are some guides to provision of open space based on size and characteristics of projected population and its recreational needs. **Table 1** categorises relevant residential catchments for each level of open space provision (hierarchy) and how it generally relates to size requirements in the future urban and residential areas based on NSW Recreation and Open Space Planning Guidelines for Local Government (2010) (Table 1).

It is important to emphasise that any benchmark standards cannot be used as a 'one size fits all' assessment tool. Through analysis of local context and community needs, these standards can and should be varied if based on sound evidence.

Figure 6 demonstrates the hierarchy to function and size relationship for the West Dapto Urban Release Area.

The relationship can also be understood in catchments for community populations. **Figure 7** shows proposed open space residential catchments of West Dapto (based on methods established in NSW Guidelines for Local Government, 2010). These catchments will be developed further for Stages 3 and 4 during implementation.

Catchment refers to the area of resident (or future resident) population the open space facility is intended to provide for. As part of the open space network for the West Dapto Urban Release Area, open space will need to be provided at all hierarchy and catchment levels. **Table 1** outlines standards



for open space planning around catchment distances in the future urban and residential areas to the open space.

Function and service	Size	Residential Catchment (distance)
Local Passive	0.5-2 ha	400-600m
Local Active	1-2 ha	400-600m
Neighbourhood Passive	2-4 ha	2km
Neighbourhood Active	2-5 ha	2km
District Active	5-8 ha	Southern ward of LGA
City wide Active	8 + ha	Facility to serve the whole LGA

Table 1 (above) Open space provision standards (based on NSW Recreation and Open Space Planning Guidelines for Local Government (2010) and the Elton Report (2007) recommendations).

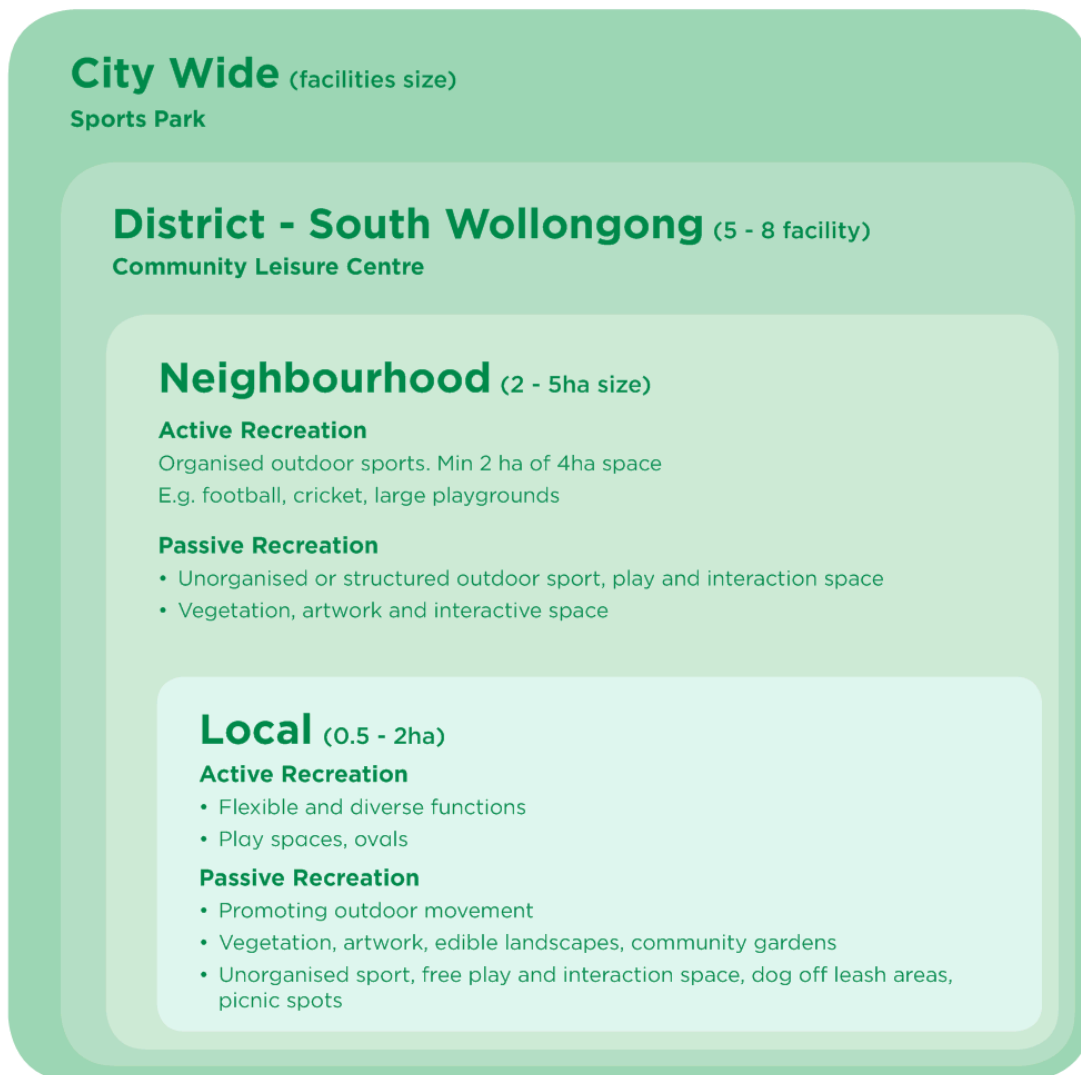


Figure 6 (above) Open space hierarchy and functions

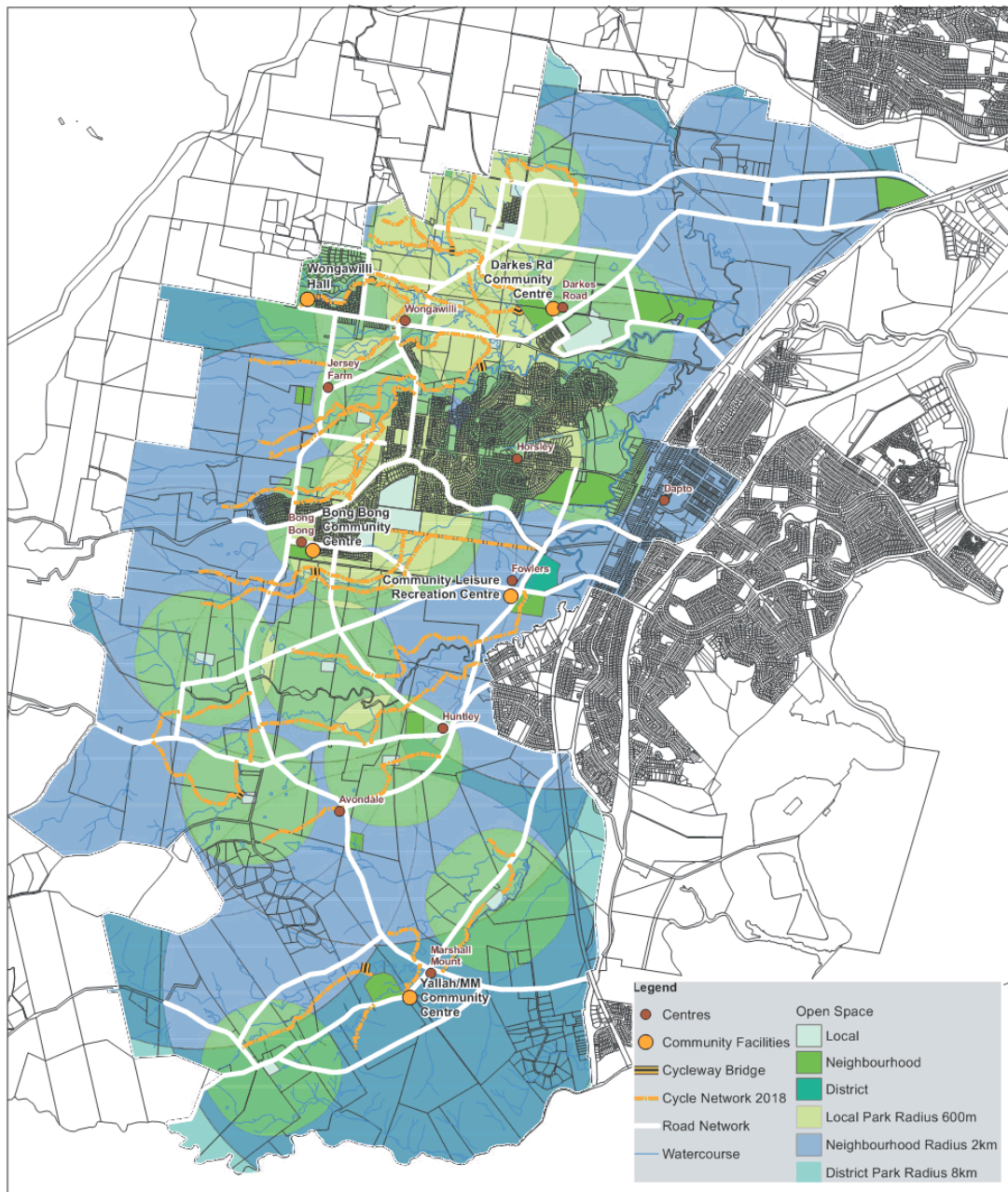


Figure 7
Example of Open
Space distance
catchments



Community & Education Facilities Principles

Goal 3 of the NSW Government's Illawarra-Shoalhaven Regional Plan promotes:
A region with communities that are strong, healthy and well-connected

Ongoing planning for the West Dapto Urban Release Area aims to achieve this goal. The goal is reflected in our Vision and key principles for Transport (Roads, Public Transport), Open Space & Recreation and Community and educational facilities. This section should also be read in conjunction with Open Space and Recreation. Community facilities are an increasingly important component of local service provision across a range of areas in the public and private sector. For example, there is a clear trend in public health and alternative education to use local community facilities for regular and specialist community services rather than develop individual facilities. Council understands this increases the importance of flexible design, location and efficiencies to be achieved by these facilities for them to make the best contribution to community outcomes.

There are nine principles to be considered in the planning of the West Dapto Urban Release Area community and education facilities.



Figure 8
Community Hub Concept of co-location and multipurpose, joint use design.

PRINCIPLE 1
Healthy, diverse and resilient

Community facilities contribute to quality of life to support healthy, diverse and resilient community.

PRINCIPLE 2
Efficient

Making efficient use of resources through shared or co-located facilities and multiple use agreements (multi-purpose community hubs) with flexible design that can respond, expand and adapt as needs change.

PRINCIPLE 3
Safety, security and adding to civic identity and sense of place

Promote safety, security and provide focal points adding to civic identity and sense of place through clustering community facilities.

PRINCIPLE 4
Self-sufficient and resilient community

Community facilities provide opportunity for self-sufficiency to build capacity and social capital and to actively contribute to community resilience.

PRINCIPLE 5
Vibrant and accessible

Placing facilities in convenient central locations, adjacent to open space which contribute to the vibrancy of the development, are accessible and allow for overflow activities such as children's play.

PRINCIPLE 6
Equitable

Provide equitable access for all sections of the population, through the distribution, design and policies of facilities.

PRINCIPLE 7
Diversity

Community facilities promote diversity and encourage people from culturally and linguistically diverse backgrounds to participate in the social and economic life of the community.

PRINCIPLE 8
Viability and sustainable

Developing sustainable funding, ownership, governance, management and maintenance arrangements, including private partnership arrangements where community benefit is achieved.

PRINCIPLE 9
Coordination

Council to work with the state government and non-government schools sector to promote best-practice education outcomes for the community of West Dapto. This will include sharing data and integrating asset solutions, such as opportunity for shared and joint-use facilities.

Planning for the provision of education is important for West Dapto's growing community. In NSW, the Department of Education provides funds and regulates education services for NSW students from early childhood to secondary school. Council will continue to work with the Department to promote best-practice education outcomes for the community of West Dapto.

*Lord Mayor
Gordon Bradbery AM
opens the Berkeley
Community Facility.*



Town Centres Principles

This section provides town centre principles to be considered during planning for the West Dapto Urban Release Area. As a new release area, there is an opportunity to ensure that the ideal treatments are made to establish sustainable, appealing and functional residential living as well as commercial and light industrial areas providing employment, social and cultural opportunities with sufficient flexibility to cater for the future populations needs. As with other previous principles the town centre principles should not be considered in isolation.

The key objective of the town centre principles is to help identify centre locations, function and existence. The town centres of West Dapto will fill diverse roles, functions and mixed uses. Configurations will reflect the town centre hierarchy with a focus on pedestrian priority. Supported with a decision process (zoning, neighbourhood planning, etc.), appropriate locations will promote the social and economic functions and outcomes sympathetic to character and 'place'.

There are three principles to be considered in planning of town centres to meet the objectives for West Dapto Urban Release Area:

PRINCIPLE 1 Hierarchy

Hierarchy provides a basis for which to establish functions, order and visions as well as allowing the protection of these. Hierarchy is not the only way to understand or set direction in planning for centres; we understand that the centres are also a connected network, which can support each other in an interlocking way.

Each level of the hierarchy represents the size and general characteristics that reflect the centres' commercial, retail and business roles (see Figure 9). The Hierarchy reinforces role and function, supports the Wollongong City Centre and higher order centres and provides certainty for investment decisions. Hierarchy reinforces character and identity as well as provides direction around appropriate residential density sympathetic to community facilities and service locations.

Regional Centres

Dapto is a regional centre. The new release, located close to this centre is in addition to an existing urban landscape, an important consideration in the planning of new town and village centres. These lower order centres must be sensitive to this hierarchy to maintain existing functions and minimise any potential negative impacts.

Town Centres

There are three town centres planned for the urban release area. The objective of the town centres is to ensure that development in the Darkes Road and Bong Bong (and Marshall Mount) town centres contributes to the creation of retail, business, commercial and community hubs while providing significant local employment opportunities.

Village Centres

The study, West Dapto further review of release area centres and controls (Urbacity, 2014), noted the role of villages, as a lower order centre, is to "provide a convenient alternative to the supermarket-based town centres for daily goods and services with a focus on amenity for housing density and improved public transport use".

PRINCIPLE 2 Movement sensitive

The town centres of West Dapto are expected to facilitate social contact, employment and living needs in a sustainable manner. The town centres will be located to promote active transport and healthy lifestyle. Living within 400m-800m of a mix of destinations is consistently associated with higher levels of active transport in adults and older adults (Heart Foundation, 2017).

Movement sensitive means movement (accessibility, location etc.) will be a key consideration for co-location of a mix of destinations (or land uses) within a centre. Centres will provide activities, attractions and services within walking distance. The community hub will create a focal point within the neighbourhood for multiple activities to be undertaken and different daily needs (ie. live, work, play) to be met in the one location.

Centres must also be supported and surrounded by a network of connected streets, paths and cycle ways, providing opportunities for active transport and convenient access to public transport. The network will link centres with open space and recreation areas.



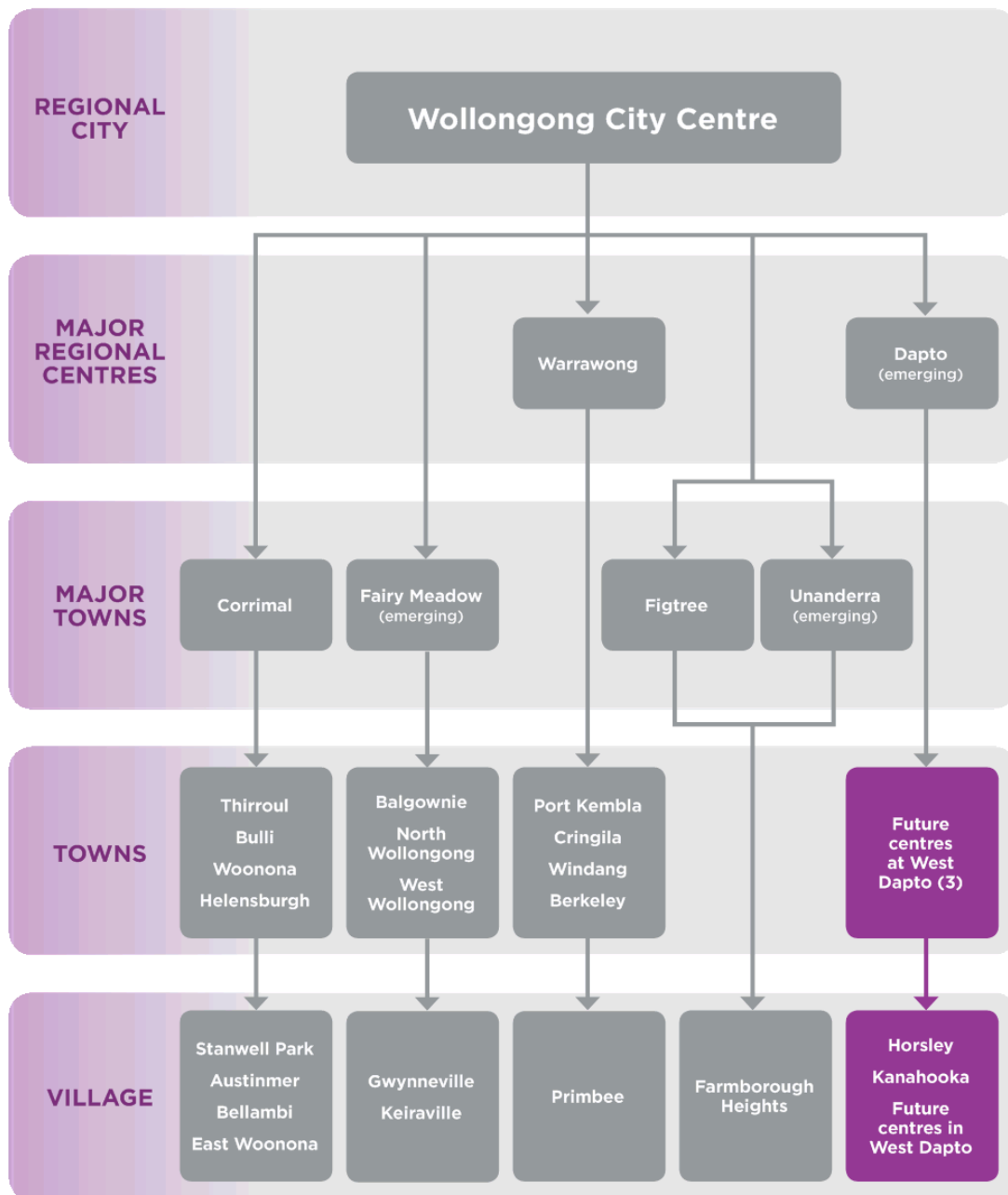
PRINCIPLE 3
Diversity and identity

Centres will facilitate a diverse range of activities by prioritising spaces for people of all ages that become vital to the social fabric of a neighbourhood where people gather, meet friends and family and engage in social activities.

Especially important for new centres is creating a vision that encourages diversity while shaping and reflecting a centre's character. Centres will be

diverse from each other (through hierarchy, features and visions). The vision capitalises on existing features of heritage, environment (vegetation, topography etc.) and contributes to a new theme expressing the centre's role in the urban residential landscape. A vision and purpose give people the creative foundations, understanding that activity, physical setting and meaning come together to create a 'sense of place'.

Figure 9
Retail and Business Centre Hierarchy in the Wollongong Local Government Area.



Housing Principles

This section establishes the Housing Principles for the West Dapto Urban Release Area, providing for ongoing strategic planning decisions. As a new release area, there is an opportunity to establish sustainable, appealing and functional residential living. The principles should also be used to guide site-by-site considerations.

The Housing Principles should be read in conjunction with Council's LGA-wide Housing Policy setting, which is updated from time to time to ensure we are addressing the challenges of a changing housing environment.

These principles should be considered in conjunction with all other planning principles in this document, as they all contribute to achieving the vision for the West Dapto Urban Release Area and ultimately sustainable housing outcomes.

"The communities will be healthy, sustainable and resilient and will have access to diverse housing choice and active or passive open space accessible by walkways, cycle ways and public transport."

PRINCIPLE 1 Encourage housing diversity

Diversity can be delivered through different products at different stages of planning by promoting and providing a range of density and lot size and shapes to offer a range of choice to better meet changing community needs.

Mixture of density low to high, single dwellings, dual occupancy, town houses and apartments in appropriate locations should all be considered at neighbourhood planning and subdivision design stages.

Promote increased densities and innovative design types close to town and village centres and transport infrastructure where possible.

PRINCIPLE 2 Promote housing affordability

Residential neighbourhoods cater for a variety of demographic and socio-economic characteristics. Promoting housing mixture is one tool that provides opportunity for more affordable housing options and reduces housing stress.

PRINCIPLE 3 Establish sustainable, energy efficient, appealing and functional residential living

Target an increased use and uptake of renewable energy through housing and neighbourhood design.

Seek to promote best practice design excellence in housing provision and neighbourhood planning.

PRINCIPLE 4 Creating local amenity and a sense of place

This principle is about designing safe, healthy and active neighbourhoods with interactive interfaces between residences, the streets and surrounds. It is about ensuring there is connection between housing and the streets, parks and activity areas they adjoin and interface other uses.

Encouraging and supporting housing design that responds to place. Creating site responsive built form and lot layouts that consider existing features and landscape context, natural land form and surrounding land uses.

Manage housing growth to protect and promote the conservation values that contribute to concepts of 'place' in West Dapto.

PRINCIPLE 5 Housing transition to the Illawarra Escarpment

Reduce housing density on the fringe of the urban release area to provide delineation to the housed urban areas and a buffer to the Escarpment and important environmental features.



The Housing principles are intended to link the overall vision to Council's desired outcome for the West Dapto Urban Release Area, with the use of tools including standards set by Wollongong Local Environmental Plan, 2009 and controls established within Wollongong Development Control Plan, 2009 which may be reviewed to support the implementation of the West Dapto Vision and principles. These documents will be developed as part of the next steps in implementing the West Dapto Vision document. The next steps process is shown in **Figure 4** and described under the section - Next Steps and Implementing the Vision.

“Opportunity to establish sustainable, appealing and functional residential living.”

Housing development in Horsley.



Employment Principles

This section establishes employment principles for the West Dapto Urban Release Area to inform strategic decisions in the release area ensuring employment outcomes are achieved.

The employment principles should be read in conjunction with all other planning principles in this Vision document as the principles applied together will ensure sustainable employment outcomes for the release area.

PRINCIPLE 1 Support local sustainable employment

- Facilitate maximum local employment opportunities.
- Maintain an aspirational target for job creation.
- Support a variety of employment opportunities accessible to the whole community.
- Employment containment to reduce commuting out of the release area and region.

- Encourage high density employment opportunities.
- Local access to higher order (career generating) employment opportunities.

PRINCIPLE 2 Attract, facilitate and support industries, enterprises and business to locate in West Dapto

- Explore planning flexibility to cater for changing employment forms.
- Incentivise employment generating activities.

PRINCIPLE 3 Ensure Town & Village centre employment outcomes are prioritised

- Landuse decisions associated with West Dapto's Town and Village centres are to ensure employment outcomes are a priority consideration.
- Encourage provision of professional services jobs in addition to retail jobs in the release area town and village centres.



PRINCIPLE 4
Protect existing employment land

- Maintain existing zoned employment land within the release area to ensure a supply of employment lands is provided over time and is available to take advantage of when employment generating opportunities are presented.
- Create a strategy to enable appropriate interim uses of employment areas that also allows for gradual intensification over time.

PRINCIPLE 5
Take advantage of and encourage employment innovations

- Planning decisions to anticipate, be responsive to and cater for innovative employment solutions.

PRINCIPLE 6
Improve employment opportunities whilst ensuring development is of a high standard

- Compatibility with residential and sensitive land-use as well as natural conservation outcomes for the urban release area.
- Apply merit based approach when assessing employment generating activities.
- Encourage development for employment which provides a range of goods and services without adversely affecting the amenity, health or safety of any adjoining area.

PRINCIPLE 7
Ensure a high level of accessibility to employment Hubs

- To encourage location of high intensity employment areas within walking distance of existing or proposed public transport services.
- To encourage location of appropriate industrial and low intensity non-retail employment areas adjoining major arterial roads to take advantage of accessibility and exposure.



Structure Plan 2018

A Structure Plan guides the future strategic direction of an urban release area. All subsequent spatial planning decisions can flow from the strategic guide. As a guiding tool, the plan is high level and relies on subsequent planning decisions and statutory tools under the NSW Environmental Planning and Assessment Act, 1979 to add more detail. These tools include but are not limited to the Wollongong Local Environmental Plan, Wollongong Development Control Plan, neighbourhood planning and ultimately development applications. Implementing a Structure Plan goes beyond planning tools. Infrastructure planning, design, funding and delivery are an essential component. Council engaged with all relevant stakeholders during exhibition and when developing the structure to ensure the strategic vision is understood and has an opportunity to come to life.

It has been 10 years since the initial Structure Plan for the West Dapto Urban Release Area was prepared. It is timely to review the Structure Plan and test previous assumptions that informed the plan. It is important to

note that the fundamental structure and outcome remains the same. West Dapto is still proposed as the region's largest strategic urban release area. The initial five stages of urban release are still reflected in the revised structure. The general urban footprint remains the same with some refinement based on revised and improved data and understanding of the area's opportunities and constraints.

Structure Plan Layers

The Structure Plan is comprised of a number of layers, as described below.

Flooding (1% AEP)

This layer represents the extent of flooding up to and including the 1% Annual Exceedance Probability (or 1% AEP). The purpose of this layer is to identify it as a physical constraint for development and also ensure the management of flood risk by restricting future development within this zone at the implementation stage. The layer combines the 1% AEP flood information from the catchments of Mullet Creek, Duck Creek and Marshall Mount Creek. The current layer includes flood information extracted from the corresponding flood studies of each catchment; namely the Mullet Creek Flood Model Update Report (2018), Duck Creek Flood Study (2012) and the Macquarie Rivulet Flood Study (2017).

Spectacular Illawarra Escarpment and a landscape of riparian valleys.



The information used from the Duck Creek and Macquarie Rivulet flood studies includes shallow inundation depths, whereas the information from the Mullet Creek report has been filtered to exclude shallow inundation depths of less than 150mm and areas where the velocity depth product is less than 0.05.

The existing flood layer for the Mullet Creek catchment on the 2008 Structure Plan was derived primarily from the draft Mullet and Brooks Creeks Floodplain Risk Management Study and Plan, 2006. The flood layers for the Duck and Marshall Mount Creek catchments were based on preliminary information and modelling commissioned by Council at the time.

Riparian Corridor

This layer represents the riparian corridors across the urban release area, derived from the Riparian Corridor Management Study (RCMS) which was prepared for Council by the Department of Infrastructure Planning and Natural Resources (DIPNR) in 2004. Note some of the riparian corridors depicted in the 2004 document have been modified over time due to changes in topography through land use activities. These areas have not been updated on the Structure Plan. Similarly, areas of inundation in some locations do not overlay with riparian corridors due to reasoning provided above.

The purpose of this layer is to identify the corridors as a physical constraint for development and also ensure the protection and enhancement of designated riparian corridors by restricting future development within these zones at the implementation stage.

This current layer identifies watercourses across the urban release area and is closely associated with the conservation layer which defines the appropriate buffers according to the designated riparian corridors shown in the RCMS (2004).

The existing 2008 Structure Plan did not delineate watercourses but rather associated watercourses with flooding.

Land-Use Structure

• Conservation Areas

Riparian corridors (mapped as blue lines) identify watercourses across the urban release area. This information is closely associated with components of the conservation layer.

The conservation layer includes areas that provide appropriate buffers to riparian corridors to maintain the corridors' function and structure for the health of the broader environmental setting. The designated riparian corridors are dynamic and geomorphologically active. This information was garnered through more analysis than a standardised buffer distance.

Other important information included in the conservation layer relates to the Illawarra Escarpment area of regional importance, ecological studies identifying areas of vegetation with high ecological value and, in particular, the work done towards biocertification of the urban release area in 2013 (Ecological, 2013).

The conservation areas in Stages 1 and 2 of the urban release area are consistent with planning decisions to date. Stages 3-4 are guided by information as outlined above and Stage 5

As a guiding tool, the plan is high level and relies on subsequent planning decisions.



Integrating natural and cultural heritage of the area.

Infrastructure planning, design, funding and delivery are an essential component.

(Yallah/Marshall Mount) conservation areas are guided by previous planning decisions informed by the Duck Creek Flood Study 2012 (for riparian corridor context) and existing biodiversity information.

• **Transition Areas**

The transition areas shown on the Structure Plan have been identified generally as a reflection of Housing Principle 5 Housing Transition to the Illawarra Escarpment. Council is promoting the need to reduce housing density on the fringe of the urban release area to provide delineation to the housed urban areas and a buffer to the Escarpment and other important environmental features.

• **Development Areas**

The development areas shown on the Structure Plan are those compatible with an urban land use outcome. These include residential and employment lands. The areas are not affected by the key constraints of the urban release area as identified on the draft Structure. However, development within these areas will be subject to the detailed implementation processes summarised at **Figure 4**.

Road Network

The road network (shown as Road Network Review on the Structure Plan) represents the framework of main collector roads required to service the transport needs of the urban release area. It is worth noting that these roads will not only cater for motorised vehicles but also for active transport (walking and cycling) through provision

of verge footpaths and shared paths. These are higher order roads that are important for traffic function and/or public transport.

The proposed road network provides connectivity to, from and between residential areas and town and village centres. It uses a number of existing roads, as well as new roads and bridges. It is planned to provide efficient and direct access to all development areas, working within the constraints of the urban release area.

Bong Bong Road/Iredell Road and Princes Highway (mapped as black lines) and the M1 Princes Motorway (mapped as a yellow/black line) have been included on the Structure Plan for context, as they are important existing main roads that contribute to access for West Dapto.

The Structure Plan shows indicative road alignments only, which may be modified in some cases as more relevant information becomes available and detailed design work is completed. The Structure Plan is a strategic plan and therefore does not provide detail on the types of roads (eg widths, number of lanes), bridges or intersections.

The proposed road network has been informed by a number of previous transport and land use studies, a Wollongong City Council/State Government Agency Working Group and more recently Council in-house design and modelling work.

Heritage

The 2018 Structure Plan update shows two heritage layers of information. The LEP 2009 Heritage layer includes items as identified in Schedule 5 and on the Heritage Map of Wollongong Local

Integrating natural and cultural heritage of the area.



Environmental Plan 2009.

The 2018 Structure Plan also shows heritage sites in the urban release area as Other Heritage Curtilages. These sites were identified during a 2006 study to inform the original LES for the urban release area (Non-indigenous Heritage Study, West Dapto - Volume 1, HLA-Envirosciences Pty Ltd 2006). In addition to those sites identified during the study, there is also an identified site protected on the Heritage Map referenced in Part 28 Calderwood Site, Schedule 3, of State Environmental Planning Policy (State Significant Precincts) 2005.

Town Centres

The 2018 Structure Plan update identifies eight centres of activity to meet the needs of the West Dapto Urban Release Area.

The eight centres are shown on the Structure Plan at **Figure 10**.

The centre locations are indicative only. Location of these centres has been informed by the Town Centres Principles of Hierarchy, Movement Sensitive, Diversity and Identity outlined in Section 6 of this report. Dapto's role as the key regional centre will be maintained and promoted into the future.

Council has developed the strategic direction for these centres based on 2014 Urbacity report (capacity in context of Dapto Regional Centre, Calderwood & Tallawarra) and 2016 SGS Dapto Town Centre Study.

The indicative locations include three town centres referred to as Darkes, Bong Bong and Marshall Mount, which are proposed to service the communities of the north, central and southern residents and visitors to the urban release area. It is important to note that the Town Centres of Darkes and Bong Bong are zoned B2 Local Centre and were zoned for a Town Centre outcome as part of the larger Stage 1 and 2 urban development zoning in 2010. Council resolved to support rezoning of the Marshall Mount town centre to B2 Local Centre. The site was subsequently rezoned by the State on 8 June 2018.

Five village centres are proposed to meet the daily needs of residents. The village centres are proposed at Wongawilli, Jersey Farm, Fowlers, Huntley and Avondale.

Specific detailed planning of each centre will be subject to the implementation steps shown at **Figure 4**.

Open Space

The indicative location for open space on the Structure Plan relate to the larger (2ha and greater) open space facilities. As outlined in the principles, these are neighbourhood scale and larger. They have been included on the Structure Plan as important provisions for the future communities of the urban release area. The need for these areas was originally established through the Elton Report 2007 and subsequently through Section 94 Planning. The location

Eight centres of activity to meet the needs of the West Dapto Urban Release Area.



Consider existing features and landscape context.

on the Structure Plan was guided by the principles and although they are indicative, re-emphasise their role as part of the vision and as key structural elements of the urban release area.

Key changes and other information

The Structure Plan 2018 includes a number of key changes relating to relevant layers and also inclusion of new layers when compared to the 2008 Structure Plan. These changes are outlined below.

Flooding (1% AEP)

The flood extents for Mullet Creek catchment have been updated since the original flood layer shown in the 2008 Structure Plan. The primary reason to update the flood layer is to better inform Council on current and future planned development areas using flood mapping based on improvements in flood modelling techniques and better data.

The main differences between the 2008 and 2018 flood layers are the increased flood extents westwards and also greater definition of flood extents throughout the catchment via the capture of smaller watercourses and low points. Other differences noted between the flood layers are as a result of ongoing development and construction of major infrastructure (ie. bridges) since 2010 and filtering of the 2018 flood extents.

Riparian Corridor

The 2018 riparian layer has been included to highlight the watercourses shown in the RCMS (2004), which was not evident in the 2008 Structure Plan.

There are minor differences between the 2008 and 2018 layers with respect to the riparian buffers, being associated with the conservation layer. Further explanation is provided in the section relating to the Land-Use Structure Layer.

Conservation

The 2008 Structure Plan showed conservation areas and some small pockets of rural landscape. The conservation areas on the 2008 Structure Plan supported the strategic basis of protection for the escarpment lands, riparian corridors and pockets of important biodiversity. There was also some rural landscape land identified around conservation areas. This approach has not changed for the Structure Plan 2018 with key areas of high environmental value and connections along riparian corridors from the Escarpment shown. A key change has been the rural landscape areas are no longer represented with the conservation areas. There is also a reduction of conservation land between Stages 4 and 5 as Stage 5 (Yallah/ Marshall Mount) has been rezoned for development. There has been a reduction in conservation areas identified as more detailed investigation was undertaken during the Stage 5 planning proposal assessment.



Integrate water management into the natural and urban land form.

Town Centres

Council's updated strategic direction for centres at West Dapto represents a consolidated approach. Eight centres are now proposed to service the Urban Release Area. This compares with 14 centres proposed in the 2008 Structure Plan (shown in Figure 2).

The consolidated centres approach is considered reasonable and needed to ensure each centre can sustain a commercial outcome long term. The higher volume was considered unsustainable and the ability of all 14 centres to stay commercially viable in the longer term was questionable. Council has developed the consolidated centres approach following recent studies, including the 2014 Urbacity report (capacity in context of Dapto Regional Centre, Calderwood & Tallawarra) and 2016 SGS Dapto Town Centre Study.

Road Network

There are a number of changes to the proposed road network for West Dapto compared with the previous 2008 Structure Plan. These differences are a result of changes that have occurred in policy as well as improved information and knowledge about the urban release area. Areas of improved knowledge and refinement that have influenced the road network include flood modelling and mapping, road design and strategic traffic modelling and analysis. In addition, road network modifications have occurred as a result of consideration of opportunities and constraints associated with new Neighbourhood Plans and Development Applications, as well as the consolidation of Town and Village Centres.

The key changes are:

- **Northcliffe Drive now extends along existing Reddalls Road and west to connect with West Dapto Road just east of Shone Avenue**

Detailed investigations have established that the proposed road location is the most efficient and direct main road route with added flood reliability to service the urban release area. The route was informed through improved data and knowledge, including road civil design analysis and costing as well as flood and traffic modelling. Council has identified a significant cost saving for this route compared with the existing policy position of upgrading West Dapto Road, reducing the burden on ratepayers.

The Principles developed for the urban release area also helped guide decision making around this issue.

- **The North-South Link Road (between Darkes Road and Bong Bong Road) has been removed**

This section of new road was formerly proposed to provide a convenient traffic and public transport link between the northern part of the urban release area and Dapto Town Centre/Railway Station Interchange as well as southern parts of the urban release area. Due to the low topography, this road was not proposed to be flood reliable. Detailed road design and flood analysis has resulted in its removal from the Structure Plan for safety reasons. It is now proposed that the existing Darkes Road/Princes Highway provide this necessary linkage for the northern part of the urban release area. The North-South Link Road also provided convenient active transport (walking and cycling) connectivity for the northern part of the urban release area to Dapto. However, the new Structure Plan would seek to retain an off-road path connection in this location to maintain this positive active transport outcome.

- **Fowlers Road extension (Princes Highway to Fairwater Drive) is now included**

A significant amount of work was completed following the Growth Centres Commission review of West Dapto Urban Release Area in 2008, resulting in Council resolving in 2013 to re-introduce Fowlers Road extension as a flood-reliable main road link for West Dapto, which was supported by a State Government Agency Working Group. Since that time, Council has progressed with detailed design work for the new road, with construction commencing in July 2017.

- **Hayes Lane/Jersey Farm Road link has been realigned to the north-east to join Shone Avenue**

The 2008 West Dapto Structure Plan (Figure 2) shows Hayes Lane extending north to meet Wongawilli Rd at Smiths Lane. Following further investigation of this arrangement, it was found to have a number of practical difficulties in design and existing community impacts. The alternative of upgrading Jersey Farm Road was also investigated, with design analysis showing substantial issues

Areas of improved knowledge and refinement that have influenced the road network include flood modelling and mapping, road design and strategic traffic modelling and analysis.

with flooding, cost and the dual-line railway level crossing.

The Structure Plan realigns the northern end of Hayes Lane to meet with Shone Avenue, avoiding flood-prone land and providing a more direct route to Darkes Town Centre and the northern part of the urban release area.

• **The proposed new road between Cleveland Road and Brooks Reach is now realigned to join Brooks Reach Road**

The 2008 West Dapto Structure Plan (GCC, 2008) shows this road connecting to the southern side of Bong Bong Town Centre. An analysis of future north-south traffic demands in the vicinity of the town centre has shown that an additional north-south connection to Bong Bong Road would be beneficial for the town centre function as well as local accessibility.

It should be noted that the main north-south road (west of the town centre) has been realigned slightly eastward compared to that shown in the 2008 Structure Plan, with a

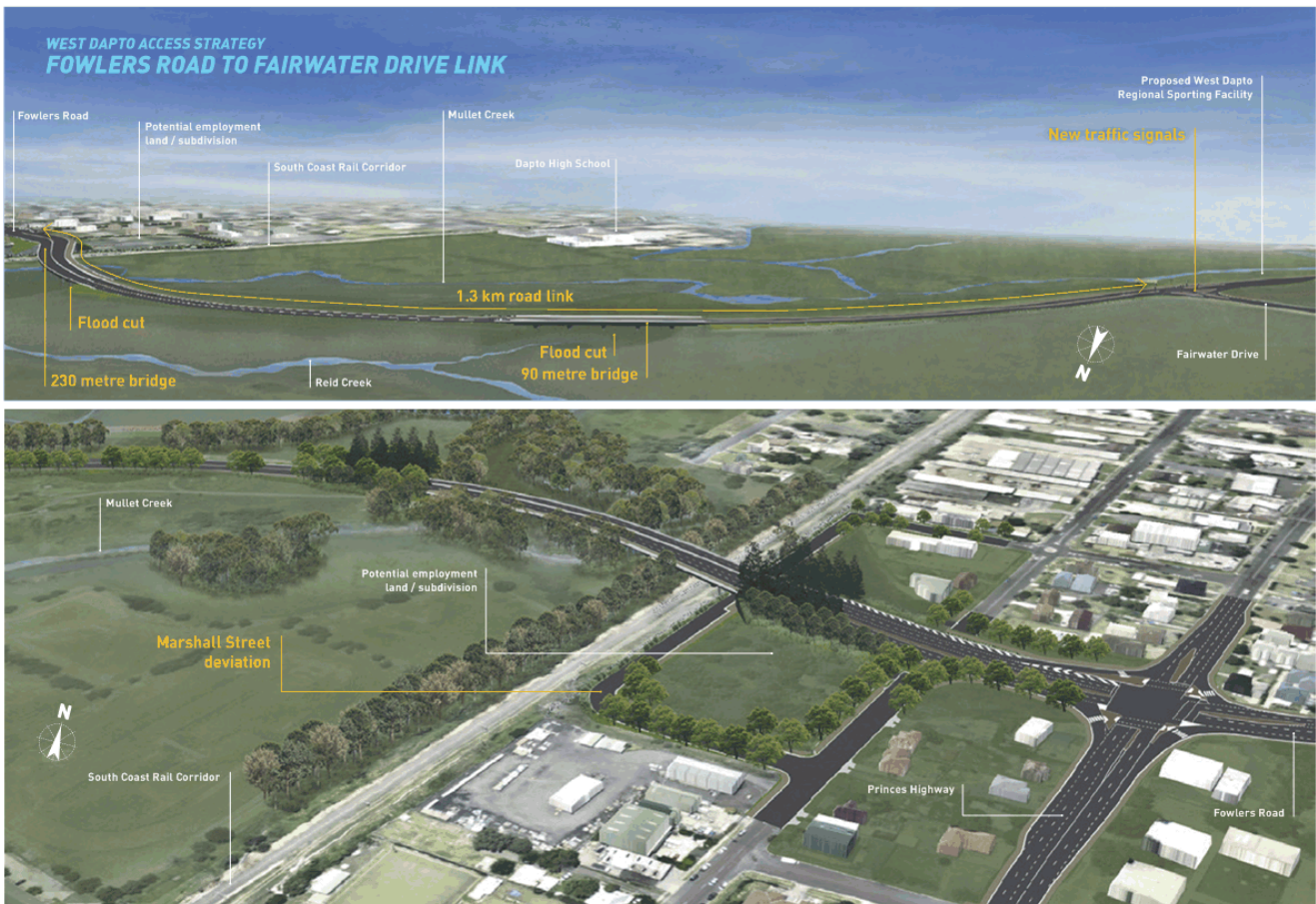
continuation of the Hayes Lane alignment south of Bong Bong Road.

• **A connecting road between Yallah Road and Avondale Road is proposed**

Detailed traffic modelling work has shown that under the current Structure Plan, Marshall Mount Road and the intersections of Marshall Mount Road/Huntley Road/Princes Highway would be heavily congested, due to the combination of development in both Marshall Mount and the adjacent Calderwood Valley land release. This heavy traffic would result in detrimental impacts for the proposed Marshall Mount Town Centre and would require complex and expensive infrastructure at Marshall Mount Road/Huntley Road/Princes Highway, which is bisected by the South Coast railway line.

A new link road between Yallah Road and Avondale Road was subsequently investigated and modelled, with results showing benefits for Marshall Mount Road and its northern intersection with Huntley Road. In the wider urban release area context,

Fowlers Road extension
(Princes Highway to Fairwater Drive)



it provides a logical and direct link between Stage 5 (Yallah/Marshall Mount) and the remainder of the release area, completing a natural western 'ring road' through the West Dapto Urban Release Area and improving transport accessibility between town and village centres.

- **Two new parallel roads to the north and south of Marshall Mt Road are proposed**

Both of these parallel roads were included to reduce the impact of through traffic in Marshall Mount Town Centre, largely generated by development in Calderwood Valley. The southern road essentially provides a 'bypass' of the town centre for traffic accessing the M1 Motorway via Yallah Road, while the northern parallel road caters for traffic accessing more northern parts of the West Dapto Urban Release Area. Both roads are required to provide access to/from adjoining residential development precincts.

Heritage

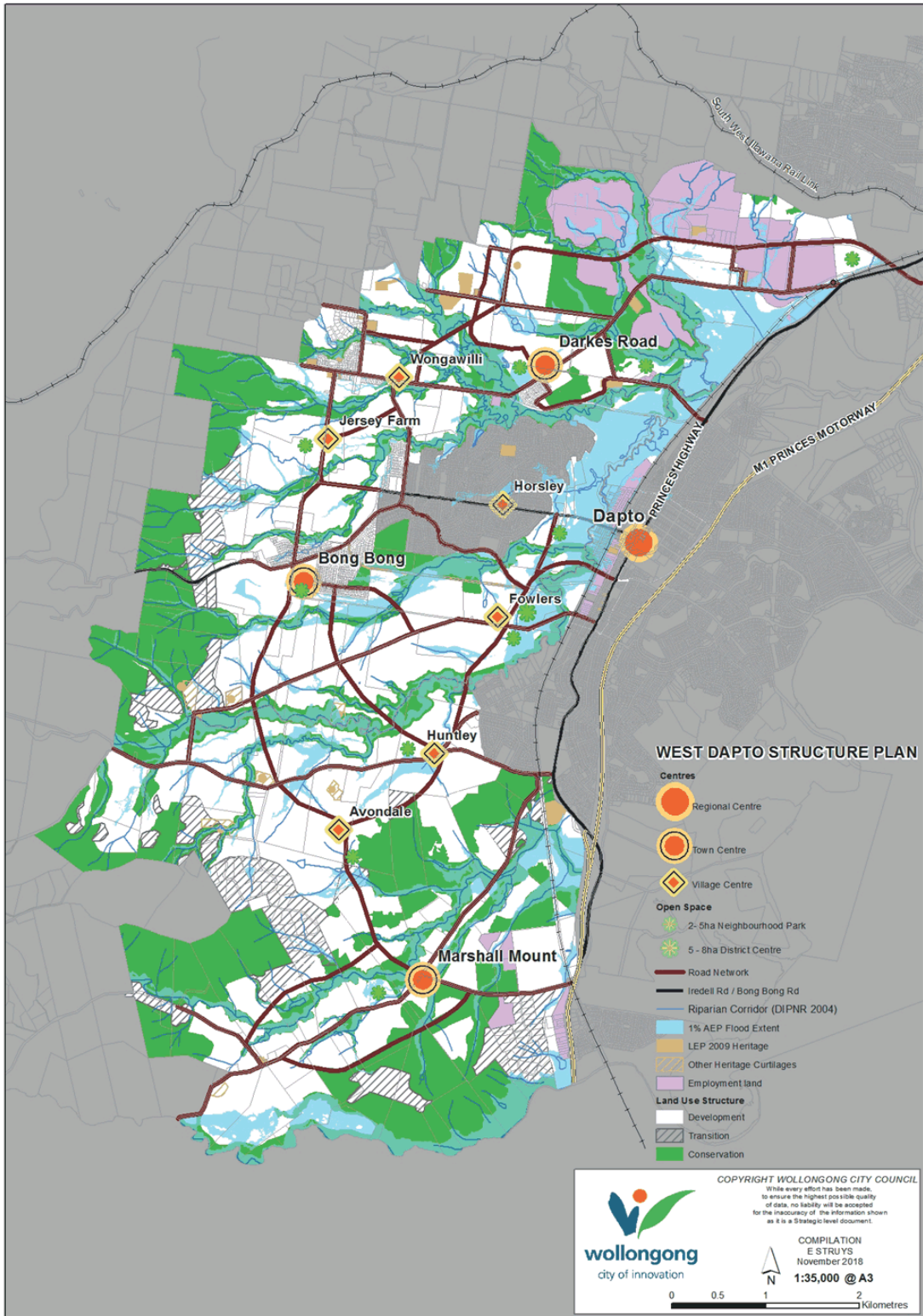
Heritage was not included as a structural element of the urban release area in the 2008 Structure Plan. There have been a number of changes to how heritage is considered since 2008 (particularly through NSW legislation) and it was decided that this constraint should be expressed as a structural element of the urban release areas landscape. It is also important to recognise that although some heritage values are known and place related that can be acknowledged in a land use structure, not all heritage will be linked to the spatial expression of place. Other, more complex heritage values need to be captured as the area continues to be planned.

NSW Government Correctional Facility Investigation

During 2018 Correctional Services NSW investigated land at West Dapto Road, Kembla Grange as a potential location for a correctional centre. Wollongong Council and a large portion of the community opposed the proposal. On 14 September 2018 the NSW Minister for Corrections announced that Kembla Grange has been ruled out as a potential location for a new correctional centre following detailed site investigations and consultation with the community.

Road/Rail Crossings

Access to and from the West Dapto Urban Release area is constrained by the South Coast Railway Line that borders the east side of the release area. The West Dapto area is currently serviced by four level crossings and two bridges across the South Coast Line, as well as two level crossings over the private Wongawilli Coal rail spur line. Council has developed a railway crossings strategy for the Dapto/West Dapto area in consultation with Sydney Trains and Roads and Maritime Services, which essentially aligns with State Government Policy of reducing risk through removing level crossings where possible. Where this is not possible (for example due to physical and/or cost constraints), then other measures will be considered to maximise safety. Whilst the future strategy for treatment of crossings on the South Coast Line is subject to further design, funding availability and government agency approvals, it would ultimately result in a significant reduction in the proportion of road vehicle movements across level crossings when compared to the current situation.



G:\Strategic Planning\ArcGIS\West Dapto 2016\Sec 94\StructurePlan_draft_rev_5.0

Figure 10
Revised West Dapto Structure Plan 2018.

Implementing the Vision

The planning and development of an urbanised future for West Dapto has a long history.

This Vision document has evolved out of many studies and reviews conducted to date. This section outlines numerous documents under the principal topics they were prepared for to provide broader context to the principles.

Some Council policies will need to be modified and updated to implement this Vision document. These include but may not be limited to:

- West Dapto Master Plan and Staging
- West Dapto Section 94 Development Contributions Plan 2017
- Wollongong Local Environmental Plan, 2009 and Wollongong Development Control Plan, 2009 and any supporting information needed for these policies
- West Dapto Biodiversity Conservation Strategy and Plan
- Updates to the Planning Agreement Policy

Other new documents that will be formed from the West Dapto Vision document include:

- Release and Development Strategy, including:
 - Infrastructure Delivery Plan (including programming)
 - Internal process policies
 - Planning proposals policy
 - Neighbourhood Planning process and standards

Following exhibition, submissions were considered and some changes were made before finalising the Vision document.

Changes to the Vision Document included:

- addition of Employment principles
- minor changes to Water principles
- minor changes to Transport principles
- minor changes to Open Spaces principles
- other minor changes to wording
- some edits to the Structure Plan 2018 including:
 - South West Illawarra Rail Link

- Road network
- Employment land
- edits to legend and labels

This Vision document is Council policy and is required to be considered by all planning decisions in relation to the growing West Dapto Release Area. This will include future proposed rezoning or amendments to Wollongong Local Environmental Plan, 2009 and Wollongong Development Control Plan, 2009 as they relate to the West Dapto Urban Release Area, ongoing revision of the West Dapto Section 94 Development Contributions Plan, neighbourhood planning, development applications and infrastructure planning and delivery. The next steps process is shown in **Figure 4**.

The Lake Illawarra Coastal Management Program is currently being developed by Wollongong and Shellharbour City Councils with support from the NSW Office of Environment and Heritage. Once complete, one of the key actions that will be implemented will be a stormwater management risk-based framework to achieve an overall better water quality outcome for Lake Illawarra and its receiving watercourses. This is supported and aligns with the West Dapto Vision's planning principles.

The NSW Department of Planning and Environment has recently updated the Environmental Planning and Assessment Act (EP&A) 1979. These updates include changes that solidify the role of strategic directions with the use of Local Strategic Planning Statements. Although these changes are not planned to be implemented until mid-2019, Wollongong City Council envisages the West Dapto Urban Release Area Vision document will be used and incorporated in future West Dapto Urban Release Area Strategic Planning Statements.

Other changes the reform work will elicit will benefit from information behind the Vision and guiding principles as Council will work to update the Wollongong Development Control Plan, 2009 with information and standardised formatting to align with the broader reforms implementing the EP&A Act 1979. Delivery of some elements of the vision is subject to the availability of State Government Funding (eg. public transport).

The next steps for planning at West Dapto are illustrated in **Figure 4**:

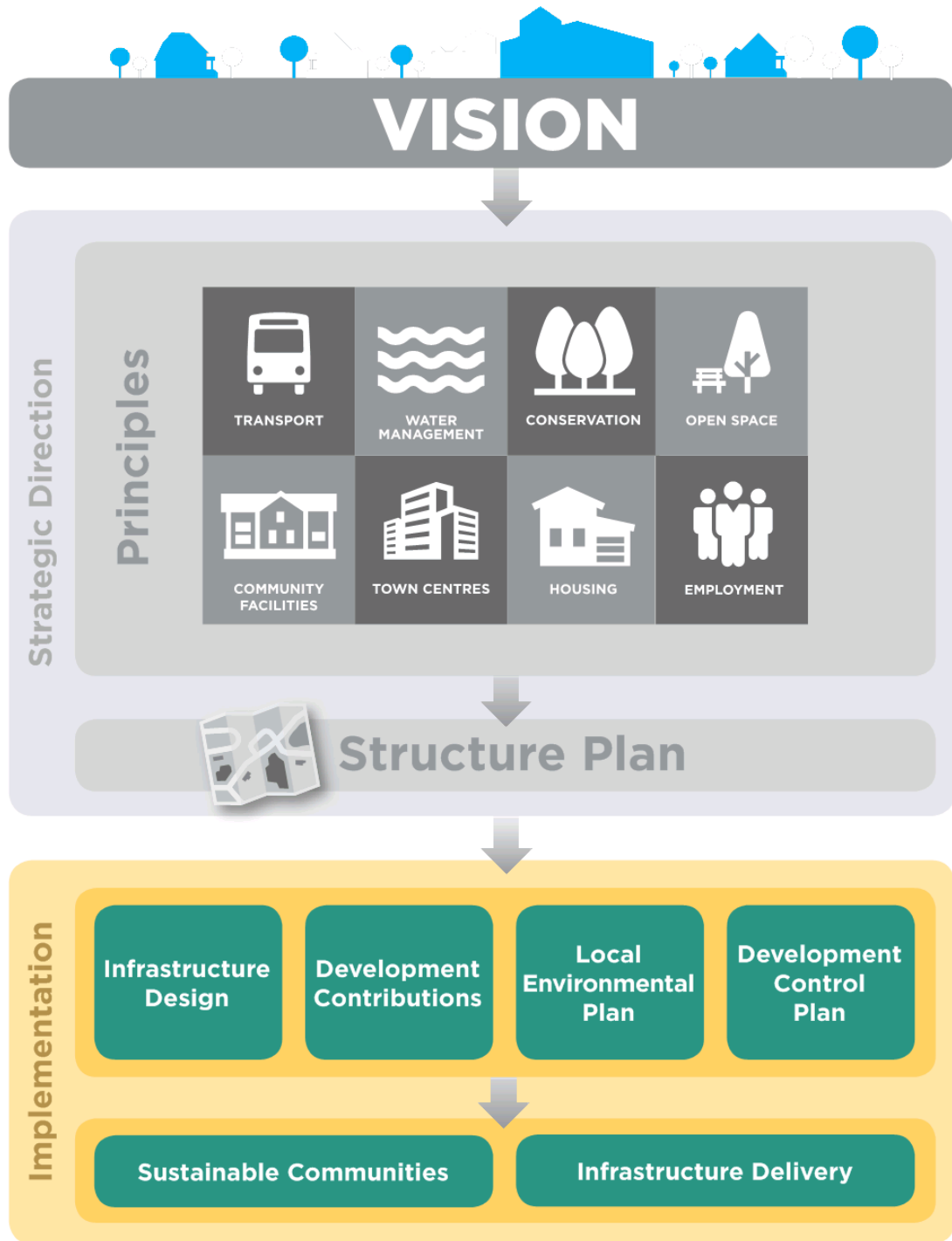


Figure 4
Structure and relationships of principles to planning tools

References

- Australian Government, Department of Environment and Energy, 2010, Australia's Biodiversity Conservation Strategy 2010-2030, <http://www.environment.gov.au/biodiversity/publications/australias-biodiversity-conservation-strategy>
- Australian Government Department of Infrastructure, Regional Development & Cities, 2018, <https://infrastructure.gov.au/cities/sustainable-development-goal-11.aspx>
- Australian Government, Your Home Australia's Guide to Environmentally Sustainable Homes <http://www.yourhome.gov.au/>
- Australian Local Government Association, National Heart Foundation of Australia and Planning Institute of Australia, 2009, Healthy Spaces and Places: A national guide to designing places for healthy living. Planning Institute of Australia, Canberra. Healthy Spaces and Places, (project completed) <http://www.healthyplaces.org.au/site/>
- Australian Bureau of Statistics (ABS), 2009, Sports and Physical Recreation: A Statistical Overview, Australia, 2012 <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4156.0Main%20Features12012?opendocument&tabname=Summary&prodno=4156.0&issue=2012&num=&view=>
- Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors), 2016, Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia (Geoscience Australia)
- Bewsher Consulting Pty Ltd on behalf of NSW Growth Centres Commission, November 2008, Final Report West Dapto Review Flooding and Stormwater Strategy
- BMTWBM on behalf of Wollongong City Council, 2012, Duck Creek Flood Study <http://www.wollongong.nsw.gov.au/services/sustainability/floodplainmanagement/Pages/Duck-Creek.aspx>
- BMTWBM on behalf of Wollongong City Council, March 2018, Mullet Creek Flood Model Update 2018, <http://www.wollongong.nsw.gov.au/services/sustainability/floodplainmanagement/Pages/mullet.aspx#gref>
- Cardno, February 2010, Calderwood Urban Development Project - Concept Plan Transport Management & Accessibility Plan (TMAP)
- Cardno Eppell Olsen, July 2007, Dapto Town Centre Access and Movement Strategy, Final Strategies and Master Plan
- Catchment Management Authority, 2007, Managing Urban Stormwater: An integrated Approach (draft).
- City of Greater Geelong, June 2016, Sustainable Communities: Infrastructure Development Guidelines, <https://www.geelongaustralia.com.au/planning/article/item/8cd5dcceb16b656.aspx>
- Eco Logical, November 2013, West Dapto Urban Release Area Updated Vegetation mapping and biodiversity conservation options - Volume 1

- Eco Logical, November 2013, West Dapto Urban Release Area Updated Vegetation mapping and biodiversity conservation options – Volume 2
- Elton Consulting, 2007, Social Cultural and Recreational Needs Study for the West Dapto New Release Area
- Elton Consulting, 2013, Warrawong District Community Centre and Library Concept Planning Report – 28 November 2013.
- Find Law Australia, 2016, Principles of Environmental Management, Centre of Professional Development, Industry Response – Business Council of Australia, accessed 11/10/2016.
<http://www.findlaw.com.au/articles/407/principles-of-environmental-management.aspx>
- Government of Western Australia, 2014, Public Parkland Planning and Design Guide WA. Perth Western Australia, Department of Sport and Recreation. <http://www.dsr.wa.gov.au/docs/default-source/file-about-us/file-plan-for-the-future/public-parkland-guide.pdf?sfvrsn=0>
- Heart Foundation, 2018, Healthy Active by Design, <http://www.healthyactivebydesign.com.au/>
- Heart Foundation, 2017, Evidence supporting the benefits of Town Centres / Main Streets for physical activity and health. <http://healthyactivebydesign.com.au/evidence-7>
- HLA Enviro Sciences, 2006, Non Indigenous Heritage Study West Dapto Volume 1
- Independent Pricing and Regulatory Tribunal NSW, October 2016, Final Report – Assessment of Wollongong City Councils Draft West Dapto Section 94 Development Contributions Plan, <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/local-government-contribution-plans-review-of-plans-wollongong-city-council-west-dapto-s94-cp/final-report-assessment-of-wollongong-city-councils-draft-west-dapto-section-94-development-contributions-plan-october-2016.pdf>
- Ives, C.Dr, Oke, C Dr, Cooke, B. Dr, Gordon, A. Dr, Bekessy, S. As. Prof, (National Environmental Research Program, RMIT), 2014, Planning for green open space in urbanised landscapes, Report for Australian Government Department of Environment. <https://www.environment.gov.au/system/files/pages/25570c73-a276-4efb-82f4-16f802320e62/files/planning-green-open-space-report.pdf>
- ICOMOS, 2013, The Burrra Charter 2013, accessed 7/9/2017, <http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf>
- Kellogg Brown & Root, February 2007, West Dapto Urban Development Transport Management and Access Plan (TMAP)
- Melbourne Water, 2013, Water Sensitive Urban Design Guidelines South Eastern Councils
- New South Wales Auditor General's Report to Parliament, 2018, Planning for school infrastructure, <https://www.audit.nsw.gov.au/publications/latest-reports/performance/planning-for-school-infrastructure/executive-summary/1-executive-summary>

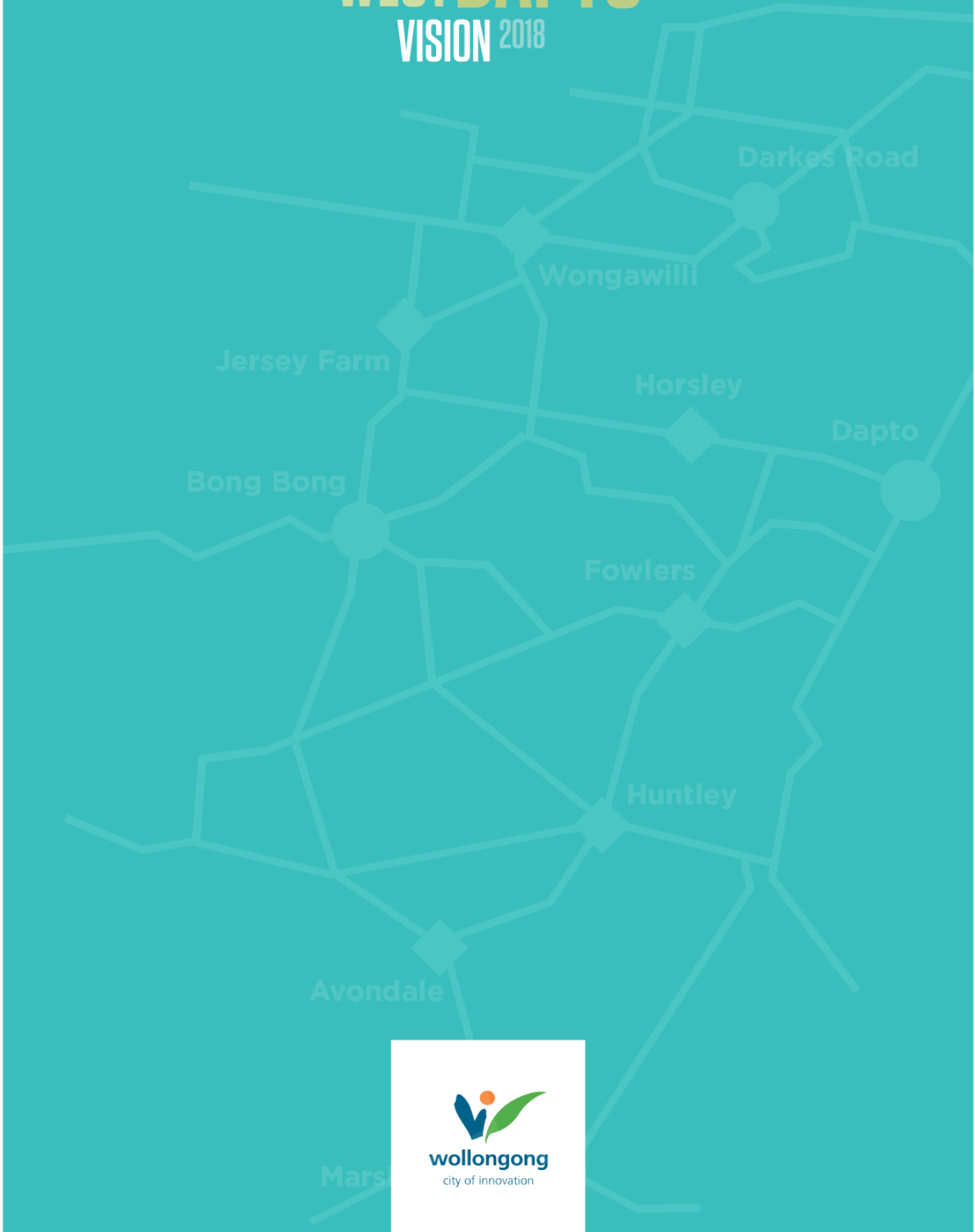
- New South Wales Government, Department of Infrastructure, Planning and Natural Resources, (RCMS), 2004, Riparian Corridor Management Study, prepared for Wollongong City Council, <http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/Riparian%20Corridor%20Management%20Study.pdf>
- New South Wales Government Department of Environment, Climate Change and Water, (DECC), 2011, Biodiversity Certification Assessment Methodology. Sydney. <http://www.environment.nsw.gov.au/resources/biocertification/110170biocertassessmeth.pdf>
- New South Wales Government, Department of Planning, 2010, Recreation and Open Space Planning Guidelines for Local Government
- New South Wales Government, Healthy Waterways initiative, 2014, Living Waterways NSW Government, (workshops held 2017) <https://www.sydneywatertalk.com.au/21003/documents/55097>
- New South Wales Government, Office of Environment and Heritage (Environment Climate Change and Water) Biodiversity Conservation Assessment Methodology <http://www.environment.nsw.gov.au/resources/biocertification/110170biocertassessmeth.pdf>
- New South Wales Government, Office of Environment and Heritage, 2015, Developing maps of High Environmental Value for strategic planning - mapping and governance guide. Environmental Programs Branch, Office of Environment and Heritage, Sydney (no longer available on line)
- New South Wales Government, Office of Environment and Heritage, 2012, Aboriginal heritage legislation in NSW, accessed 7/9/2017 <http://www.environment.nsw.gov.au/resources/cultureheritage/20120401system.pdf>
- New South Wales Government, Office of Environment and Heritage, 2011, Guidelines to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW, accessed 7/9/2017, <http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf>
- New South Wales Government, March 2014, Illawarra Regional Transport Plan, <https://www.transport.nsw.gov.au/newsroom-and-events/reports-and-publications/illawarra-regional-transport-plan>
- New South Wales Department of Land and Water Conservation, 2004, Best Practice Guidelines for Greener Subdivisions Western Sydney
- New South Wales Government, 2005, Floodplain Development Manual- the Management of flood liable land
- New South Wales Growth Centres Commission, 2006, Growth Centres Development Code
- New South Wales Growth Centres Commission, November 2008, West Dapto Release Area Review Planning and Infrastructure - Planning Report
- New South Wales Growth Centres Commission, November 2008, West Dapto Release Area Review Planning and Infrastructure - Technical Report

- New South Wales Government, Office of Local Government, 2015, Planning for a multicultural community, <https://www.olg.nsw.gov.au/sites/default/files/OLG-Planning-for-a-Multicultural-Community.pdf>
- New South Wales Government, Office of Water, 2012, Guidelines for riparian corridors on water-front land. NSW Office of Water, Sydney. http://www.water.nsw.gov.au/__data/assets/pdf_file/0004/547222/licensing_approvals_controlled_activities_riparian_corridors.pdf
- New South Wales Planning and Environment, 2015, Camden Growth Centre Precincts Development Control Plan www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-growth-centre-precincts-development-control-plan-2015.ashx
- New South Wales Government, Transport For NSW, June 2016, Integrated Public Transport Service Planning Guidelines, Outer Metropolitan Area <https://www.transport.nsw.gov.au/sites/default/files/media/documents/2017/integrated-pt-service-planning-guidelines-outer-metro-jun-2016.pdf>
- Planning Institute of Australia, 07/13, Policy / Planning System Principles. www.planning.org.au/policy/planning-system-principles-0713
- Queensland Government, Department of Transport and Main Roads, 2015, Road Drainage Chapter 6: Approach to Drainage Design –<https://www.tmr.qld.gov.au/-/media/busind/techstdpubs/Hydraulics-and-drainage/Road-drainage-manual/July-2015/Chapter6.pdf?la=en>
- Regional Development Australia Illawarra, 2018, <http://www.rdaillawarra.com.au/about-us/rda-illawarra-vision/>
- Roads and Maritime Services, Centre For Urban Design, 2012, Bridge Aesthetics: Design guideline to improve the appearance of bridges in NSW, <http://www.rms.nsw.gov.au/documents/projects/planning-principles/urban-design/bridge-aesthetics-guidelines.pdf>
- Roads and Maritime Services, Centre For Urban Design, 2014, Beyond the Pavement: Urban Design Policy Procedures and Design Principles, <http://www.rms.nsw.gov.au/documents/projects/planning-principles/beyond-pavement.pdf>
- Roger Henshaw Consultancy Services, July 2017, Helensburgh Branch Library Initial Scoping and Concept Planning Report
- Rohan Dickson + Associates, Dapto Town Centre Revitalisation Study, 2004, <http://wollongong.nsw.gov.au/development/planningforthefuture/Documents/Dapto%20Background%20Report%20-%20Exhibition%208Mar06.pdf>
- SGS Economic on behalf of Wollongong City Council, 2005, Wollongong Housing Study, <http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/Wollongong%20Housing%20Study.pdf>
- SGS Economics, 2017, Dapto Towncentre Economic Study

- Soule, M.E., 1991 (published online, 2007), Land Use Planning and Wildlife Maintenance: Guidelines for Conserving Wildlife in an Urban Landscape, Journal of the American Planning Association, Vol 57, issue 3, 1991. http://www.michaelsoule.com/resource_files/80/80_resource_file1.pdf
- Transgrid Easement Guidelines for third party developers, 2016, <https://www.transgrid.com.au/being-responsible/public-safety/living-and-working-with-powerlines/Documents/Easement%20guidelines%20for%20third%20party%20developers.pdf>
- Urbacity, June 2014, West Dapto, further review of release area centres & controls
- Victoria State Government, 2015, Design for Everyone, Sports and Recreation settings, <http://sport.vic.gov.au/design-for-everyone/sport-and-recreation-settings>
- Western Australian Planning Commission, 2009, Liveable Neighbourhoods – A Western Australian Government Sustainable Cities Initiative
- Western Australian Planning Commission, 2015, Draft Liveable Neighbourhoods <https://www.planning.wa.gov.au/liveable-neighbourhoods.aspx>
- Wollongong City Council et al ,2011a, Illawarra Biodiversity Strategy. Volume 1 Action Plan. Wollongong City Council, Shellharbour City Council and Kiama Municipal. NSW Environmental Trust, Sydney. <http://www.wollongong.nsw.gov.au/services/sustainability/sustainableliving/Documents/Illawarra%20Biodiversity%20Strategy%20Vol%201-%20%20Part%201.pdf>
- WMA Water on behalf of Shellharbour City Council, February 2017, Macquarie Rivulet Flood Study Final, <http://www.shellharbour.nsw.gov.au/Documents/Build/Plans,-Controls-and-Policies/Floodplain/Macquarie-Rivulet-Flood-Study-Final>
- Wollongong City Council, 2017, Dapto Town Centre Plan 2017-2027, <http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/Dapto%20Town%20Centre%20Plan.pdf>
- Wollongong City Council, May 2017, Draft Housing Our Community: A discussion paper identifying issues for our housing future, <https://www.haveyoursaywollongong.com.au/housingourcommunity>
- Wollongong City Council, 2017, – Draft Urban Greening Strategy <http://www.wollongong.nsw.gov.au/council/meetings/BusinessPapers/Item%201%20-%20Draft%20Urban%20Greening%20Strategy%202017%20-%202037.pdf>
- Wollongong City Council, 2010, Mullet & Brooks Creeks Floodplain Risk Management Study and Plan <http://www.wollongong.nsw.gov.au/services/sustainability/floodplainmanagement/Pages/mullet.aspx#gref>
- Wollongong City Council, 2014, Report to Ordinary Meeting of Council, 23 June 2014, <http://www.wollongong.nsw.gov.au/council/meetings/BusinessPapers/West%20Dapto%20Urban%20Release%20Area%20Biodiversity%20Certification%20Conservation%20Strategy.pdf>
- Wollongong City Council, 2006, Wollongong Planning People Places, A strategic framework for open space, recreation facilities and Community facilities. <http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/Open%20Space%20Recreation%20Study%20Volume1.pdf>

- Wollongong City Council, 2014, Play Wollongong, Background research report, <http://www.wollongong.nsw.gov.au/facilities/sportrec/Documents/Play%20Wollongong%20Supporting%20Document%20-%20Background%20Research%20Report%20-%20Adopted.pdf>
- Wollongong City Council, 2015, Illawarra Escarpment Strategic Management Plan 2015. Wollongong. <http://www.wollongong.nsw.gov.au/council/meetings/BusinessPapers/Illawarra%20Escarpment%20Strategic%20Management%20Plan%202015.pdf>
- Wollongong City Council, 2009, Wollongong Development Control Plan 2009. <http://www.wollongong.nsw.gov.au/development/regulations/Pages/dcp.aspx>
- Wollongong City Council, October 2010, West Dapto Urban Release Area Integrated Transport Plan
- Wollongong City Council et al, 2011b, Illawarra Biodiversity Strategy. Volume 2 Background Information. Wollongong City Council, Shellharbour City Council and Kiama Municipal. NSW Environmental Trust, Sydney. <http://www.wollongong.nsw.gov.au/services/sustainability/sustainable-living/Documents/Illawarra%20Biodiversity%20Strategy%20Vol%202.pdf>
- Wollongong City Council, October 2015, West Dapto Release Area Section 94 Contributions Plan (2015) [http://wollongong.nsw.gov.au/development/planningforthefuture/Documents/West%20Dapto%20Section%2094%20Development%20Contributions%20Plan%20\(2015\)%20-%20In%20Force%202026%20October%202015.pdf](http://wollongong.nsw.gov.au/development/planningforthefuture/Documents/West%20Dapto%20Section%2094%20Development%20Contributions%20Plan%20(2015)%20-%20In%20Force%202026%20October%202015.pdf)
- Wollongong City Council, 2017, West Dapto Release Area Section 94 Contributions Plan (2017) [http://wollongong.nsw.gov.au/council/governance/Policies/West%20Dapto%20Section%2094%20Development%20Contributions%20Plan%20\(2017\)%20-%20In%20force%202018%20December%202017.pdf](http://wollongong.nsw.gov.au/council/governance/Policies/West%20Dapto%20Section%2094%20Development%20Contributions%20Plan%20(2017)%20-%20In%20force%202018%20December%202017.pdf)
- Wollongong City Council, Wollongong Economic Development Strategy, 2013 - 23
- Wollongong City Council, Wollongong Development Control Plan, 2009

WEST DAPTO VISION 2018



OUR PLACE
our voice
OUR FUTURE



DRAFT WEST DAPTO VISION 2018

ENGAGEMENT REPORT

July - October 2018

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Executive Summary

West Dapto is the region's largest strategic urban release area. The West Dapto Vision document guides the strategic direction of West Dapto and we invited the community to comment on the Vision from 30 July to 10 September 2018 (Appendix 1). The West Dapto Vision includes planning principles which outline what is involved to make West Dapto an integrated and connected community and a great place to live and work. They help us guide how we plan for housing, leisure, community, facilities, roads, pathways and manage flooding. The Vision also includes the West Dapto Structure Plan. The Structure Plan guides the future strategic direction of the urban release area. It takes into account things such as buildings, open spaces, land uses, activities and transport.

Written correspondence was sent to key stakeholders notifying them of the draft West Dapto Vision document exhibition. A pamphlet (Appendix 2) was distributed to all properties in West Dapto promoting the engagement opportunity. A media release was distributed, details placed in the Council column of the *Advertiser* and messages distributed through Council's social media channels. A project page was established on the Have Your Say page which included a copy of the Structure Plan, Frequently Asked Questions (Appendix 3) and an online version of the Feedback Form (Appendix 4). Paper copies of the Frequently Asked Questions and Feedback Form were made available at all Council libraries and the Customer Service Centre during the exhibition.

Meetings were held with key property owners and key agencies. An information session was held at the Dapto Ribbonwood Centre, attended by 22 community members and a presentation undertaken at Neighbourhood Forum 8, attended by 25 community members.

The total number of submissions received during the exhibition period was 32, with 8 submissions via the Have Your Say website, 22 emailed and written submissions and 2 submissions received verbally.

There was general support for the draft West Dapto Vision document. The importance of biodiverse areas and the balance between development and the sustainability of a diverse natural habitat was recognised. There was concern that changes to the future conservation outcomes and development footprints will have implications for bio certification. There was also an emphasis on the importance to provide space that can delineate between urban and natural areas.

The preservation of both Aboriginal and European heritage was presented. There were requests to recognise the dairy industry heritage of the area.

Water management principles were generally supported. There were requests for more specific information regarding the management of stormwater and to include details on drinking, recycled and waste water.

A reduction in the number of town centres was generally supported and some support for additional density in town and village centres. Principles for active and public transport were well received. There was discussion on how these principles were to be delivered and it was suggested the document should provide details relating to the connections to the broader network.

Land owners affected by the proposed Northern Transport Corridor were invited to provide comment. Comments were received from three businesses with land holdings and one community member who owns and operates farm land. Objection to the proposal was received from three land owners.

Background

West Dapto is the region's largest strategic urban release area. In 2007-2008 Council exhibited the draft West Dapto Release Area vision and accompanying draft planning document. In 2008, a Structure Plan, prepared by the State's Growth Centres Commission at the time, was developed to guide and inform the rezoning of the West Dapto Urban Release Area to allow for residential development. Stages 1 & 2 of the 5 stage release areas were zoned for urban development in 2010 and Stage 5 was zoned for urban development in June 2018.

Using the knowledge accumulated over the past 10 years, Council has prepared a draft for the 2018 West Dapto Vision document, including updated Planning Principles and Structure Plan. The West Dapto Vision includes planning principles which outline what is involved to make West Dapto an integrated and connected community and a great place to live and work. They help us guide how we plan for housing, leisure, community, facilities, roads, pathways and manage flooding. The Vision also includes the West Dapto Structure Plan. The Structure Plan guides the future strategic direction of the urban release areas. It spatially represents land uses for housing areas, centres, open spaces, flooding constraints, conservation areas and transport.

Key stakeholders were engaged prior to exhibition and feedback was considered during preparation of the draft document which was exhibited. Stakeholders were invited to provide comment on the draft West Dapto Vision document from 30 July to 10 September 2018.

Stakeholders

Stakeholders identified prior to the commencement of the engagement period included:

Community

Local residents/owners
Illawarra Aboriginal Land Council
Clubs in surrounding areas
Environmental groups
Horsley Community Centre
Wongawilli community hall
Dapto Ribbonwood
Neighbourhood Forum 8

Business

Dapto Leagues Club
Developer and industry groups such as:
- UDIA (Urban Development Institute of Australia)
- Property Council
- Planning Institute Australia
- Wollongong Coal
- Developers
Dapto Business Chamber

Utilities

Transgrid
Jemena
Sydney Water
Endeavour Energy

Government

Dapto Primary School
Dapto High School
National Parks and Wildlife Services
Transport NSW
Roads and Maritime Services
Office of Environment and Heritage
Department of Primary Industries
State and Federal members

Methodology

The following section outlines the activities undertaken during the engagement for the draft West Dapto Vision document. Engagement was undertaken in a phased approach, including gathering input from key stakeholders prior to the exhibition of the draft document. The draft West Dapto Vision document was exhibited from 30 July to 10 September 2018. The methodology is presented in two categories:

1. Communication Methods
2. Engagement Activities

Communication Methods

A range of communication methods were used to inform the community about the draft West Dapto Vision document. The following section provides details about each of the methods.

Pamphlet

A DL pamphlet (Appendix 2) promoting the draft West Dapto Vision and engagement opportunity was distributed via AusPost's non-addressed mail service. Approximately 4800 properties received the pamphlet and it was made available at Dapto Library, Wollongong Library, Wollongong City Council's customer service, CareWays and Horsley Community Centre.

Information packs

Information packs were distributed to external stakeholders including residents, property owners and organisations. The packs consisted of Frequently Asked Questions (FAQ) (Appendix 3) and a feedback form (Appendix 3). Information packs were also made available at Dapto Library, Wollongong Library, Wollongong City Council's customer service, CareWays, Horsley Community Centre and at engagement activities.

Information packs were created for key stakeholder groups which provided additional information based on the impact of the project. These included property owners affected by the Northern Transport Corridor (Appendix 3).

Media

A media release was distributed and an article was published in the Illawarra Mercury and an interview with the Lord Mayor was aired on ABC Illawarra. Notices appeared in the Council column in The Advertiser to promote the engagement opportunities. Council's social media tools, Facebook, Instagram and Twitter, were used to publicise the engagement opportunity.

Engagement Activities

A range of engagement activities were implemented to target stakeholders including phone calls, individual meetings and a community information session. The following section provides details about each of the activities.

Phone calls

Stakeholders affected by potential land acquisition were contacted by telephone to arrange a face to face meeting. Stakeholders were provided an opportunity to meet project staff in person to discuss the concept design.

Individual meetings

Meetings were held with the property owners directly affected by the proposed Northern Transport Corridor Link. The meetings were held at a time and location convenient to the property owner.

Presentations

The Project Manager, Strategic Project Officer and Engagement Officer presented the draft document at the Neighbourhood Forum 8 meeting on 8 August 2018. An invitation was extended to participants to attend the community information session. Presentations were also made to key peak bodies or organisations.

Community Information Session

A community information session was held from 6 to 8pm at Dapto Ribbonwood Centre on 9 August 2018.

Online

Information was made available on Council’s online engagement page including a copy of the draft document and an outline of all planned engagement activities. The opportunity to provide feedback was also made available on this site.

Feedback Form

A feedback form (Appendix 4) was made available at all engagement activities, Dapto and Wollongong Library, CareWays, Horsley Community Centre and the customer service centre.

Results

This section of the report provides details on the engagement activities (Table 2), the on-line participation summary (Table 3) and the feedback received during the exhibition period (see Tables 4-11). Council staff responses to detailed feedback is provided at Appendix 5.

Engagement Participation Results

Details of the number of participants for each engagement activity are presented in Table 2.

Table 2: Engagement participation results

Engagement activity	Participation
Number of meetings held with key stakeholders	8
Attendance at Neighbourhood Forum 8	25
Information session attendance numbers	22
Submissions received during the engagement period	32

Online Engagement Results

A total of 8 submissions were received through the online engagement portal. Table 3 presents the usage statistics for the project page on Council’s website.

Table 3: Summary of online participation

Measure and Explanation	Usage
Unique Site Visits – Total number of visits to the project page	802
Aware – Total number of users who viewed the project page	544
Informed – Total number of users who opened a hyperlink or read a document	347

Engaged – Total number of users who have actively contributed to the project	8
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Submission results

Community members were asked to provide feedback on the draft West Dapto Vision document during the exhibition period. Four questions were posed:

1. Do you feel the West Dapto Vision document clearly sets out the future direction for West Dapto?
2. Do you agree with the West Dapto Vision Statement?
3. What are your thoughts on the West Dapto Principles?
4. What are your thoughts on the West Dapto Structure Plan?

Feedback came from 32 submissions, which included 8 online responses, 22 emails, letters and feedback forms and 2 verbal submissions. The results are recorded in Tables 4-11. Overall, there was general support for the vision document and for the work being proposed.

THEME – Environmental Biodiverse Areas

The importance of biodiverse areas and the balance between development and the sustainability of a diverse natural habitat was recognised. There was concern that changes to the future conservation outcomes and development footprints will have implications for proposed bio certification.

Table 4: Overview of comments received regarding future development avoiding environmental biodiverse areas

Overview of comments
We support future development avoiding areas of environmental and biodiversity significance
Supports in principle the development of a West Dapto Biodiversity Conservation Strategy (BCS) and Biodiversity Conservation Strategy Structure Plan (BCSSP) as part of the implementation process described in the document.

THEME – Conservation Area Verges

Comments were received concerning the verges of developed land adjacent to conservation areas and transitional land to conservation land. There was emphasis on the importance of providing space to establish delineation between urban and natural areas.

Table 5: Overview of comments received regarding conservation area verges

Overview of comments
Housing transition to the Illawarra Escarpment must ensure the fringe of conservation areas complies with large lots (5-10acres to fit landscape contour) then 5 dwellings per hectare, then 10 dwellings per hectare and then R2 zoning with 13-15 dwellings per hectare as per existing Vista Park & Haynes Lane areas
R2 housing blocks min 450sqm
Reduction of housing density on the fringes of the Illawarra Escarpment in order to provide the necessary delineation between urban and natural areas
Housing transition to the Illawarra Escarpment - This principle is supported where the unique

characteristics of the location warrant a planning outcome that delivers a higher level of environmental protection.
Feel that the land verging onto conservation areas should be mirroring neighbouring suburbs i.e. already released areas
Action towards the program for restoring natural areas adjacent to new residential developments
Wollongong Coal land adjacent to conservation areas should be transitional lands as per rest of URA (in line with Housing Principle 5) and also classified as Landscape Management Zone A (DCP)

THEME – Heritage

The preservation of both Aboriginal and European heritage was presented. There were requests to recognise the dairy industry heritage of the area.

Table 6: Overview of comments received regarding heritage

Overview of comments
We support strong strategic planning to promote Aboriginal heritage conservation
Prioritising of heritage items and sites of aboriginal heritage significance as high value destinations and connection to place.
Opportunities for protection of environmentally significant areas and both European and Aboriginal heritage will arise as more detailed information becomes known.
Concerns regarding Aboriginal cultural and/or archaeological significance, along with other heritage items.
Supports the use of historically relevant street names and integration of interpretative measures to assist in embedding both Aboriginal and post-settlement history into the new communities.
Concerns regarding the loss of heritage and items within the general area, particularly in regard to the dairy industry. Ensure the dairying industrial archaeology is preserved.

THEME – Flooding and Water Quality

Water management principles were generally supported. There were requests for more specific information regarding the management of stormwater quality and quantity, identification of site constraints and the impact on the health of Lake Illawarra. It was suggested that information concentrated on flood management and that the Vision document should also include other aspects such as drinking, recycled and waste water.

Table 7: Overview of comments received regarding flooding and water quality

Overview of comments
It is recommended that council continues to work in collaboration with all infrastructure/service agencies from initiation through to the strategic planning stage of new developments to effectively plan critical infrastructure, and allow sufficient time for its planning, procurement and delivery.
The vision only discusses flood and stormwater management. All aspects of water including drinking water, waste water and recycled water need to be considered..... land use planning and the role of it can be better used to manage water runoff.
Identification of new site constraints, such as updated details regarding flood behaviour. In those instances it is preferable that land that cannot be developed for residential purposes is not given a

residential zoning when Council considers future land zoning proposals.
Applaud the Water Management principles but continue to be concerned at the impacts of the West Dapto plan on the health of Lake Illawarra. 'Protecting people and property from flooding' may be unrealistic as West Dapto is by nature a floodplain.
We recommend that Water Management Principles 2, 4 and 6 include more specific information to outline how stormwater quality and quantity will be managed to ensure there is no impact on Lake Illawarra.
It is commendable that Council recognise and are addressing the significant complexity involved in the integration of multiple objectives including but not limited to flooding, water quality, riparian improvement, creek geomorphology and stormwater management within the vision document.
We encourage Council to identify that Floodplain Risk Management Study and Plan(s) (FRMSPs) are currently being updated.

THEME – Town Centres

A reduction in the number of town centres was generally supported by those who provided comment. There was some support for additional density in town and village centres. One submission received on behalf a town centre property owner did not support the relocation of Huntley Village town centre. There was one submission suggesting town centres have colour schemes.

Table 8: Overview of comments received regarding town centres

Overview of comments
Any overarching objectives relating to the new centres are clearly explained and detailed in the Development Control Plan .
Supportive of the amendment to relocate the Fowlers Village Centre to the east.
Not supportive of Huntley Village relocation to west due to potential to impinge on viability of Bong Bong Rd Town Centre. Instead Relocate Huntley Village Centre to the east opposite proposed Hospital so that it can provide services and retail to support hospital and providing commercial space for related medical consulting services.
Supportive of removal of Cleveland Village Centre from the Structure Plan.
Not supportive of any revision to town centres hierarchy as shown on the structure plan. Clarify the hierarchy of town centres in draft structure plan mapping to visually identify Darkes Rd Town Centre and Marshall Mount Town Centre reduced in size comparative to Bong Bong Town Centre.
The impact on the scale and makeup of the Town Centre to be located at 340 West Dapto Rd be assessed by an appropriate Retail study as a consequence of the proposed construction of the new Northcliffe Drive/Shone Ave extension. The future town centre be relocated close to the revised Northcliffe Drive.
Support the relocation of the Marshall Mount centre in the draft Structure Plan, away from the Calderwood centre, and the deletion of six local centres. However, encourage Council to consider flexible zoning in areas of West Dapto where future local centres may be necessary.
Supportive of Marshal Mount Town Centre being limited to 3500sqm given the extension of Yallah Rd to the Marshall Mount Town Centre.
Town centres to have colour scheme controls to limit identification with fast food.
Improve Dapto Town Centre.

THEME – Transport

Principles for active and public transport were well received. There was discussion on how these principles were to be delivered with the suggestion that alignment of state and local government objectives was of particular importance. It was suggested the document should provide details relating to the connections to the broader transport network, including the M1.

Table 9: Overview of comments received regarding transport

Overview of comments
Prioritising active transport, pedestrians, cyclists and public transport users and early provision of reliable bus services.
The provision of public transport is imperative to the success of the West Dapto precinct. Therefore, it is critical that the elements outside of Councils control are identified and that early and regular dialogue is had to ensure the alignment of State and local government objectives.
The active transport principles indicate future walking and cycling networks in West Dapto will rely on 'local solutions'. Further information is required to better understand what these local solutions are and how they will ensure the West Dapto cycleway network integrates with the surrounding regional cycle routes.
Walkable distances to spaces and facilities, high quality public open spaces, connectivity, movement and flow and hierarchy for open space usages.
Council is encouraged to engage with agencies to identify opportunities for green/cycle – links along/within utility corridors.
Need additional road out of West Dapto between Bong Bong and Darkes Rd.
There is not enough consideration given to transport access. Improved access from the motorway (M1).

THEME – Northern Transport Corridor

Land owners affected by the proposed Northern Transport Corridor were invited to provide comment. Comments were received from three businesses with land holdings and one community member who owns and operates farm land. Three land owners objected to the proposal.

Table 10: Overview of comments received regarding northern transport corridor

Overview of comments
The alignment could be improved if it connected direct with the Shone Avenue.
It is important that proposed infrastructure does not sterilise useable land on property.
Discrepancy regarding flood affectation on some land.
Alignment should be further south to reduce impact on property.
The amended route of the North Transport Corridor: <ul style="list-style-type: none"> ▪ has detrimental impact on a large scale commercial development that has only recently been approved; ▪ compromises the efficient development of land in proximity to the route in both industrial and residential zones; ▪ is an impediment to the preservation of biodiversity and protection of the natural environment; and ▪ has not been prepared having due regard to the West Dapto Planning Principles.

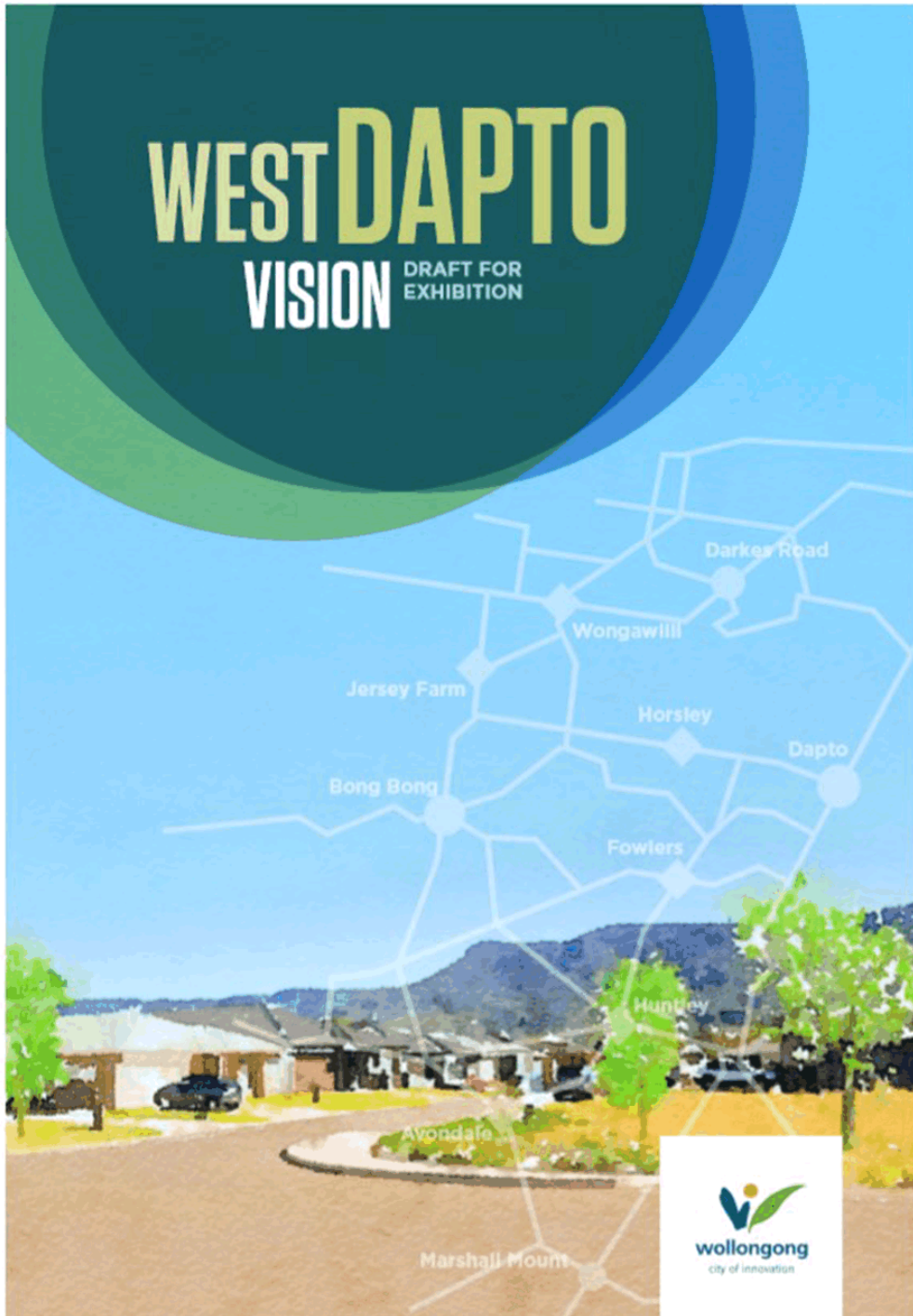
Other comments

Table 11 provides an overview of other comments received for consideration.

Table 11: Overview of additional comments for consideration

Overview of comments
A detailed plan for land between Cleveland Rd and Bong Bong Rd was presented showing plan and artistic elevation views for a public accessible botanic gardens and parkland.
Request that Council amend the boundary of the West Dapto Structure Plan to exclude the Calderwood Urban Development Project
Walking track into escarpment with lookout would be great could be in conservation land and provide education
Structure Plan should provide schools
More consideration should be given to community spaces, which bring communities together with purpose. Such spaces could be playgrounds, off-leash dog parks, sports fields, and a youth centre
The structure plan has little to say about employment lands
Does not support loss of rural lands and prime agricultural and dairying lands continues to be under threat
Include minimum residential house lot sizes of 450sqm
It is hard to take the housing principles seriously when we look at what has been built. It hardly conforms with the principles 'encourage housing diversity', 'promote housing affordability', 'establish sustainable, energy efficient, appealing and functional residential living' or 'create local amenity and a sense of place'

Appendix 1: West Dapto Vision Document





West Dapto Vision

West Dapto will grow and develop as a series of integrated and connected communities. Set against the spectacular Illawarra Escarpment and a landscape of riparian valleys, these communities will integrate the natural and cultural heritage of the area with the new urban form.

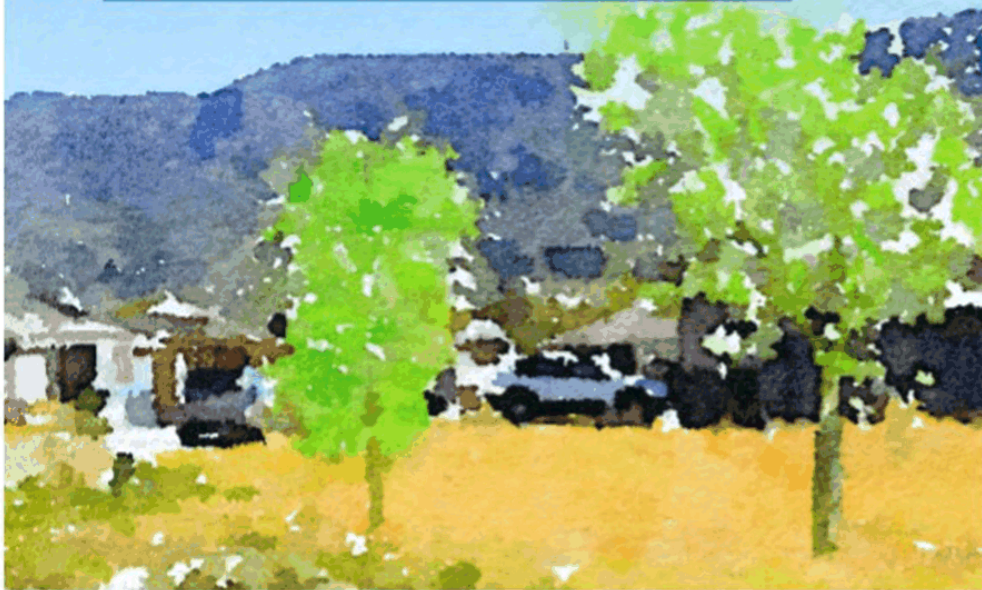
The communities will be healthy, sustainable and resilient with active and passive open space accessible by walkways, cycleways and public transport. To support these new communities, local centres will provide shopping services, community services and jobs while employment lands will facilitate further opportunities for the region.

West Dapto will be supported by a long-term strategy to oversee the timely implementation of infrastructure to deliver sustainable and high-quality suburbs with diverse housing choices.



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Urban Growth at West Dapto

The role of West Dapto in our Region

The NSW Government's Illawarra-Shoalhaven Regional Plan 2015 (Regional Plan) estimates that by 2050 the Illawarra-Shoalhaven region will have a population of about half a million people. It is expected that much of this population will live in the Wollongong local government area. The region's beachside lifestyle, its stunning natural environment and proximity to Sydney have combined to attract an increasing number of people seeking to make the region their home.

Direction 2.3 of the Regional Plan confirms that the major regional release areas of West Lake Illawarra (which includes West Dapto) and Nowra-Bomaderry will continue to be the long-term focus for greenfield housing in the region. It is therefore crucial that continued attention is given to appropriate structure and infrastructure planning for West Dapto.

Wollongong City Council estimates the West Dapto Urban Release Area will provide about 19,500 dwellings and an additional population of about 56,500 people once fully developed over 50-plus years. Final dwelling numbers may vary over time and will require continuous strategic review to ensure Council's planning caters for the changing nature of housing types, designs and densities that will occur decade to decade. The release area will also provide local employment opportunities, community and recreational facilities and the conservation of sensitive sites.

As well as being a key source of new housing for the Illawarra in the coming decades, the West Dapto Urban Release Area will establish designated employment lands and support the growth of Port Kembla. Planning will include measures to conserve and protect the Illawarra Escarpment and the quality of waterways which feed into Lake Illawarra.

The development of the West Dapto Urban Release Area is closely linked to the growth and development of the town centre of Dapto.

Dapto, located between the larger centres of Wollongong to the north and Shellharbour to the south, has evolved to provide a range of services and retailing opportunities. Future urban development west of Dapto will strengthen the Dapto town centre as a regional township and centre for employment. In line with the regional direction to encourage and facilitate "flexible employment lands", businesses and employers will have the option to base themselves within the physical and economic landscape of the release area. The West Dapto Urban Release Area boundary is shown in Figure 1 below.

Figure 1 West Dapto Release Area



**19,500 new homes
and the supporting
public infrastructure**

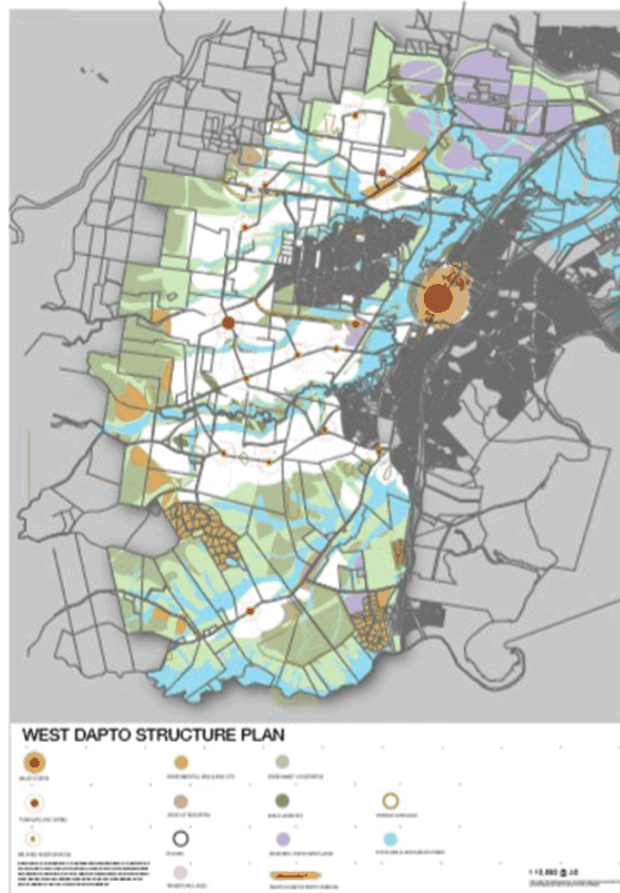
The 2008 Structure Plan

It has been 10 years since the initial Structure Plan for West Dapto was prepared. It is timely to review the Structure Plan and test previous assumptions that informed the plan. It is important to note that the fundamental structure and outcome remains the same. West Dapto is still proposed as the region's largest strategic urban release area. The general urban footprint remains the same with some refinement based on revised and improved data and understanding the area's opportunities and constraints.

Progress at West Dapto and Implementing the Vision

The establishment of about 19,500 new dwellings and providing the supporting public infrastructure is a major undertaking. To ensure a measured, sustainable development schedule, it will be rolled out in stages over more than 50 years. The existing five stages of the urban release area are reflected in the revised structure.

Stages 1 and 2 were rezoned for urban development in 2010 and include



West Dapto is still proposed as the regions largest strategic urban release area.

Figure 2
Existing West Dapto Structure Plan (GCC, 2008). Extract from Wollongong DCP, 2009.

Kembla Grange to Wongawilli and the area west of Horsley. Stage 3 of the urban release area is Cleveland and Avondale is Stage 4. Development has commenced in the north to make use of existing services and promote development of the Kembla Grange employment lands. Development will gradually extend south while also widening east to west. Initial strategic development staging is shown in Figure 3. Stage 5 (Yallah/Marshall Mount) and the Dapto Town Centre precincts will develop separately.

We've continued to drive change around West Dapto with construction of a four-lane road from Horsley's Fairwater and Daisy Bank Drive to the Fowlers Road/Princes Highway Intersection well underway. These exciting projects will continue into this financial year (Wollongong City Council, June 2017, 2017-18 Annual Plan).

To support the Vision, Council is committed to:

- managing the development program for West Dapto to achieve economic, environmental and socially sustainable urban development for the current and future residents of Wollongong.
- developing vibrant, safe, sustainable and liveable neighbourhoods that provide for community well-being and are supported by essential facilities.
- achieving long-term sustainability through the design and development of our new communities by:
 - meeting housing supply needs through a diversity in housing product.
 - encouraging well integrated and connected neighbourhoods with appropriate land uses.
 - protecting and enhancing ecological and cultural features throughout the release area.
 - maximising the potential for local employment opportunities.
 - developing a long-term strategy to oversee the implementation of infrastructure, and ensuring cost effective and efficient infrastructure provision using a collaborative and transparent approach between Council and the NSW Government.

Planning progress

Since the rezoning of stages 1 and 2 in 2010, Council has adopted 10

neighbourhood plans into Chapter D16: West Dapto Urban Release Area of Wollongong Development Control Plan, 2009. The 10 neighbourhood plans will facilitate the creation of about 3,350 residential lots, the development of Bong Bong and Darkes Town Centre and Reddalls Road Industrial Area. Council continues to consider further draft neighbourhood plans and assess subdivision applications.

Since 2010, 25 subdivision development approvals (for 1,100 lots) have been granted and more than 750 subdivision certificates issued. Ongoing development assessments will continue.

On 8 June 2018, Stage 5 (Yallah / Marshall Mount) was rezoned for urban development.

Infrastructure delivery progress

The significant increases in 2018-19 to 2020-21 include amounts for West Dapto Access Strategy projects such as the Fowlers Road extension to Fairwater Drive and other major transport projects (Wollongong City Council, June 2017, Annual Plan).

Ongoing infrastructure delivery continues at West Dapto. Since 2010 Council has committed significant road infrastructure funding towards projects that have either been constructed or are currently under construction. Roads include:

- Shone Avenue upgrade to road and bridges Stage 1 & 2
- Fairwater Drive extension to Cleveland Road (Daisy Bank Drive)
- Cleveland Road bridge and school drop-off area
- Fowlers Road connection and bridges
- West Dapto Road (Kembla Grange) intersection upgrade
- Bong Bong Road upgrade including Glenlee Drive roundabout upgrade
- Darkes Road safety and alignment upgrades
- Wongawilli Road upgrade

We are continuing to design other key road projects, including:

- Yallah Road and Marshall Mount Road
- Cleveland Road
- Jersey Farm Road
- West Dapto/Sheaffes/Darkes Road
- Avondale/Huntley Road

Council's commitment to the vision is reflected in **planning principles** intended to guide all land use planning decisions associated with the urban release area. The principles are discussed in further detail in the body of this report. The principles have been used to review the 2008 West Dapto Structure Plan shown at Figure 4.1, Chapter D16: West Dapto Urban Release Area of Wollongong Development Control Plan, 2009 (see also Figure 2 of this document). A draft revised West Dapto Structure Plan is presented at the **Next Steps and implementing**

the vision section of this report. The planning principles will promote best practice outcomes without replacing legislative obligations.

Essential infrastructure required to deliver the vision will rely on a coordinated approach to funding and delivery through a combination of development contributions from Council, State stakeholders and, in some cases, additional means such as public-private partnerships.

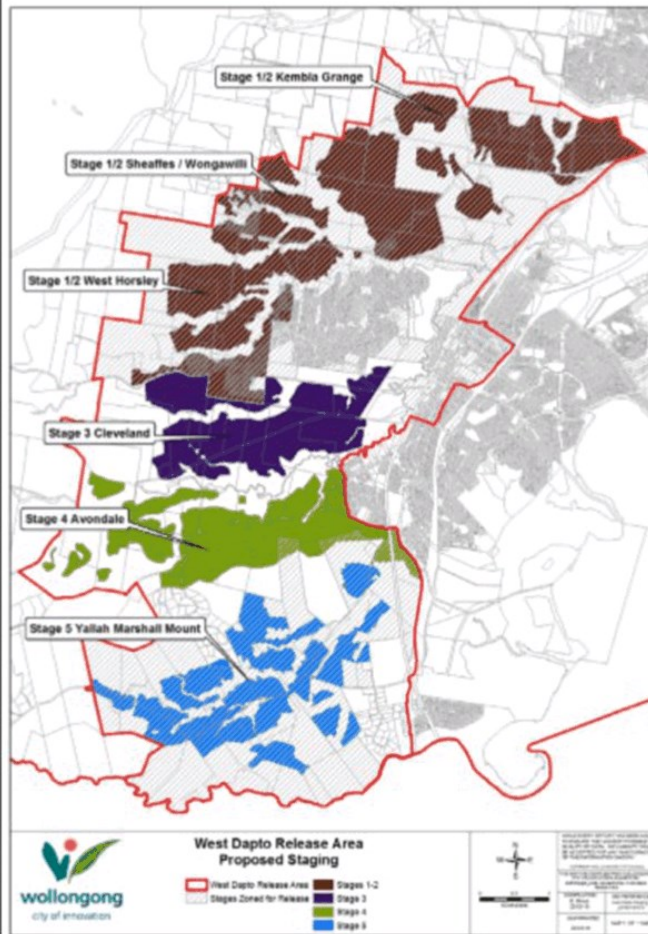


Figure 3
West Dapto Staging Plan. Modified from West Dapto Section 94 Plan, 2017.

Revising the Structure Plan

A structure plan guides the future strategic direction of an urban release area. All spatial planning decisions flow from the strategic guide. As a guiding tool, the plan is high level and relies on subsequent planning decisions and statutory tools under the NSW Environmental Planning and Assessment Act, 1979 to add more detail. These tools include but are not limited to the Wollongong Local Environmental Plan, Wollongong Development Control Plan, neighbourhood planning and ultimately development applications. Implementing a structure plan goes beyond planning tools. Infrastructure planning, design, funding and delivery are essential components. Engagement of all relevant stakeholders when developing the structure is crucial to ensure the strategic vision is understood and has an opportunity to come to life.

Several key inputs and factors have evolved informing the revised structure plan, including but not limited to:

- improved understanding of road network requirements and travel behaviour tested through Council's in-house TRACKS model and informed by engineering design.
- demographic changes and changes to social and cultural settings as well as broader changes to living standards shaping trends in housing markets; need for an increase in housing diversity, choice and affordability; and increased demand and pressure on housing supply throughout the region and NSW.
- changing State planning policy setting influencing urban outcomes requiring more rigour during subdivision planning and assessment.
- improved understanding of flood behaviour through the 2018 Mullet Creek Flood Model update.
- rezoning of Stage 1 & 2 and Stage 5 of the initial structure plan; progressive preparation of neighbourhood plans within Stage 1 and 2 and subsequent LEP amendments as needs identified; and the ongoing lodgement and approval of development applications and progressive housing construction.
- better understanding of the role of town

and village centres and their strategic location through two key studies (2014, Urbacity report and 2016, SGS, Dapto Town Centre Study).

- more detailed knowledge of biodiversity and environmental setting (updated vegetation map, threatened species survey and Biodiversity Conservation Options, 2013).
- progress in infrastructure planning and delivery.
- changing infrastructure funding environment.

The revised Structure Plan has also been informed by the West Dapto Principles listed within this document. The revised Structure Plan is presented for comment. All feedback Council receives will be considered in the finalisation of the plan.

In summary, the key changes proposed to the 2008 structure plan (2008 plan shown at Figure 2, draft 2018 plan shown at Figure 10) include:

- 2010 urban zoning of Stages 1 and 2 (rezoned as one stage). The revised structure plan reflects the rezoned land.
- June 2018 urban zoning of Stage 5 (Yallah/Marshall Mount). The revised structure plan reflects the rezoned land.
- Revised road network strategy informed by Council's TRACKS model, progress in infrastructure design and strategic costing.
- Revised flood layer 1% Annual Exceedance Probability (AEP). Informed by the 2018 Mullet Creek Flood Model update.
- Revised biodiversity survey, assessment and conservation initiatives. Council progress in data collection and mapping to formulate a biodiversity strategy with updated development patterns.
- Revised and consolidated town and village centres to more efficiently serve the growing community (eight new centres compared with 14 proposed in 2008).
- Inclusion of the significant access road project at Fowlers Road/ Fairwater Drive.
- Important heritage items included in the structure plan to ensure future planning decisions consider the implications. Other heritage values, specific heritage controls and required considerations will be provided in more detail via Council's plans and policies, including the Wollongong Local Environmental Plan, 2009, and the Wollongong Development Control Plan, 2009.

About West Dapto Planning Principles

The West Dapto Planning Principles are intended to guide land use planning decisions associated with the urban release area.

The principles are guiding review of the existing West Dapto Structure Plan and Master Plan. Changes to the Structure Plan and Master Plan will be implemented via:

1. Council-sequenced and developer-proposed rezoning of land through amendment of Wollongong Local Environmental Plan, 2009.
2. Review and update of the West Dapto chapter D16 of Wollongong Development Control Plan, 2009.
3. Development of new development contributions plans (with both Council Section 94 Plan, and Department of Planning and Environment's (DPE) Special Infrastructure Contributions (SIC) supporting the Structure Plan.
4. Continued assessment and determination of development applications within the urban release area.

What is a strategic planning principle?

A planning principle is a statement of a desirable outcome from a chain of reasoning. Planning principles can guide outcomes and provide a list of appropriate matters to be considered in making a planning decision. While planning principles are stated in general terms, they are applied to promote consistency and diligence around planning and design considerations.

Planning principles are not legally binding and they do not prevail over Council's plans and policies. They inform changes to Council plans and policies and guide changes in process, their application and outcomes. The principles must be considered in conjunction with existing relevant legislation.

Planning principles assist when making a planning decision, especially:

- where there is a void in policy;

- where policies expressed in qualitative terms allow for more than one interpretation;
- where policies lack clarity and consistency; and
- where policies lack detail, are dated against sciences or need improvement as a result of undesirable development outcomes.

Sustainable and liveable communities

Council's vision for the West Dapto Urban Release Area is reflected in contemporary needs for sustainable and liveable communities. Sustainable development, spatial planning and urban design principles reflect broader approaches to sustainability in state legislation and will inform decisions, processes and guide relevant policy content and reform. Urban design and non-urban land use principles together with the revised Structure Plan and implementation documentation will lead to designs sympathetic to landscape features and unique characteristics.

The West Dapto Urban Release Area has many environmental, social and economic challenges that require careful consideration to ensure efficient and sustainable delivery of urban development. These factors include the unique topography, water management (including flooding), fragmented land ownership, threatened species and ecological communities, Aboriginal and European heritage, accessibility and the cost of infrastructure. Careful consideration needs to be given to understand the release area's full potential for urban development.

It is important to note that promoting sustainable outcomes is intrinsic in all the West Dapto Urban Release Area principles, outlined below, and a key outcome through the collective implementation of all planning principles.

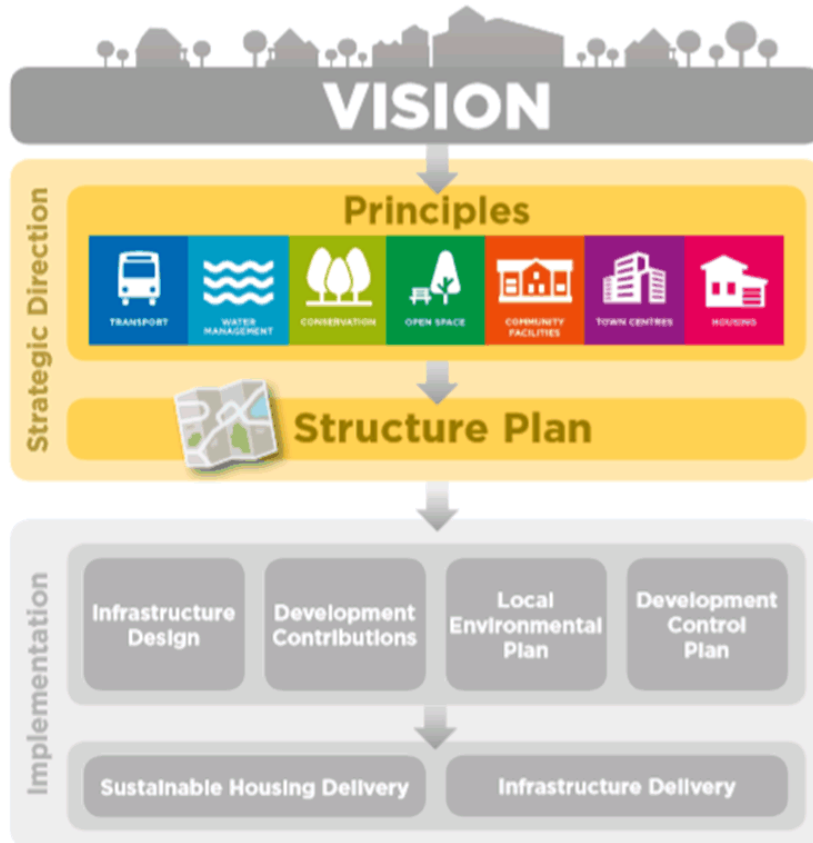
The West Dapto Urban Release Area principles

The Principles' order of appearance does not denote any form of priority but outlines interrelated land features which require detailed consideration in development proposals. Figure 4 outlines the principles and their key components. Each principle is detailed in the following sections of this report.



Many of the principles are supported by quantitative measures to ensure the desired outcome can be achieved. The appropriate place for these measures will be explored during implementation (see Figure 4).

Figure 4
Structure and relationships of principles to planning tools



Transport Principles

1.1 ROAD NETWORK

The future road network for the West Dapto Urban Release Area will be the 'backbone' of the community, providing for all types of access and movement through the release area. The road network form and provision contribute significantly to achieving the vision of long-term sustainability.

An integrated transport system is proposed that caters for the private car as well as freight, public transport, pedestrians and cyclists. Road types have been developed based on a functional hierarchy, where the road designs support the transport modes in various ways. The road network has been developed to cater for planned land use and deliver a safe, connected and efficient transport framework that compliments the natural environment and facilitates sustainable transport outcomes.

PRINCIPLE 1

Supportive land use patterns

- 1.1 Plan higher residential densities and mixed land use in and adjacent to town and village centres and major public transport nodes to reduce reliance on the private car and reduce overall road network requirements and costs.
- 1.2 Plan the co-location of compatible land uses to reduce reliance on the private car and reduce overall road network requirements and costs.

PRINCIPLE 2

A safe, connected and legible road network for all users

- 2.1 Provide a road network based on the modified grid layout to maximise accessibility and efficiency.
- 2.2 Implement a clear hierarchy of road types that meets relevant transport requirements and road function, creating a highly legible road network for all users.

- 2.3 Ensure the major road network supports the town and village centres hierarchy within West Dapto.
- 2.4 Ensure a balanced and integrated road system, catering not only for the private car but for freight, public transport (buses), pedestrians and cyclists.
- 2.5 Implement driveway access restrictions and manage on-road parking on the higher-order roads (access-denied roads) to improve traffic efficiency and pedestrian/cyclist safety and amenity.
- 2.6 Implement intersection designs appropriate to the road types, surrounding land use and environment.
- 2.7 Ensure built form controls on adjacent properties deliver active frontages to maximise passive surveillance and personal safety in the road environment.
- 2.8 Ensure roads and intersections are designed to meet relevant standards and best practice guidelines.

PRINCIPLE 3

Design roads to compliment the environment

- 3.1 Ensure roads fit with the landform (topography), complement local character/land use and minimise visual, ecological and noise impacts.
- 3.2 Ensure road alignments take advantage of views and visual stimuli for the motorist to enhance legibility, sense of place and create a positive experience in movement.
- 3.3 Consider the role of road networks in structuring precincts, including both transport and community needs to maximise liveability and quality urban outcomes.
- 3.4 Incorporate Water Sensitive Urban Design (WSUD) into road design, using verges and medians where possible.

PRINCIPLE 4

Quality Infrastructure

- 4.1 Use robust and durable materials, quality finishes and ancillary infrastructure with neat, uncomplicated designs that minimise maintenance requirements and discourage vandalism.



- 4.2 Consider the use of innovative technologies in road and transport infrastructure design, construction and operation.

PRINCIPLE 5

Road network to support sustainable transport outcomes

- 5.1 Staging of additional car based infrastructure to encourage public/active transport and maximise use of existing infrastructure.
- 5.2 Use an established 15% transport mode shift target when planning for road network requirements within West Dapto to reduce car dependence.
- 5.3 Ensure that roads are designed to provide a high level of safety, access and amenity for pedestrians, cyclists and public transport (bus) services.

1.2 BRIDGE AND CULVERT DESIGN

PRINCIPLE 1

Good design is context sensitive design

Design that is sensitive to context is valued by communities. Bridges/culverts that are functional and fit the landscape are good for community pride and local identity.

- 1.1 Consider locational context and functional requirements in the design process.
- 1.2 Bridge/culvert alignment should integrate with environmental and local constraints.
- 1.3 Ensure storm immunity standards are met and design/construction provides longevity to minimise maintenance requirements.
- 1.4 Design and finishes should respond to and incorporate the character of the area.

Detailed objectives, associated outcomes and specific guiding requirements for bridge and culvert delivery will be developed as part of the next steps in implementing the West Dapto Vision Document. The 'next steps' process is shown in Figure 4 of the Vision Document.

1.3 PUBLIC TRANSPORT

The establishment of efficient and attractive public transport options for West Dapto is imperative to achieve sustainable growth outcomes. This importance is echoed in many Council and State Government documents, including the Illawarra Regional Transport Plan and Illawarra - Shoalhaven Regional Plan. The new land release area in West Dapto presents an opportunity to promote 'best practice' in public transport and non-motorised modes, reducing reliance on the private car, contributing to a mode shift target and creating a more resilient, interesting and liveable community.

To this end, high-level principles have been developed that will be used to inform & guide public transport planning for the new growth area, to ultimately ensure that the vision for sustainable transport in West Dapto is achieved. These principles are set out below.

PRINCIPLE 1

Supportive land use patterns

- 1.5 Plan residential land use and higher residential densities close to town, village centres and major public transport nodes.
- 1.6 Locate major generators of travel demand in, or close to, accessible centres that are well serviced by public transport.
- 1.7 Ensure plans allow for a variety of land uses around public transport nodes and in centres so that services are centralised.

Ensure that roads are designed to provide a high level of safety, access and amenity for pedestrians, cyclists and public transport (bus services).

PRINCIPLE 2
**Effective bus network,
service provision &
Integration**

- 2.1 Provide coordinated, frequent and reliable bus services to destinations within and surrounding West Dapto.
- 2.2 Create an efficient, seamless travel experience through integrated ticketing, minimising transfer times and intuitive and easily accessible service information.
- 2.3 Ensure street networks are interconnected and allow access for bus services.
- 2.4 Ensure the bus network is highly accessible and services the majority of residences, town and village centres, employment areas, sporting facilities and Dapto Railway Station.
- 2.5 Incorporate bus priority measures as necessary to ensure highly efficient, prioritised bus transport.

PRINCIPLE 3
Quality Infrastructure

- 3.1 Provide comfortable, attractive, safe and secure buses and bus-related infrastructure with clear timetable/service information, catering for all users, including disabled/elderly.
- 3.2 Ensure pedestrian and cycle links to bus stops are of a high standard (refer also Active Transport Principles).

- 3.3 Encourage the use of innovative and efficient public transport technology.

PRINCIPLE 4
Early provision of public transport

- 4.1 Introduce bus services 'just ahead of time' to gain early community acceptance and set travel behaviour patterns from the start of new land release development.
- 4.2 Encourage staging of development in a contiguous manner with adequate roads and footpaths to make the early provision of bus services feasible and to allow bus networks to be efficiently staged.

PRINCIPLE 5
Working with State Government to provide & improve public transport services

- 5.4 Work with State Government to help plan and deliver improvements to the public transport system in and around West Dapto, including bus networks and service levels that meet or exceed Transport For NSW's Integrated Public Transport Service Planning Guidelines. Complete a major interchange upgrade at Dapto Station that provides the highest level of multi-modal accessibility, efficiency and convenience.

Dapto High School Bus Interchange (\$2.4 million). Bus stops and drop-off areas, increasing access and safety.



PRINCIPLE 6
Promotion & Incentives

- 6.1 Build community awareness and promote benefits of public transport in West Dapto (eg. travel packs, website, branding of buses etc.).
- 6.2 Investigate incentives for use of bus services.
- 6.3 Encourage significant employment-generating developments to implement workplace travel plans.
- 6.4 Use the location, supply and availability of parking to discourage car use and support public transport.

1.4 ACTIVE TRANSPORT

Walking and cycling (referred to as Active Transport) will be an important component of the future West Dapto transport system, contributing significantly to achieving the vision of a 'sustainable' community. Design and planning for the West Dapto Urban Release Area has emphasised the notion of walkable communities which enable sustainable healthy living to occur. Walking is also an important factor in the success of public transport.

The future strategy for walking and cycling at West Dapto will require local solutions. Best practice planning for active transport at the local level will deliver convenient and attractive travel options, especially for short trips. This will not only assist in reducing reliance on, and impacts of, private car use but will also contribute to the health and vitality of the community. Principles for active transport are set out below:

PRINCIPLE 1
Supportive land use patterns

- 1.3 Plan residential land use close to town and village centres and major public transport nodes, with higher residential densities adjacent to these locations to maximise walking and cycling catchments.

- 1.4 Encourage careful siting and co-location of land uses to maximise walking and cycling options.

- 1.5 Promote shared parking across uses in town/village centres to encourage walking when undertaking multiple activities. Avoid fragmented parking to maximise use of spaces and improve walkability through more compact town centre layouts and fewer driveway crossings.

PRINCIPLE 2
Connected, functional pedestrian & cycle network

- 2.9 Provide a convenient and legible movement network for pedestrians (including those with disabilities) and cyclists, ensuring excellent connectivity and directness between residences and attractors such as schools, shops, public transport nodes, sports ovals and employment centres.

- 2.10 Include footpaths/shared paths on all roads in the road hierarchy except laneways and minor access streets (refer to Roads Principles).

- 2.11 Take advantage of easements, riparian areas and open spaces to create convenient pedestrian and cycle links (or short-cuts) that maximise accessibility between different precincts /land uses.

- 2.12 Implement a directional (often referred to as way finding) strategy to provide clear and coordinated information for access to facilities and services within the West Dapto Urban Release Area and surrounds.

- 2.13 Provide safe and secure bicycle parking or storage facilities at key destinations in town and village centres, sports ovals, community facilities, transport interchanges and key open space areas.

- 2.14 Encourage bicycle parking and end-of-trip facilities as part of the development of employment and commercial land uses.

- 2.15 Ensure the West Dapto cycleway network integrates with the surrounding regional cycle routes.

PRINCIPLE 3
Attractive and safe environment

- 3.5 Design streets using current 'best practice' to provide a high level of pedestrian and cyclist amenity and safety, creating public space where people want to be.
- 3.6 Provide convenient and safe road crossing points, traffic calming (where appropriate) and tree planting to enhance the pedestrian and cycle environment.
- 3.7 Ensure built form controls on adjacent properties deliver active frontages to maximise passive surveillance and accessibility to/ from the path network.
- 3.8 In high pedestrian demand areas such as town and village centres, further increase pedestrian amenity and safety through path widening, driveway access controls and other site-specific actions to improve pedestrian priority.
- 3.9 Incorporate Crime Prevention Through Environmental Design (CPTED) principles in the planning of walking and cycling facilities.

- 3.10 Consider innovative technologies for lighting key off-road paths, including solar lighting and luminescent pathway materials.
- 3.11 Construct pedestrian and cycle infrastructure according to current 'best practice', with attractive and durable materials and well-designed landscaping treatments (refer also to Roads Principles).
- 3.12 Incorporate supporting infrastructure such as seats, bike rails, shade structures, bubblers and viewing/ rest areas into the active transport network where appropriate.

PRINCIPLE 4
Promotion of active transport

- 4.3 Encourage significant employment-generating developments to implement workplace travel plans.
- 4.4 Prepare household travel information packs for new homebuyers.
- 4.5 Support active transport community events and promotions.
- 4.6 Support the establishment of bike share services.

Walkable communities which enable sustainable healthy living to occur.





Water Management Principles

The water management principles are the integration of common floodplain and stormwater management principles.

In isolation, floodplain management is the consideration of the consequences of flooding as it relates to human occupation of the floodplain and establishing corrective and preventative measures for reducing flood damage and risk to life.

Stormwater management is the practice of collecting, conveying and reusing quality treated stormwater runoff primarily from urban development with minimal nuisance, while also protecting receiving waters and the surrounding environment.

The approach taken is to consider integrated water management principles in order to achieve a better overall 'water management' strategy for the West Dapto Urban Release Area and also provide high level guidance for new development.

Looking east from Wongawilli towards Lake Illawarra.

PRINCIPLE 1 Integration of floodplain and stormwater management

Integrate floodplain and stormwater management into the urban development process.

PRINCIPLE 2 Manage water quantity

Manage the stormwater quantity from urban development.

PRINCIPLE 3 Sustainable floodplain development

Create sustainable development around and within the floodplain.

PRINCIPLE 4 Preservation of floodplain function and natural corridors

Preserve the natural function of the floodplain, natural waterways and riparian corridors where possible.

PRINCIPLE 5 Protection from flooding

Protect people and property from flooding.



PRINCIPLE 6
Protect water quality

Protect water quality of surface and groundwater from urban development and any adverse effects on water quality in Lake Illawarra.

PRINCIPLE 7
Integrate stormwater with the environment

Integrate stormwater management into the natural and urban land form in an unobtrusive way.

PRINCIPLE 8
Efficient and sustainable Infrastructure

Provide efficient and sustainable stormwater infrastructure for the urban release area.

PRINCIPLE 9
Preserve/enhance the environment

Preserve the natural environment and enhance where possible in keeping with stormwater quantity and quality management objectives and targets.

The water management principles are intended to link the overall vision to Council's desired outcome for the West Dapto Urban Release Area. This link will be further achieved by the use of tools including detailed reports and updated statutory policies. The detailed reports and policies will include a Floodplain Risk Management Study and Plan, Water Cycle Management Study and Plan, updated Wollongong Local Environmental Plan, 2009 and Wollongong Development Control Plan, 2009 to support the implementation of the West Dapto Vision. These documents will be developed as part of the next steps in implementing the West Dapto Vision document. The next steps process is shown on Figure 4 and described under the section - Next Steps and Implementing the Vision.

Promote integrated water management principles.





Conservation Principles

ENVIRONMENT CONSERVATION

In adopting the concept of ecologically sustainable development, regionally significant releases such as the West Dapto Urban Release Area present opportunities to preserve remnant vegetation and enhance ecological connectivity (structural and functional). This section identifies the strategic environmental priorities to guide planning and development of the West Dapto Urban Release Area, integrating conservation priorities with opportunity for a future West Dapto Biodiversity Conservation Strategy (BCS) and Biodiversity Conservation Strategy Structure Plan (BCSSP).

A BCS provides opportunity for Council to achieve biodiversity certification (bio certification) in a coordinated approach for the whole release area, improving the overall conservation outcomes beyond what would be achievable site by site. Council will work closely with the NSW Office of Environment and Heritage and Department of Planning and Environment to achieve this strategic outcome. The principles should also be used to guide site-by-site considerations.

PRINCIPLE 1 Prioritise areas that offer high environmental value for conservation

Consider information that identifies areas of threatened ecological communities or stands of habitat greater than 4ha (considered to present high environmental value in terms of habitat size and location) and avoid impacts as a result of land use changes to these areas.

PRINCIPLE 2 Connectivity of habitat areas

Connecting patches of habitat that have high biodiversity value will provide

opportunity for ecological migration over time as well as opportunity for improvement to habitat quality and values. These are more commonly known as biodiversity corridors providing strategic connection of larger and better condition patches of vegetation either by re-establishing continuous native vegetation cover or designing stepping stones of habitat that traverse local corridors.

PRINCIPLE 3 Protect Environmental Values

Provide complimentary land uses alongside conservation sites to assist in improving and protecting the ecological function of the site and enhancing its resilience.

Secure areas that present high environmental value as areas for conservation and long-term management (ideally through a bio certification process).

Figure 5 illustrates key conservation documents and their relationships. The BCS will provide the direction and framework while the BCSSP will outline the actions to guide the implementation of conservation measures. Implementation of these documents and achieving bio certification creates opportunity to improve biodiversity values of the West Dapto Urban Release Area.

Further detail, including environment and heritage conservation objectives, the role of West Dapto Environmental Principles, bio certification process and conservation priority areas will be developed as part of the next steps in implementing the West Dapto Vision. The next steps and implementation process is shown in Figure 4 and described under the Next Steps and implementing the vision below.

HERITAGE CONSERVATION

Heritage values present great opportunities to enhance cultural understanding and social enrichment of the release area. The Australian Heritage Commission (2000) states the aim of both natural and cultural heritage conservation is to retain the significance of place (Australian Government, Department of Environment and Energy, 2017). Impacts on the heritage significance of the area are key considerations at each planning stage. Land





use changes should retain, promote and integrate heritage values. The principles for West Dapto aim to incorporate heritage conservation and promote consideration of the significance of place to encourage heritage protection.

PRINCIPLE 1
Prioritise the Conservation of Heritage Items and sites of Aboriginal Heritage Significance

Listed heritage items and sites of Aboriginal, cultural and/or archaeological significance should be retained and conserved within new development areas with appropriate curtilages and visual settings. Development planning should account for the significance of sites and places and consider retention of key sites that contribute to the historic setting of newly developing neighbourhoods.

PRINCIPLE 2
Respect the Cultural Landscape

The West Dapto Urban Release Area has a rich and diverse history of Aboriginal and non-Aboriginal occupation. The area retains a range of key landscape elements, landforms, natural features such as creeks and ridgelines, important views and visual connections. It has historic road and transport

corridors that are important and unique aspects of the area, contributing to its character and significance by telling the story of development. Proposed development should be guided by an understanding of, and respect for, significant features of the natural landform and the historic setting. New communities should be assisted to understand and appreciate the unique visual and physical connections between places and features within and outside of their development areas.

PRINCIPLE 3
Embed Local History and Character in New Communities

Developments should strive to feature historic sites and places of significance to provide a unique sense of identity and character for developing neighbourhoods. The adaptation and re-use of historic buildings in an appropriate manner that provides for their conservation and integration into new developments is encouraged. The use of historically relevant street names, integration of interpretation and the celebration of aspects of a site's indigenous and post-settlement history are encouraged to ensure that the rich history of the area is celebrated and recognisable in the identity of developing communities.

Figure 5
West Dapto's strategic environmental conservation documents



Open Space & Recreation Principles

This section establishes the open space principles for the West Dapto Urban Release Area. This section should be read in conjunction with Community Facilities. An overarching framework with **four inter-related principles** is designed to achieve the open space objective for the West Dapto Urban Release Area.

PRINCIPLE 1 Functionality

- Appropriate size and flexible footprint for multiple functions and uses (*Hierarchy of facilities*).
- That competing functional elements such as flooding and water management, traffic and road infrastructure, cultural heritage and biodiversity are accommodated without compromising the open space and recreation functions.

PRINCIPLE 2 Accessibility

- Walkable distances from residential areas, universal design principles used for facilities with a focus on 'play' and diverse experience (*resident catchments*).
- There is a well-distributed network of accessible (in both location and design), attractive and useable public open spaces and natural areas within the existing and future neighbourhoods of West Dapto.

PRINCIPLE 3 Connectivity, movement and flow

- Connected spaces with shared paths to other facilities, places of interest and centres (open or riparian corridors, heritage sites and urban bushland).
- The open space areas are highly connected to create a network of open space with a range of functions to complement the existing landscape features.

PRINCIPLE 4 Value and amenity

- Future uses complement and add to existing values (an active play facility may jeopardise a threatened ecological community, water management may restrict active use etc.).
- That public open space and natural areas will provide for a variety of recreational, sporting, play and social needs of the community.

HIERARCHY AND CATCHMENTS

Based on the principles of functionality, accessibility, connectivity and community values, there are some guides to the level of open space based on size and characteristics of projected population and its recreational needs. **Table 1** categorises relevant population catchment distances for each level of open space provision (hierarchy) and how it generally relates to size requirements in the future urban and residential areas based on NSW Recreation and Open Space Planning Guidelines for Local Government (2010).

It is important to emphasise that any benchmark standards cannot be used as a 'one size fits all' assessment tool. Through analysis of local context and community needs, these standards can and should be varied if based on sound evidence.

Figure 6 demonstrates the hierarchy to function and size relationship for the West Dapto Urban Release Area.

Table 1 Open space provision standards (based on NSW Recreation and Open Space Planning Guidelines for Local Government (2010) and the Elton Report (2007) recommendations).

The relationship can also be understood in catchments for community populations. **Figure 7** shows proposed open space catchments of West Dapto (based on methods established in NSW Recreation and Open Space Planning Guidelines for Local Government, 2010). These catchments will be developed further for Stages 3 and 4 and are shown for illustration purposes only.

Catchment refers to the area and resident (or future resident) population the open space facility is intended to provide for. As part of the open space network for the West Dapto Urban Release Area, open space will need to be provided at all hierarchy and

catchment levels. Table 1 outlines standards for open space planning around catchment distances in the future urban and residential areas to the open space.

Table 1 (below)
Open space provision standards (based on NSW Recreation and Open Space Planning Guidelines for Local Government (2010) and the Eiton Report (2007) recommendations).

Function and service	Size	Catchment radius (distance)
Local Passive	0.5-2 ha	400-600m
Local Active	1-2 ha	400-600m
Neighbourhood Passive	2-4 ha	2km
Neighbourhood Active	3-5 ha	2km
District Active	5-8 ha	Southern ward of LGA
City wide Active	8 + ha	Facility to serve the whole LGA

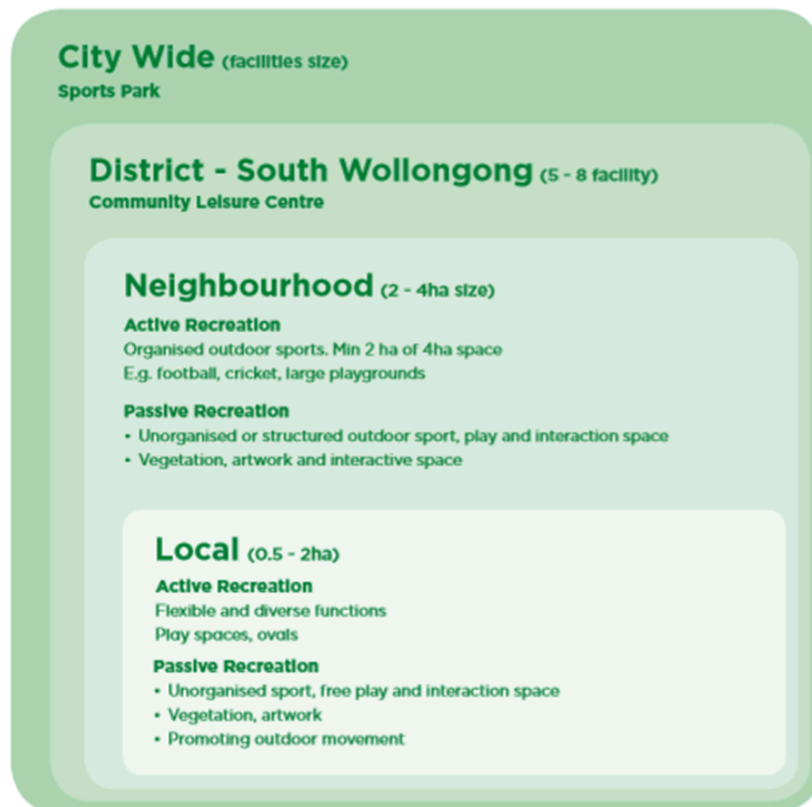


Figure 6 (above)
Open space hierarchy and functions



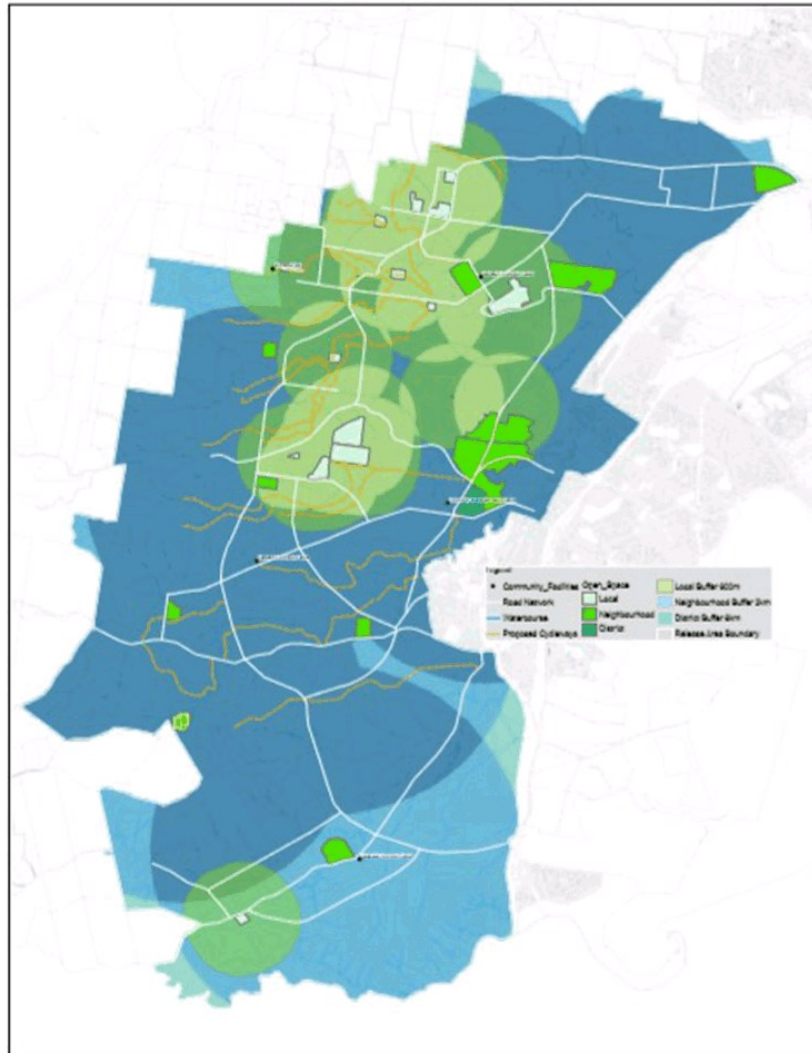


Figure 7
Example of Open
Space distance
catchments

Community & Education Facilities Principles

Goal 3 of the NSW Government's Illawarra-Shoalhaven Regional Plan promotes:
A region with communities that are strong, healthy and well-connected

Ongoing planning for the West Dapto Urban Release Area aims to achieve this goal. The goal is reflected in our Vision and key principles for Transport (Roads, Public Transport), Open Space & Recreation and Community and educational facilities. This section should also be read in conjunction with Open Space and Recreation. Community facilities are an increasingly important component of local service provision across a range of areas in the public and private sector. For example, there is a clear trend in public health and alternative education to use local community facilities for regular and specialist community services rather than develop individual facilities. Council understands this increases the importance of flexible design, location and efficiencies to be achieved by these facilities for them to make the best contribution to community outcomes.

There are nine principles to be considered in the planning of the West Dapto Urban Release Area community and education facilities.



Figure 8
Community Hub Concept of co-location and multipurpose, joint use design.

PRINCIPLE 1
Healthy, diverse and resilient

Community facilities contribute to quality of life to support healthy, diverse and resilient community.

PRINCIPLE 2
Efficient

Making efficient use of resources through shared or co-located facilities and multiple use agreements (multi-purpose community hubs) with flexible design that can respond, expand and adapt as needs change.

PRINCIPLE 3
Safety, security and adding to civic identity and sense of place

Promote safety, security and provide focal points adding to civic identity and sense of place through clustering community facilities.

PRINCIPLE 4
Self-sufficient and resilient community

Community facilities provide opportunity for self-sufficiency to build capacity and social capital and to actively contribute to community resilience.

PRINCIPLE 5
Vibrant and accessible

Placing facilities in convenient central locations, adjacent to open space which contribute to the vibrancy of the development, are accessible and allow for overflow activities such as children's play.

PRINCIPLE 6
Equitable

Provide equitable access for all sections of the population, through the distribution, design and policies of facilities.

PRINCIPLE 7
Diversity

Community facilities promote diversity and encourage people from culturally and linguistically diverse backgrounds to participate in the social and economic life of the community.

PRINCIPLE 8
Viable and sustainable

Developing sustainable funding, ownership, governance, management and maintenance arrangements, including private partnership arrangements where community benefit is achieved.

PRINCIPLE 9
Coordination

Council to work with the state government and non-government schools sector to promote best-practice education outcomes for the community of West Dapto. This will include sharing data and integrating asset solutions, such as opportunity for shared and joint-use facilities.

Planning for the provision of education is important for West Dapto's growing community. In NSW, the Department of Education provides funds and regulates education services for NSW students from early childhood to secondary school. Council will continue to work with the Department to promote best-practice education outcomes for the community of West Dapto.

*Lord Mayor
Gordon Bradbery AM
opens the Berkeley
Community Facility.*



Town Centres Principles

This section provides town centre principles to be considered during planning for the West Dapto Urban Release Area. As a new release area, there is an opportunity to ensure that the ideal treatments are made to establish sustainable, appealing and functional residential living as well as commercial and light industrial areas providing employment, social and cultural opportunities with sufficient flexibility to cater for the future populations needs. As with other previous principles the town centre principles should not be considered in isolation.

The key objective of the town centre principles is to help identify centre locations, function and existence. The town centres of West Dapto will fill diverse roles, functions and mixed uses. Configurations will reflect the town centre hierarchy with a focus on pedestrian priority. Supported with a decision process (zoning, neighbourhood planning, etc.), appropriate locations will promote the social and economic functions and outcomes sympathetic to character and 'place'.

There are three principles to be considered in planning of town centres to meet the objectives for West Dapto Urban Release Area:

PRINCIPLE 1 Hierarchy

Hierarchy provides a basis for which to establish functions, order and visions as well as allowing the protection of these. Hierarchy is not the only way to understand or set direction in planning for centres; we understand that the centres are also a connected network, which can support each other in an interlocking way.

Each level of the hierarchy represents the size and general characteristics that reflect the centres' commercial, retail and business roles (see Figure 9). The Hierarchy reinforces role and function, supports the Wollongong City Centre and higher order centres and provides certainty for investment decisions. Hierarchy reinforces character and identity as well as provides direction around appropriate residential density sympathetic to community facilities and service locations.

Regional Centres

Dapto is a regional centre. The new release, located close to this centre is in addition to an existing urban landscape, an important consideration in the planning of new town and village centres. These lower order centres must be sensitive to this hierarchy to maintain existing functions and minimise any potential negative impacts.

Town Centres

There are three town centres planned for the urban release area. The objective of the town centres is to ensure that development in the Darkes Road and Bong Bong (and Marshall Mount) town centres contributes to the creation of retail, business, commercial and community hubs while providing significant local employment opportunities.

Village Centres

The study, West Dapto further review of release area centres and controls (Urbacity, 2014), noted the role of villages, as a lower order centre, is to "provide a convenient alternative to the supermarket-based town centres for daily goods and services with a focus on amenity for housing density and improved public transport use".

PRINCIPLE 2 Movement sensitive

The town centres of West Dapto are expected to facilitate social contact, employment and living needs in a sustainable manner. The town centres will be located to promote active transport and healthy lifestyle. Living within 400m-800m of a mix of destinations is consistently associated with higher levels of active transport in adults and older adults (Heart Foundation, 2017).

Movement sensitive means movement (accessibility, location etc.) will be a key consideration for co-location of a mix of destinations (or land uses) within a centre. Centres will provide activities, attractions and services within walking distance. The community hub will create a focal point within the neighbourhood for multiple activities to be undertaken and different daily needs (ie. live, work, play) to be met in the one location.

Centres must also be supported and surrounded by a network of connected streets, paths and cycle ways, providing opportunities for active transport and convenient access to public transport. The network will link centres with open space and recreation areas.



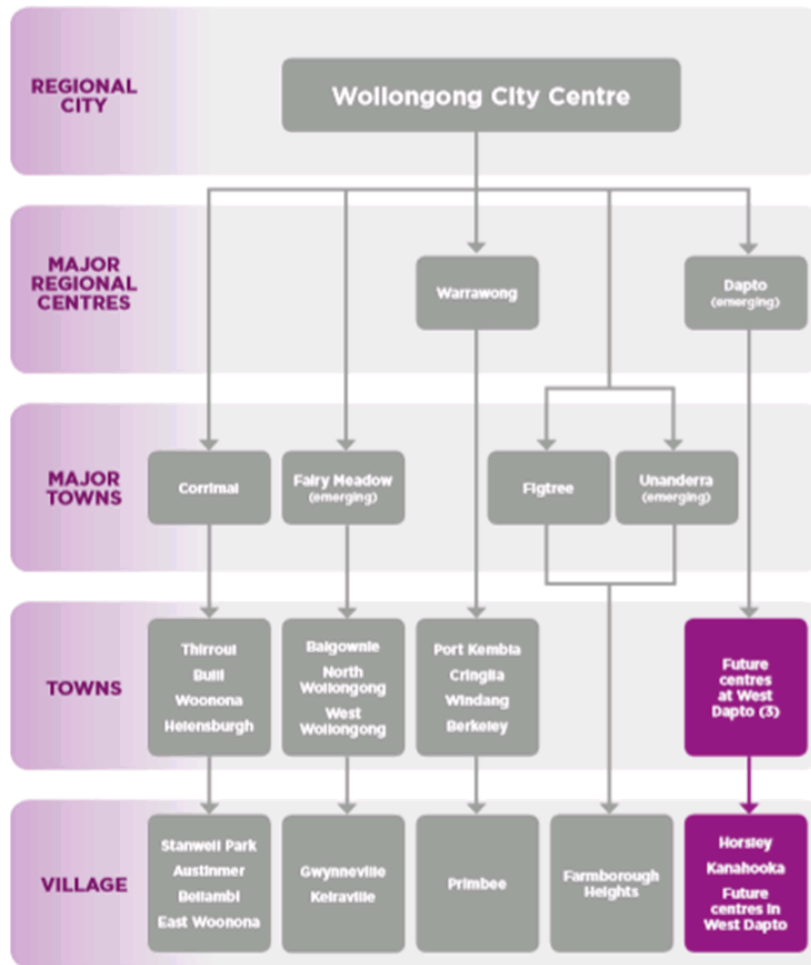
TOWN CENTRES

**PRINCIPLE 3
Diversity and Identity**

Centres will facilitate a diverse range of activities by prioritising spaces for people of all ages that become vital to the social fabric of a neighbourhood where people gather, meet friends and family and engage in social activities. Especially important for new centres is creating a vision that encourages diversity while shaping and reflecting a centre's character. Centres will be

diverse from each other (through hierarchy, features and visions). The vision capitalises on existing features of heritage, environment (vegetation, topography etc.) and contributes to a new theme expressing the centre's role in the urban residential landscape. A vision and purpose give people the creative foundations, understanding that activity, physical setting and meaning come together to create a 'sense of place'.

Figure 9
Retail and Business Centre Hierarchy in the Wollongong Local Government Area.



Housing Principles

This section establishes the Housing Principles for the West Dapto Urban Release Area, providing for ongoing strategic planning decisions. As a new release area, there is an opportunity to establish sustainable, appealing and functional residential living. The principles should also be used to guide site-by-site considerations.

The Housing Principles should be read in conjunction with Council's LGA-wide Housing Policy setting, which is updated from time to time to ensure we are addressing the challenges of a changing housing environment.

These principles should be considered in conjunction with all other planning principles in this document, as they all contribute to achieving the vision for the West Dapto Urban Release Area and ultimately sustainable housing outcomes.

"The communities will be healthy, sustainable and resilient and will have access to diverse housing choice and active or passive open space accessible by walkways, cycle ways and public transport."

PRINCIPLE 1 Encourage housing diversity

Diversity can be delivered through different products at different stages of planning by promoting and providing a range of density and lot size and shapes to offer a range of choice to better meet changing community needs.

Mixture of density low to high, single dwellings, dual occupancy, town houses and apartments in appropriate locations should all be considered at neighbourhood planning and subdivision design stages.

Promote increased densities and innovative design types close to town and village centres and transport infrastructure where possible.

PRINCIPLE 2 Promote housing affordability

Residential neighbourhoods cater for a variety of demographic and socio-economic characteristics. Promoting housing mixture is one tool that provides opportunity for more affordable housing options and reduces housing stress.

PRINCIPLE 3 Establish sustainable, energy efficient, appealing and functional residential living

Target an increased use and uptake of renewable energy through housing and neighbourhood design.

Seek to promote best practice design excellence in housing provision and neighbourhood planning.

PRINCIPLE 4 Creating local amenity and a sense of place

This principle is about designing safe, healthy and active neighbourhoods with interactive interfaces between residences, the streets and surrounds. It is about ensuring there is connection between housing and the streets, parks and activity areas they adjoin and interface other uses.

Encouraging and supporting housing design that responds to place. Creating site responsive built form and lot layouts that consider existing features and landscape context, natural land form and surrounding land uses.

Manage housing growth to protect and promote the conservation values that contribute to concepts of 'place' in West Dapto.

PRINCIPLE 5 Housing transition to the Illawarra Escarpment

Reduce housing density on the fringe of the urban release area to provide delineation to the housed urban areas and a buffer to the Escarpment and important environmental features.



The Housing principles are intended to link the overall vision to Council's desired outcome for the West Dapto Urban Release Area, with the use of tools including standards set by Wollongong Local Environmental Plan, 2009 and controls established within Wollongong Development Control Plan, 2009 which may be reviewed to support the implementation of the West Dapto Vision and principles. These documents will be developed as part of the next steps in implementing the West Dapto Vision document. The next steps process is shown in Figure 4 and described under the section - Next Steps and Implementing the Vision.

“Opportunity to establish sustainable, appealing and functional residential living.”

Housing development in Horsley.



Draft Structure Plan 2018

A structure plan guides the future strategic direction of an urban release area. All subsequent spatial planning decisions can flow from the strategic guide. As a guiding tool, the plan is high level and relies on subsequent planning decisions and statutory tools under the NSW Environmental Planning and Assessment Act, 1979 to add more detail. These tools include but are not limited to the Wollongong Local Environmental Plan, Wollongong Development Control Plan, neighbourhood planning and ultimately development applications. Implementing a structure plan goes beyond planning tools. Infrastructure planning, design, funding and delivery are an essential component. Engagement of all relevant stakeholders when developing the structure is also crucial to ensure the strategic vision is understood and has an opportunity to come to life.

It has been 10 years since the initial Structure Plan for the West Dapto Urban Release Area was prepared. It is timely to review the Structure Plan and test previous assumptions that informed the plan. It is important to

note that the fundamental structure and outcome remains the same. West Dapto is still proposed as the region's largest strategic urban release area. The initial five stages of urban release are still reflected in the revised structure. The general urban footprint remains the same with some refinement based on revised and improved data and understanding of the area's opportunities and constraints.

Structure Plan Layers

The draft structure plan is comprised of a number of layers, as described below.

Flooding (1% AEP)

This layer represents the extent of flooding up to and including the 1% Annual Exceedance Probability (or 1% AEP). The purpose of this layer is to identify it as a physical constraint for development and also ensure the management of flood risk by restricting future development within this zone at the implementation stage. The layer combines the 1% AEP flood information from the catchments of Mullet Creek, Duck Creek and Marshall Mount Creek. The current layer includes flood information extracted from the corresponding flood studies of each catchment; namely the Mullet Creek Flood Model Update Report (2018), Duck Creek Flood Study (2012) and the Macquarie Rivulet Flood Study (2017).

Spectacular Illawarra Escarpment and a landscape of riparian valleys.



The information used from the Duck Creek and Macquarie Rivulet flood studies includes shallow inundation depths, whereas the information from the Mullet Creek report has been filtered to exclude shallow inundation depths of less than 150mm and areas where the velocity depth product is less than 0.05.

The existing flood layer for the Mullet Creek catchment on the 2008 structure plan was derived primarily from the draft Mullet and Brooks Creeks Floodplain Risk Management Study and Plan, 2006. The flood layers for the Duck and Marshall Mount Creek catchments were based on preliminary information and modelling commissioned by Council at the time.

Riparian Corridor

This layer represents the riparian corridors across the urban release area, derived from the Riparian Corridor Management Study (RCMS) which was prepared for Council by the Department of Infrastructure Planning and Natural Resources (DIPNR) in 2004. Note some of the riparian corridors depicted in the 2004 document have been modified over time due to changes in topography through land use activities. These areas have not been updated on the draft structure plan. Similarly, areas of inundation in some locations do not overlay with riparian corridors due to reasoning provided above.

The purpose of this layer is to identify the corridors as a physical constraint for development and also ensure the protection and enhancement of designated riparian corridors by restricting future development within these zones at the implementation stage.

This current layer identifies watercourses across the urban release area and is closely associated with the conservation layer which defines the appropriate buffers according to the designated riparian corridors shown in the RCMS (2004).

The existing 2008 structure plan did not delineate watercourses but rather associated watercourses with flooding.

Land-Use Structure

• Conservation Areas

Riparian corridors (mapped as blue lines) identify watercourses across the urban release area. This information is closely associated with components of the conservation layer.

The conservation layer includes areas that provide appropriate buffers to riparian corridors to maintain the corridors' function and structure for the health of the broader environmental setting. The designated riparian corridors are dynamic and geomorphologically active. This information was garnered through more analysis than a standardised buffer distance.

Other important information included in the conservation layer relates to the Illawarra Escarpment area of regional importance, ecological studies identifying areas of vegetation with high ecological value and, in particular, the work done towards biocertification of the urban release area in 2013 (Ecological, 2013).

The conservation areas in Stages 1 and 2 of the urban release area are consistent with planning decisions to date. Stages 3-4 are guided by information as outlined above and Stage 5

As a guiding tool, the plan is high level and relies on subsequent planning decisions.



Integrating natural and cultural heritage of the area.

Infrastructure planning, design, funding and delivery are an essential component.

(Yallah/Marshall Mount) conservation areas are guided by previous planning decisions informed by the Duck Creek Flood Study 2012 (for riparian corridor context) and existing biodiversity information.

• Transition Areas

The transition areas shown on the draft Structure Plan have been identified generally as a reflection of proposed Housing Principle 5 Housing Transition to the Illawarra Escarpment. Council is promoting the need to reduce housing density on the fringe of the urban release area to provide delineation to the housed urban areas and a buffer to the Escarpment and other important environmental features.

• Development Areas

The development areas shown on the Structure Plan are those compatible with an urban land use outcome. These include residential and employment lands. The areas are not affected by the key constraints of the urban release area as identified on the draft Structure. However, development within these areas will be subject to the detailed implementation processes summarised at Figure 4.

Road Network

The road network (shown as Road Network Review on the Structure Plan) represents the framework of main collector roads required to service the transport needs of the urban release area. It is worth noting that these roads will not only cater for motorised vehicles but also for active transport

(walking and cycling) through provision of verge footpaths and shared paths. These are higher order roads that are important for traffic function and/or public transport.

The proposed road network provides connectivity to, from and between residential areas and town and village centres. It uses a number of existing roads, as well as new roads and bridges. It is planned to provide efficient and direct access to all development areas, working within the constraints of the urban release area.

Bong Bong Road/Iredell Road and Princes Highway (mapped as black lines) and the M1 Princes Motorway (mapped as a yellow/black line) have been included on the Structure Plan for context, as they are important existing main roads that contribute to access for West Dapto.

The Structure Plan shows indicative road alignments only, which may be modified in some cases as more relevant information becomes available and detailed design work is completed. The Structure Plan is a strategic plan and therefore does not provide detail on the types of roads (eg widths, number of lanes), bridges or intersections.

The proposed road network has been informed by a number of previous transport and land use studies, a Wollongong City Council/State Government Agency Working Group and more recently Council in-house design and modelling work.

Heritage

The 2018 Structure Plan update shows two heritage layers of information. The LEP 2009 Heritage layer includes items as identified in Schedule 5 and on the

Integrating natural and cultural heritage of the area.



Heritage Map of Wollongong Local Environmental Plan 2009.

The 2018 Structure Plan also shows heritage sites in the urban release area as Other Heritage Curtilages. These sites were identified during a 2006 study to inform the original LES for the urban release area (Non-indigenous Heritage Study, West Dapto - Volume 1, HLA-Envirosciences Pty Ltd 2006). In addition to those sites identified during the study, there is also an identified site protected on the Heritage Map referenced in Part 28 Calderwood Site, Schedule 3, of State Environmental Planning Policy (State Significant Precincts) 2005.

Town Centres

The 2018 Structure Plan update identifies eight centres of activity to meet the needs of the West Dapto Urban Release Area.

The eight centres are shown on the Preliminary Structure Plan at Figure 10 (page 37).

The centre locations are indicative only. Location of these centres has been informed by the Town Centres Principles of Hierarchy, Movement Sensitive, Diversity and Identity outlined in Section 6 of this report. Dapto's role as the key regional centre will be maintained and promoted into the future.

Council has developed the strategic direction for these centres based on 2014 Urbacity report (capacity in context of Dapto Regional Centre, Calderwood & Tallawarra) and 2016 SGS Dapto Town Centre Study.

The indicative locations include three town centres referred to as Darkes, Bong Bong and Marshall Mount, which are proposed to service the communities of the north, central and southern residents and visitors to the urban release area. It is important to note that the Town Centres of Darkes and Bong Bong are zoned B2 Local Centre and were zoned for a Town Centre outcome as part of the larger Stage 1 and 2 urban development zoning in 2010. Council resolved to support rezoning of the Marshall Mount town centre to B2 Local Centre. The site was subsequently rezoned by the State on 8 June 2018.

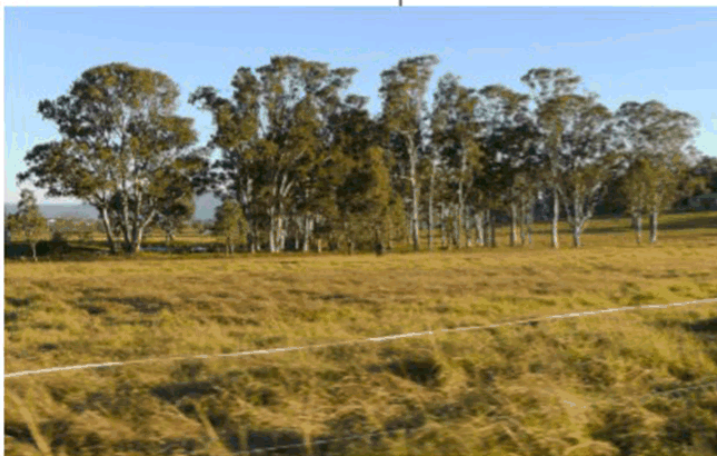
Five village centres are proposed to meet the daily needs of residents. The village centres are proposed at Wongawilli, Jersey Farm, Fowlers, Huntley and Avondale.

Specific detailed planning of each centre will be subject to the implementation steps shown at Figure 4.

Open Space

The indicative location for open space on the Structure Plan relate to the larger (2ha and greater) open space facilities. As outlined in the principles, these are neighbourhood scale and larger. They have been included on the Structure Plan as important provisions for the future communities of the urban release area. The need for these areas was originally established through the Elton Report 2007 and subsequently through Section 94 Planning. The location on the Structure Plan was guided by the principles and although they are

Eight centres of activity to meet the needs of the West Dapto Urban Release Area.



Consider existing features and landscape context.

indicative, re-emphasise their role as part of the vision and as key structural elements of the urban release area.

Key changes and other information

The Draft Structure Plan 2018 includes a number of key changes relating to relevant layers and also inclusion of new layers when compared to the 2008 Structure Plan. These changes are outlined below.

Flooding (1% AEP)

The flood extents for Mullet Creek catchment have been updated since the original flood layer shown in the 2008 Structure Plan. The primary reason to update the flood layer is to better inform Council on current and future planned development areas using flood mapping based on improvements in flood modelling techniques and better data.

The main differences between the 2008 and 2018 flood layers are the increased flood extents westwards and also greater definition of flood extents throughout the catchment via the capture of smaller watercourses and low points. Other differences noted between the flood layers are as a result of ongoing development and construction of major infrastructure (ie. bridges) since 2010 and filtering of the 2018 flood extents.

Riparian Corridor

The 2018 riparian layer has been included to highlight the watercourses shown in the RCMS (2004), which was not evident in the 2008 Structure Plan.

There are minor differences between the 2008 and 2018 layers with respect to the riparian buffers, being associated with the conservation layer. Further explanation is provided in the section relating to the Land-Use Structure Layer.

Conservation

The 2008 Structure Plan showed conservation areas and some small pockets of rural landscape. The conservation areas on the 2008 Structure Plan supported the strategic basis of protection for the escarpment lands, riparian corridors and pockets of important biodiversity. There was also some rural landscape land identified around conservation areas. This approach has not changed for the Structure Plan 2018 with key areas of high environmental value and connections along riparian corridors from the Escarpment shown. A key change has been the rural landscape areas are no longer represented with the conservation areas. There is also a reduction of conservation land between Stages 4 and 5 as Stage 5 (Yallah/ Marshall Mount) has been rezoned for development. There has been a reduction in conservation areas identified as more detailed investigation was undertaken during the Stage 5 planning proposal assessment.



Integrate water management into the natural and urban land form.

Town Centres

Council's updated strategic direction for centres at West Dapto represents a consolidated approach. Eight centres are now proposed to service the Urban Release Area. This compares with 14 centres proposed in the 2008 Structure Plan (shown in Figure 2).

The consolidated centres approach is considered reasonable and needed to ensure each centre can sustain a commercial outcome long term. The higher volume was considered unsustainable and the ability of all 14 centres to stay commercially viable in the longer term was questionable. Council has developed the consolidated centres approach following recent studies, including the 2014 Urbacity report (capacity in context of Dapto Regional Centre, Calderwood & Tallawarra) and 2016 SGS Dapto Town Centre Study.

Road Network

There are a number of changes to the proposed road network for West Dapto compared with the previous 2008 Structure Plan. These differences are a result of changes that have occurred in policy as well as improved information and knowledge about the urban release area. Areas of improved knowledge and refinement that have influenced the road network include flood modelling and mapping, road design and strategic traffic modelling and analysis. In addition, road network modifications have occurred as a result of consideration of opportunities and constraints associated with new Neighbourhood Plans and Development Applications, as well as the consolidation of Town and Village Centres.

The key changes are:

- **Northcliffe Drive now extends along existing Reddalls Road and west to connect with West Dapto Road just east of Shone Avenue**

Detailed investigations have established that the proposed road location is the most efficient and direct main road route with added flood reliability to service the urban release area. The route was informed through improved data and knowledge, including road civil design analysis and costing as well as flood and traffic modelling. Council has identified a significant cost saving for this route compared with the existing policy position of upgrading West Dapto Road, reducing the burden on ratepayers.

The Principles developed for the urban release area also helped guide decision making around this issue.

- **The North-South Link Road (between Darkes Road and Bong Bong Road) has been removed**

This section of new road was formerly proposed to provide a convenient traffic and public transport link between the northern part of the urban release area and Dapto Town Centre/Railway Station Interchange as well as southern parts of the urban release area. Due to the low topography, this road was not proposed to be flood reliable. Detailed road design and flood analysis has resulted in its removal from the Structure Plan for safety reasons. It is now proposed that the existing Darkes Road/Princes Highway provide this necessary linkage for the northern part of the urban release area. The North-South Link Road also provided convenient active transport (walking and cycling) connectivity for the northern part of the urban release area to Dapto. However, the new Structure Plan would seek to retain an off-road path connection in this location to maintain this positive active transport outcome.

- **Fowlers Road extension (Princes Highway to Fairwater Drive) is now included**

A significant amount of work was completed following the Growth Centres Commission review of West Dapto Urban Release Area in 2008, resulting in Council resolving in 2013 to re-introduce Fowlers Road extension as a flood-reliable main road link for West Dapto, which was supported by a State Government Agency Working Group. Since that time, Council has progressed with detailed design work for the new road, with construction commencing in July 2017.

- **Hayes Lane/Jersey Farm Road link has been realigned to the north-east to join Shone Avenue**

The 2008 West Dapto Structure Plan (Figure 2) shows Hayes Lane extending north to meet Wongawilli Rd at Smiths Lane. Following further investigation of this arrangement, it was found to have a number of practical difficulties in design and existing community impacts. The alternative of upgrading Jersey Farm Road was also investigated, with design analysis showing substantial issues

Areas of improved knowledge and refinement that have influenced the road network include flood modelling and mapping, road design and strategic traffic modelling and analysis.

with flooding, cost and the dual-line railway level crossing.

The current draft Structure Plan proposes realigning the northern end of Hayes Lane to meet with Shone Avenue, avoiding flood-prone land and providing a more direct route to Darkes Town Centre and the northern part of the urban release area.

• **The proposed new road between Cleveland Road and Brooks Reach Is now realigned to join Brooks Reach Road**

The 2008 West Dapto Structure Plan (GCC, 2008) shows this road connecting to the southern side of Bong Bong Town Centre. An analysis of future north-south traffic demands in the vicinity of the town centre has shown that an additional north-south connection to Bong Bong Road would be beneficial for the town centre function as well as local accessibility.

It should be noted that the main north-south road (west of the town centre) has been realigned slightly eastward compared to that shown in the 2008 Structure Plan, with a

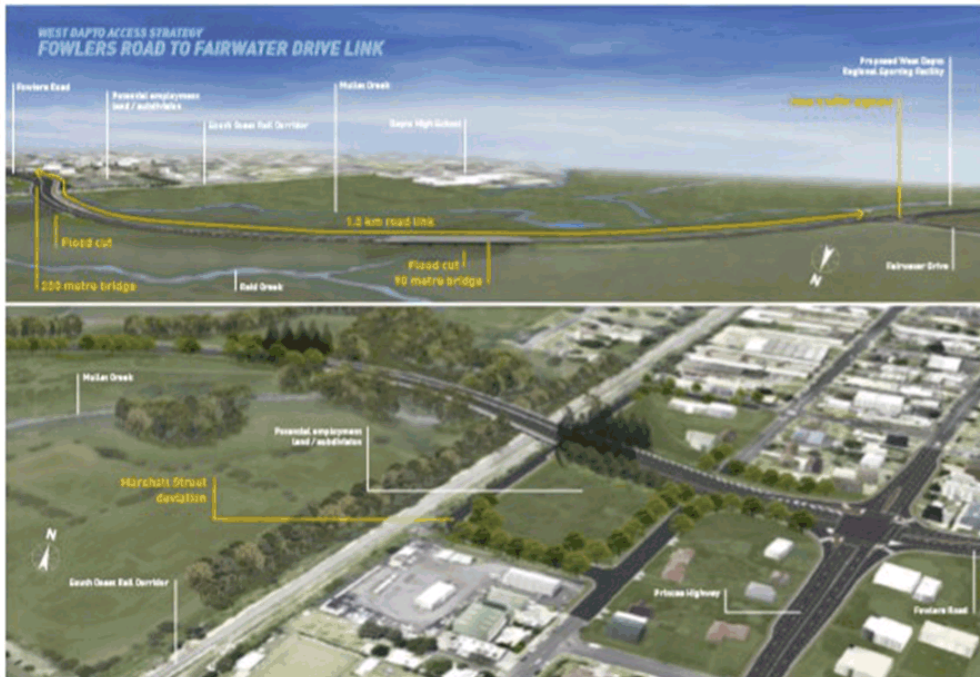
continuation of the Hayes Lane alignment south of Bong Bong Road.

• **A connecting road between Yallah Road and Avondale Road is proposed**

Detailed traffic modelling work has shown that under the current Structure Plan, Marshall Mount Road and the intersections of Marshall Mount Road/Huntley Road/Princes Highway would be heavily congested, due to the combination of development in both Marshall Mount and the adjacent Calderwood Valley land release. This heavy traffic would result in detrimental impacts for the proposed Marshall Mount Town Centre and would require complex and expensive infrastructure at Marshall Mount Road/Huntley Road/Princes Highway, which is bisected by the South Coast railway line.

A new link road between Yallah Road and Avondale Road was subsequently investigated and modelled, with results showing benefits for Marshall Mount Road and its northern intersection with Huntley Road. In the wider urban release area context,

Fowlers Road extension (Princes Highway to Fairwater Drive)



it provides a logical and direct link between Stage 5 (Yallah/Marshall Mount) and the remainder of the release area, completing a natural western 'ring road' through the West Dapto Urban Release Area and improving transport accessibility between town and village centres.

• **Two new parallel roads to the north and south of Marshall Mt Road are proposed**

Both of these parallel roads were included to reduce the impact of through traffic in Marshall Mount Town Centre, largely generated by development in Calderwood Valley. The southern road essentially provides a 'bypass' of the town centre for traffic accessing the M1 Motorway via Yallah Road, while the northern parallel road caters for traffic accessing more northern parts of the West Dapto Urban Release Area. Both roads are required to provide access to/from adjoining residential development precincts.

Heritage

Heritage was not included as a structural element of the urban release area in the 2008 Structure Plan. There are been a number of changes to how heritage is considered since 2008 (particularly through NSW legislation) and it was decided that this constraint should be expressed as a structural element of the urban release areas landscape. It is also important to recognise that although some heritage values are known and place related that can be acknowledged in a land use structure, not all heritage will be linked to the spatial expression of place. Other, more complex heritage values need to be captured as the area continues to be planned.

NSW Government Correctional Facility Investigation

The NSW Government, via the Department of Justice, is undertaking an investigation into the potential for a correctional facility at West Dapto. Council understands the State investigation is at an early stage and no decision has been made.

On 23 July 2018 Council formally resolved to oppose the proposal to build a correctional centre in West Dapto / Kembra Grange and to make a formal submission to Corrective Services NSW consistent with this resolution. A full copy of the Council resolution is available on Council's website at: <http://www.wollongong.nsw.gov.au/council/meetings/Pages/councilmeetings.aspx>

If you are seeking more information regarding the correctional facility investigation, contact the Department of Justice's Stakeholder Engagement team on:
Phone: 1800 875 345
Email: newprisons@justice.nsw.gov.au
Visit: www.correctiveservices.justice.nsw.gov.au/new-prisons

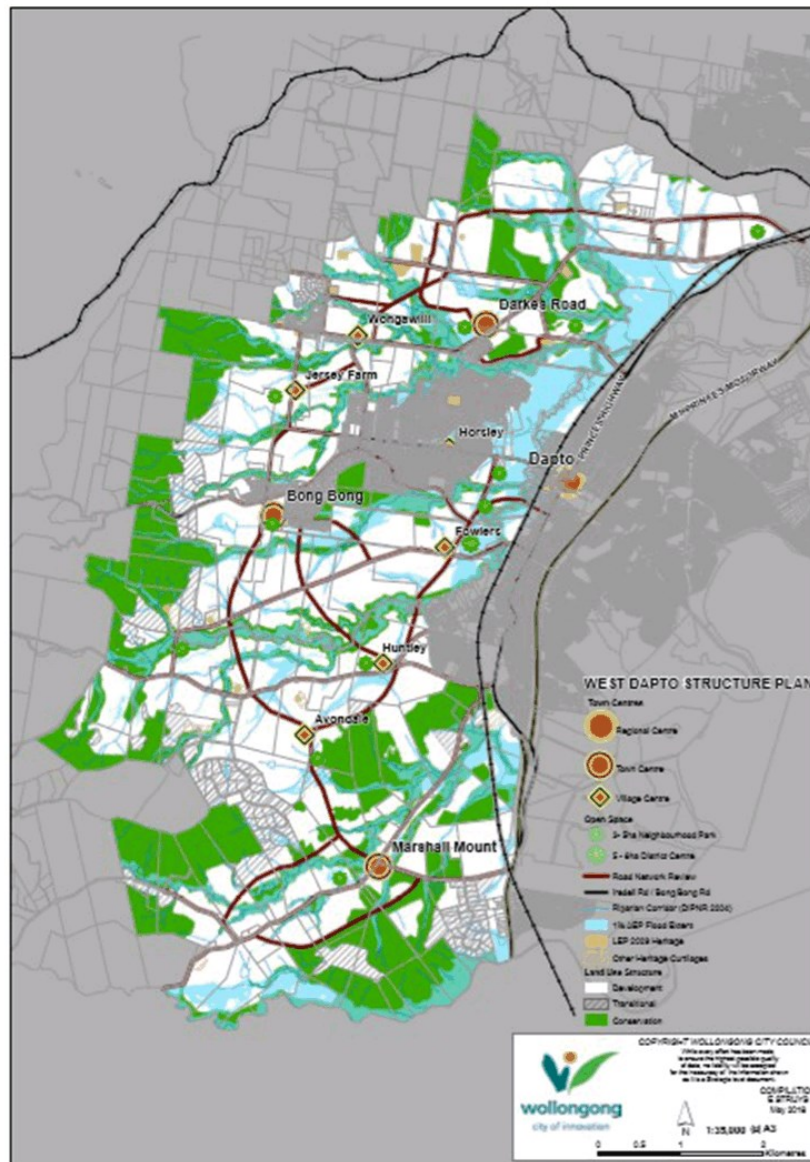


Figure 10
Revised West
Dapto Structure
Plan 2018.

Next Steps & Implementing the Vision

The planning and development of an urbanised future for West Dapto has a long history.

This Vision document has evolved out of many studies and reviews conducted to date. This section outlines numerous documents under the principal topics they were prepared for to provide broader context to the principles.

A number of policy documents have been incorporated into the planning principles in this Vision document where relevant. Policies will need to be modified and updated to implement this Vision document. These include but may not be limited to:

- West Dapto Master Plan and Staging
- West Dapto Section 94 Development Contributions Plan 2017
- Wollongong Local Environmental Plan, 2009 and Wollongong Development Control Plan, 2009 and any supporting information needed for these policies
- West Dapto Biodiversity Conservation Strategy and Plan
- Updates to the Planning Agreement Policy

Other new documents that will be formed from the West Dapto Vision document include:

- Release and Development Strategy, including:
 - Infrastructure Delivery Plan (including programming)
 - Internal process policies
 - Planning proposals policy
 - Neighbourhood Planning process and standards

Following exhibition, the project team will consider all feedback before finalising the Vision document. The project team will then finalise a report to Council recommending adoption of the final strategic direction. The report to Council will include a summary of how feedback received during the exhibition has been considered.

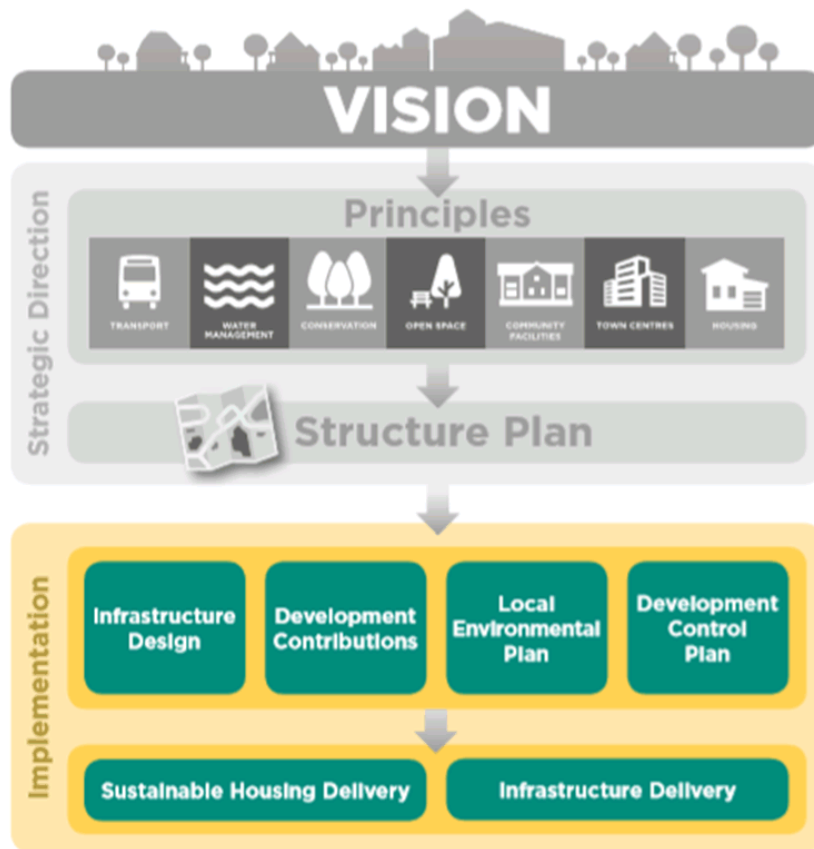
Once the Vision document is adopted by Council, we can ensure that subsequent planning decisions are guided by the updated strategic direction for the growing West Dapto Urban Release Area. This will include future proposed rezoning or amendments to Wollongong Local Environmental Plan, 2009 and Wollongong Development Control Plan, 2009 as they relate to the West Dapto Urban Release Area, ongoing revision of the West Dapto Section 94 Development Contributions Plan, neighbourhood planning, development applications and infrastructure planning and delivery. The next steps process is shown in Figure 4.

The NSW Department of Planning and Environment has recently updated the Environmental Planning and Assessment Act (EP&A) 1979. These updates include changes that solidify the role of strategic directions with the use of Local Strategic Planning Statements. Although these changes are not planned to be implemented until mid-2019, Wollongong City Council envisages the West Dapto Urban Release Area Vision document will be used and incorporated in future West Dapto Urban Release Area Strategic Planning Statements.

Other changes the reform work will elicit will benefit from information behind the Vision and guiding principles as Council will work to update the Wollongong Development Control Plan, 2009 with information and standardised formatting to align with the broader reforms implementing the EP&A Act 1979.

The next steps for planning at West Dapto are illustrated in Figure 4:

Policies will need to be modified and updated to implement this vision document.



*Figure 4
Structure and
relationships of
principles to
planning tools*

References

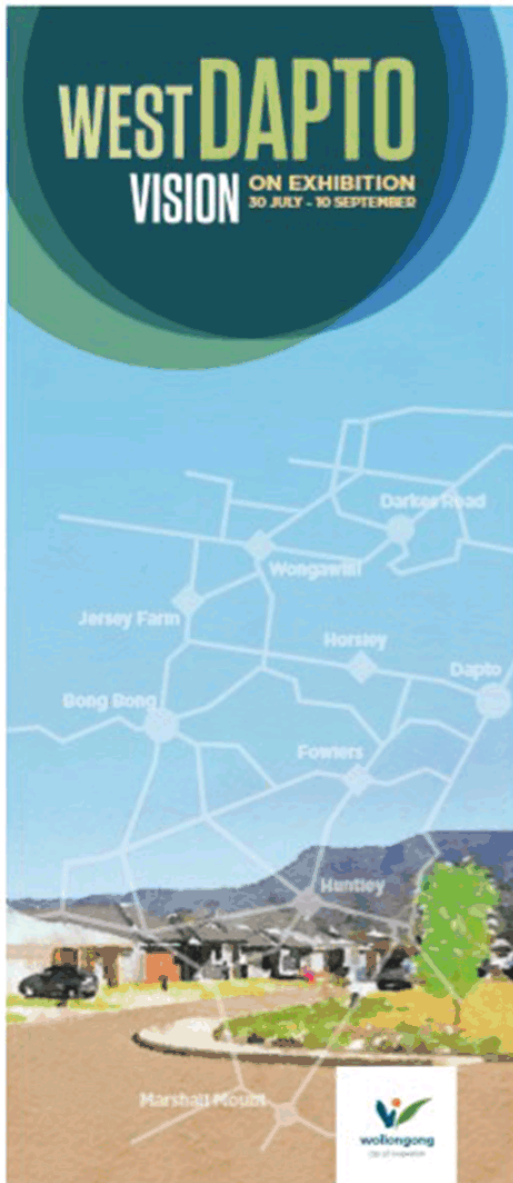
- Australian Government, Department of Environment and Energy, 2010, Australia's Biodiversity Conservation Strategy 2010-2030, <http://www.environment.gov.au/biodiversity/publications/australias-biodiversity-conservation-strategy>
- Australian Government, Your Home Australia's Guide to Environmentally Sustainable Homes <http://www.yourhome.gov.au/>
- Australian Local Government Association, National Heart Foundation of Australia and Planning Institute of Australia, 2009, Healthy Spaces and Places: A national guide to designing places for healthy living. Planning Institute of Australia, Canberra. Healthy Spaces and Places, (project completed) <http://www.healthyplaces.org.au/site/>
- Australian Bureau of Statistics (ABS), 2009, Sports and Physical Recreation: A Statistical Overview, Australia, 2012 <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4156.0Main%20Features12012?opendocument&tabname=Summary&prodno=4156.0&issue=2012&num=&view=>
- Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors), 2016, Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia (Geoscience Australia)
- Bewsher Consulting Pty Ltd on behalf of NSW Growth Centres Commission, November 2008, Final Report West Dapto Review Flooding and Stormwater Strategy
- Cardno, February 2010, Calderwood Urban Development Project - Concept Plan Transport Management & Accessibility Plan (TMAP)
- Cardno Eppell Olsen, July 2007, Dapto Town Centre Access and Movement Strategy, Final Strategies and Master Plan
- Catchment Management Authority, 2007, Managing Urban Stormwater: An integrated Approach (draft).
- City of Greater Geelong, June 2016, Sustainable Communities: Infrastructure Development Guidelines, <https://www.geelongaustralia.com.au/planning/article/item/8cd5dcceb16b656.aspx>
- Eco Logical, November 2013, West Dapto Urban Release Area Updated Vegetation mapping and biodiversity conservation options - Volume 1
- Eco Logical, November 2013, West Dapto Urban Release Area Updated Vegetation mapping and biodiversity conservation options - Volume 2
- Elton Consulting, 2007, Social Cultural and Recreational Needs Study for the West Dapto New Release Area
- Elton Consulting, 2013, Warrawong District Community Centre and Library Concept Planning Report - 28 November 2013.
- Find Law Australia, 2016, Principles of Environmental Management, Centre of Professional Development, Industry Response - Business Council of Australia, accessed 11/10/2016. <http://www.findlaw.com.au/articles/407/principles-of-environmental-management.aspx>
- Government of Western Australia, 2014, Public Parkland Planning and Design Guide WA. Perth Western Australia, Department of Sport and Recreation. <http://www.dsr.wa.gov.au/docs/default-source/file-about-us/file-plan-for-the-future/public-parkland-guide.pdf?sfvrsn=0>
- New South Wales Government, Healthy Waterways initiative, 2014, Living Waterways NSW Government, (workshops held 2017) <https://www.sydneywatertalk.com.au/21003/documents/55097>
- Heart Foundation, 2018, Healthy Active by Design, <http://www.healthyactivebydesign.com.au/>
- Heart Foundation, 2017, Evidence supporting the benefits of Town Centres / Main Streets for physical activity and health. <http://healthyactivebydesign.com.au/evidence-7>
- HLA Enviro Sciences, 2006, Non Indigenous Heritage Study West Dapto Volume 1
- Independent Pricing and Regulatory Tribunal NSW, October 2016, Final Report - Assessment of Wollongong City Councils Draft West Dapto Section 94 Development Contributions Plan, <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/local-government-contribution-plans-review-of-plans-wollongong-city-council-west-dapto-s94-cp/final-report-assessment-of-wollongong-city-councils-draft-west-dapto-section-94-development-contributions-plan-october-2016.pdf>

- Ives, C.Dr, Oke, C Dr, Cooke, B. Dr, Gordon, A. Dr, Bekessy, S. As. Prof, (National Environmental Research Program, RMIT), 2014, Planning for green open space in urbanised landscapes, Report for Australian Government Department of Environment. <https://www.environment.gov.au/system/files/pages/25570c73-a276-4efb-82f4-16f802320e62/files/planning-green-open-space-report.pdf>
- ICOMOS, 2013, The Burra Charter 2013, accessed 7/9/2017, <http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf>
- Kellogg Brown & Root, February 2007, West Dapto Urban Development Transport Management and Access Plan (TMAP)
- Melbourne Water, 2013, Water Sensitive Urban Design Guidelines South Eastern Councils
- New South Wales Auditor General's Report to Parliament, 2018, Planning for school infrastructure, <https://www.audit.nsw.gov.au/publications/latest-reports/performance/planning-for-school-infrastructure/executive-summary/1-executive-summary>
- New South Wales Government, Department of Infrastructure, Planning and Natural Resources, (RCMS), 2004, Riparian Corridor Management Study, prepared for Wollongong City Council, <http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/Riparian%20Corridor%20Management%20Study.pdf>
- New South Wales Government Department of Environment, Climate Change and Water, (DECC), 2011, Biodiversity Certification Assessment Methodology, Sydney. <http://www.environment.nsw.gov.au/resources/biocertification/110170biocertassessmeth.pdf>
- New South Wales Government, Department of Planning, 2010, Recreation and Open Space Planning Guidelines for Local Government
- New South Wales Government, Office of Environment and Heritage (Environment Climate Change and Water) Biodiversity Conservation Assessment Methodology <http://www.environment.nsw.gov.au/resources/biocertification/110170biocertassessmeth.pdf>
- New South Wales Government, Office of Environment and Heritage, 2015, Developing maps of High Environmental Value for strategic planning - mapping and governance guide. Environmental Programs Branch, Office of Environment and Heritage, Sydney (no longer available on line)
- New South Wales Government, Office of Environment and Heritage, 2012, Aboriginal heritage legislation in NSW, accessed 7/9/2017 <http://www.environment.nsw.gov.au/resources/cultureheritage/20120401system.pdf>
- New South Wales Government, Office of Environment and Heritage, 2011, Guidelines to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW, accessed 7/9/2017, <http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf>
- New South Wales Government, March 2014, Illawarra Regional Transport Plan, <https://www.transport.nsw.gov.au/newsroom-and-events/reports-and-publications/illawarra-regional-transport-plan>
- New South Wales Department of Land and Water Conservation, 2004, Best Practice Guidelines for Greener Subdivisions Western Sydney
- New South Wales Government, 2005, Floodplain Development Manual- the Management of flood liable land
- New South Wales Growth Centres Commission, 2006, Growth Centres Development Code
- New South Wales Growth Centres Commission, November 2008, West Dapto Release Area Review Planning and Infrastructure - Planning Report
- New South Wales Growth Centres Commission, November 2008, West Dapto Release Area Review Planning and Infrastructure - Technical Report
- New South Wales Government, Office of Local Government, 2015, Planning for a multicultural community, <https://www.olg.nsw.gov.au/sites/default/files/OLG-Planning-for-a-Multicultural-Community.pdf>
- New South Wales Government, Office of Water, 2012, Guidelines for riparian corridors on water-front land. NSW Office of Water, Sydney. http://www.water.nsw.gov.au/__data/assets/pdf_file/0004/547222/licensing_approvals_controlled_activities_riparian_corridors.pdf

- New South Wales Planning and Environment, 2015, Camden Growth Centre Precincts Development Control Plan www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/camden-growth-centre-precincts-development-control-plan-2015.ashx
- New South Wales Government, Transport For NSW, June 2016, Integrated Public Transport Service Planning Guidelines, Outer Metropolitan Area <https://www.transport.nsw.gov.au/sites/default/files/media/documents/2017/integrated-pt-service-planning-guidelines-outer-metro-jun-2016.pdf>
- Queensland Government, Department of Transport and Main Roads, 2015, Road Drainage Chapter 6: Approach to Drainage Design <https://www.tmr.qld.gov.au/-/media/busind/techstdpubs/Hydraulics-and-drainage/Road-drainage-manual/July-2015/Chapter6.pdf?la=en>
- Roads and Maritime Services, Centre For Urban Design, 2012, Bridge Aesthetics: Design guideline to improve the appearance of bridges in NSW, <http://www.rms.nsw.gov.au/documents/projects/planning-principles/urban-design/bridge-aesthetics-guidelines.pdf>
- Roads and Maritime Services, Centre For Urban Design, 2014, Beyond the Pavement: Urban Design Policy Procedures and Design Principles, <http://www.rms.nsw.gov.au/documents/projects/planning-principles/beyond-pavement.pdf>
- Roger Henshaw Consultancy Services, July 2017, Helensburgh Branch Library Initial Scoping and Concept Planning Report
- Rohan Dickson + Associates, Dapto Town Centre Revitalisation Study, 2004, <http://wollongong.nsw.gov.au/development/planningforthefuture/Documents/Dapto%20Background%20Report%20-%20Exhibition%20Mar06.pdf>
- SGS Economic on behalf of Wollongong City Council, 2005, Wollongong Housing Study, <http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/Wollongong%20Housing%20Study.pdf>
- SGS Economics, 2017, Dapto Towncentre Economic Study
- WMA Water on behalf of Shellharbour City Council, February 2017, Macquarie Rivulet Flood Study Final, <http://www.shellharbour.nsw.gov.au/Documents/Build/Plans,-Controls-and-Policies/Floodplain/Macquarie-Rivulet-Flood-Study-Final>
- Soule, M.E., 1991 (published online, 2007), Land Use Planning and Wildlife Maintenance: Guidelines for Conserving Wildlife in an Urban Landscape, Journal of the American Planning Association, Vol 57, issue 3, 1991, http://www.michaelsoule.com/resource_files/80/80_resource_file1.pdf
- Transgrid Easement Guidelines for third party developers, 2016, <https://www.transgrid.com.au/being-responsible/public-safety/living-and-working-with-powerlines/Documents/Easement%20guidelines%20for%20third%20party%20developers.pdf>
- Urbacity, June 2014, West Dapto, further review of release area centres & controls
- Victoria State Government, 2015, Design for Everyone, Sports and Recreation settings, <http://sport.vic.gov.au/design-for-everyone/sport-and-recreation-settings>
- Western Australian Planning Commission, 2009, Liveable Neighbourhoods – A Western Australian Government Sustainable Cities Initiative
- Western Australian Planning Commission, 2015, Draft Liveable Neighbourhoods <https://www.planning.wa.gov.au/liveable-neighbourhoods.aspx>
- Wollongong City Council, 2017, Dapto Town Centre Plan 2017-2027, <http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/Dapto%20Town%20Centre%20Plan.pdf>
- Wollongong City Council, May 2017, Draft Housing Our Community: A discussion paper identifying issues for our housing future, <https://www.haveyoursaywollongong.com.au/housingourcommunity>
- Wollongong City Council, 2017, – Draft Urban Greening Strategy <http://www.wollongong.nsw.gov.au/council/meetings/BusinessPapers/Item%201%20-%20Draft%20Urban%20Greening%20Strategy%202017%20-%202037.pdf>
- BMTWBM on behalf of Wollongong City Council, 2012, Duck Creek Flood Study <http://www.wollongong.nsw.gov.au/services/sustainability/floodplainmanagement/Pages/Duck-Creek.aspx>

- BMTWBM on behalf of Wollongong City Council, March 2018, Mullet Creek Flood Model Update 2018, <http://www.wollongong.nsw.gov.au/services/sustainability/floodplainmanagement/Pages/mullet.aspx#gref>
- Wollongong City Council, 2010, Mullet & Brooks Creeks Floodplain Risk Management Study and Plan <http://www.wollongong.nsw.gov.au/services/sustainability/floodplainmanagement/Pages/mullet.aspx#gref>
- Wollongong City Council, 2014, Report to Ordinary Meeting of Council, 23 June 2014, <http://www.wollongong.nsw.gov.au/council/meetings/BusinessPapers/West%20Dapto%20Urban%20Release%20Area%20Biodiversity%20Certification%20Conservation%20Strategy.pdf>
- Wollongong City Council, 2006, Wollongong Planning People Places, A strategic framework for open space, recreation facilities and Community facilities. <http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/Open%20Space%20Recreation%20Study%20Volume1.pdf>
- Wollongong City Council, 2014, Play Wollongong, Background research report. <http://www.wollongong.nsw.gov.au/facilities/sportrec/Documents/Play%20Wollongong%20Supporting%20Document%20-%20Background%20Research%20Report%20-%20Adopted.pdf>
- Wollongong City Council, 2015, Illawarra Escarpment Strategic Management Plan 2015. Wollongong. <http://www.wollongong.nsw.gov.au/council/meetings/BusinessPapers/Illawarra%20Escarpment%20Strategic%20Management%20Plan%202015.pdf>
- Wollongong City Council, 2009, Wollongong Development Control Plan 2009. <http://www.wollongong.nsw.gov.au/development/regulations/Pages/dcp.aspx>
- Wollongong City Council, October 2010, West Dapto Urban Release Area Integrated Transport Plan
- WCC et al ,2011a, Illawarra Biodiversity Strategy. Volume 1 Action Plan. Wollongong City Council, Shellharbour City Council and Kiama Municipal. NSW Environmental Trust, Sydney. <http://www.wollongong.nsw.gov.au/services/sustainability/sustainableliving/Documents/Illawarra%20Biodiversity%20Strategy%20Vol%201-%20%20Part%201.pdf>
- WCC et al, 2011b, Illawarra Biodiversity Strategy. Volume 2 Background Information. Wollongong City Council, Shellharbour City Council and Kiama Municipal. NSW Environmental Trust, Sydney. <http://www.wollongong.nsw.gov.au/services/sustainability/sustainableliving/Documents/Illawarra%20Biodiversity%20Strategy%20Vol%202.pdf>
- Wollongong City Council, October 2015, West Dapto Release Area Section 94 Contributions Plan (2015) [http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/West%20Dapto%20Section%2094%20Development%20Contributions%20Plan%20\(2015\)%20-%20In%20Force%20%2026%20October%202015.pdf](http://www.wollongong.nsw.gov.au/development/planningforthefuture/Documents/West%20Dapto%20Section%2094%20Development%20Contributions%20Plan%20(2015)%20-%20In%20Force%20%2026%20October%202015.pdf)
- Wollongong City Council, 2017, West Dapto Release Area Section 94 Contributions Plan (2017) [http://www.wollongong.nsw.gov.au/council/governance/Policies/West%20Dapto%20Section%2094%20Development%20Contributions%20Plan%20\(2017\)%20-%20In%20force%2018%20December%202017.pdf](http://www.wollongong.nsw.gov.au/council/governance/Policies/West%20Dapto%20Section%2094%20Development%20Contributions%20Plan%20(2017)%20-%20In%20force%2018%20December%202017.pdf)

Appendix 2: Pamphlet



West Dapto is the region's largest strategic urban release area. The West Dapto Vision guides the strategic direction of West Dapto and we are inviting you to have your say.

The West Dapto Vision includes seven planning principles. These outline what's involved to make West Dapto an integrated and connected community and a great place to live and work. They will help us guide how we plan for housing, leisure, community, facilities, roads, pathways and manage flooding.

The Vision also includes the West Dapto Structure Plan. The Structure Plan guides the future strategic direction of the urban release area. It takes into account things such as buildings, open spaces, land uses, activities and transport.

We are inviting you to HAVE YOUR SAY from 30 July to 10 September 2018.

To find out more or to have your say visit www.wollongong.nsw.gov.au or drop in and chat to one of Council's Urban Release team at:

**Dapto Ribbonwood Centre
Thursday 9 August 2018
Anytime between 6.30pm-8.30pm
Or call customer service on 4227 7111**

If you are not the property owner we'd appreciate if you could let them know about this opportunity.



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Appendix 3: FAQ's



West Dapto Vision 2018 Transport Principles

Council has prepared the West Dapto Vision document, which includes review and update of the West Dapto Structure Plan and we are inviting you to Have Your Say on the guiding principles that support the plan and will inform decisions around its implementation. The Transport Principles relate to all transport modes, roads, paths and road related infrastructure in the Release Area. We are inviting you to Have Your Say on the draft material.

Feedback must be received by 5pm Monday, 10 September, 2018

Why have Transport principles?

The Transport Principles outline considerations for roads, bridges, culverts, public transport and active transport. In combination, these principles ensure that land use and transport are planned in a way that results in efficient, sustainable and desirable transport outcomes for the community.

These principles will guide Council decisions making including ongoing updates of Council's Development Control Plan and the Local Environmental Plan as well as road designs.

Why are there changes to the previous Structure Plan?

Improved knowledge and refinement has influenced planning for the road network. An update of the 2008 Structure Plan is required to take into account these changes.

Research has included flood modelling and mapping, road design and traffic modelling and analysis. Advancements in these areas together with changes in policy setting have influenced network planning.

Modifications to the road network have also occurred through consideration of opportunities & constraints associated with new Neighbourhood Plans and Development Applications, as well as the consolidation of Town and Village Centres.

It is expected that there will be more refinements as the active release area development progresses and new data and knowledge become available. The Vision document will be periodically reviewed and updated to incorporate these developments.

What are the changes to the planned roads in West Dapto?

The key changes to the proposed road network for West Dapto compared to the 2008 Structure Plan are summarised below:

- Northcliffe Dr is now extended along existing Reddalls Rd and west to connect with West Dapto Rd just east of Shone Ave
- The North-South Link Road between Darkes Rd and Bong Bong Rd has been removed
- Fowlers Rd extension from the Princes Hwy to Fairwater Dr is now included
- The proposed new road between Cleveland Rd and Brooks Reach is now realigned to join Brooks Reach Rd
- Jersey Farm Rd link has been realigned to the north-east to join Shone Ave
- A connecting road between Yallah Rd and Avondale Rd is proposed
- Two new parallel roads to the north and south of Marshall Mt Rd are proposed
- Change in alignment of Yallah Rd (east) to provide a more direct connection to Princes Hwy (associated with Albion Park Rail Bypass project)

When will new roads be built?

The delivery of new roads and paths will be timed to support development and provide transport access for all modes including public and active transport (walking and cycling). In some circumstances, timing of road construction may be influenced by other factors such as flood access and bus servicing.

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Transport modelling will be used to help determine staged road requirements based on knowledge and timing of development. This has traditionally been based on a north-to-south development progression, which allows for the best use of funds and maximum utilisation of the new assets.

The West Dapto S94 Plan (2017) includes indicative timing for road infrastructure and is available on Council's website. The S94 Plan will be reviewed every two years as development progresses.

Will there be public transport?

Public Transport is a crucial component of a successful future transport network for West Dapto. It will help reduce car dependence, congestion and provide transport choice for the community.

Although planning and delivering public transport is a State Government responsibility, Council has developed a set of Public Transport Principles and is working with Transport for NSW to develop a bus strategy for West Dapto to meet the projected needs of the release area.

Council envisages the future bus system for West Dapto will be a series of high frequency 'feeder' routes that will connect with the Dapto Railway Station Interchange and Town Centre, where longer distance and express public transport services can be accessed to Wollongong, Shellharbour and other destinations.

Council is also aware of the importance of providing bus services early in the delivery of new residential areas and together with State Government will be proactively planning for this outcome.

Will walking and cycling be catered for?

Described as Active Transport, walking and cycling are an integral part of the transport system, providing a convenient option for trips to local facilities.

Specific principles have been developed for Active Transport to guide the planning and delivery of walking and cycling infrastructure.

All roads included in the Structure Plan and the majority of local roads created in subdivisions will include footpaths or shared paths. These will also connect to a network of off-road shared paths through riparian areas and open space. In combination, this will provide for a high level of walking and cycling throughout the release area.

Where can I get more information?

The Vision Document will be on exhibition from the 30 July till 10 September 2018. The document outlines the Vision, Principles and Structure Plan as well as some explanation around all of these. There are a number of FAQs available that explore different sections of the document.

All the material will be available on the Council web site for download and there will be hardcopies to view at the Dapto Library located in the Ribbonwood Centre.

There will be a community information session at the Dapto Ribbonwood Centre Thursday 9 August 2018. Drop in anytime between 6.30 and 8.30pm and chat to one of Council's Urban Release team.

How can I have my say?

The easiest way to provide your feedback on the draft Vision document 2018 is to complete a feedback form available on the Council website, or from Dapto library. For further questions please call 4227 7111 or email engagement@wollongong.nsw.gov.au

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West Dapto Vision 2018 Water Management Principles

Council has prepared the West Dapto Vision document, which includes review and update of the West Dapto Structure Plan and we are inviting you to Have Your Say. The Water Management Principles outline the requirements and tasks involved to achieve the vision for West Dapto from a combined flooding and stormwater perspective with consideration to the natural environment.

Feedback must be received by 5pm Monday, 10 September, 2018

What do water management principles involve?

The Principles have been developed through ongoing research into flooding and stormwater management with consideration to the natural environment. The result is nine principles with each discipline integrated together to achieve a common outcome. These principles will guide the creation and the update of Councils Development Control Plans and the Local Environmental Plan.

Why does flooding occur?

Flooding is a natural process that occurs periodically as a result of rainfall events in a catchment. The effects of flooding in Wollongong (and many other urban areas in New South Wales) are magnified by the proximity of urban development to natural and modified creeks and channels. The banks of creeks and channels are exceeded in flood events with flow being conveyed through properties, via streets or ponding.

What is a flood study?

A flood study is a comprehensive technical investigation of flood behaviour. It defines the nature of flood hazard across the floodplain by providing information on the extent, level and velocity of floodwaters, and on the distribution of flood flows. The flood study forms the basis for subsequent management studies and needs to take into account a full range of flood events up to and including extreme events including the probable maximum flood.

How do you determine flood areas?

Flooding experts employed by local and state authorities use computer models to simulate the flood mapping extents. Because of the critical importance of the flood results produced by these models, such modelling is

subject to close scrutiny before flood information is formally adopted by a council. The flood maps produced by the models are accepted only after consideration of flood levels and velocities for a range of possible floods, ground levels, historic flood events, previous flood studies and community consultation.

What is a 1% AEP flood?

An AEP or Annual Exceedance Probability is the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. A 1% AEP flood is a 1% chance, or a 1-in-100 chance, of a flood of a given size or larger occurring in any one year.

How was the 1% AEP flood extent layer created?

This layer was compiled from mapping produced by three different Council flood studies according to the relevant water catchment – the Mullet Creek Flood Model Update (2018), the Duck Creek Flood Study (2012) and the Macquarie Rivulet Flood Study (2017).

Can development be undertaken in the 1% AEP flood extents?

Generally, future development will not be permitted within the 1% AEP extents to ensure that flood risks can be appropriately managed.

Why is my property now shown as flood affected?

The 1% AEP flood extent layer has been updated based on more detailed modelling using updated ground data and land use information. The models have also expanded their coverage further west to better inform Council on current and future planned development areas.

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Why is there no flooding shown along some of the riparian corridors?

The flood extents have been filtered to remove shallow depth flooding of less than 150mm and also areas where the velocity depth product is less than 0.05.

In some areas, the flood extents do not align with the riparian corridors due to modifications to the natural land form through land use activities since initial mapping of the riparian corridors occurred.

Which roads on the structure plan will provide the flood access routes?

The primary roads that will provide flood reliable access to and from West Dapto include the proposed northern sub-arterial road from Northcliffe Drive to Shone Ave and Fowlers Road to Fairwater Drive. A plan identifying all flood access routes will be developed as part of the next steps in implementing the structure plan.

Where can I get more information?

The Vision Document will be on exhibition from the 30 July till 31 August 2018. The document outlines the Vision, Principles and Structure Plan as well as some explanation around all of these. There are a number of FAQs available that explore different sections of the document.

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West Dapto Vision 2018 Conservation Principles

Council has prepared the West Dapto Vision document, which includes review and update of the West Dapto Structure Plan and we are inviting you to Have Your Say. The Conservation Principles relate to areas for conservation in regard to biodiversity and/or heritage.

Feedback must be received by 5pm Monday, 10 September, 2018

What are conservation principles?

The Conservation Principles outline a range of considerations for what should be conserved and inform the landscape features that are to be kept. This group of principles includes biological conservation as well as heritage conservation.

The principles also apply to areas that require more study to understand their heritage and ecology values and to determine if these require conservation.

How do they relate to the Structure Plan?

The principles were developed alongside the Structure Plan to support and explain the decision process. They inform land uses, features and items included on the Structure Plan and support the development of more detailed information for future decisions.

What is different to what was shown on the last Structure Plan?

Since the last Structure Plan was made in 2008 there have been changes to biodiversity and heritage legislation and regulations as well as an increase in knowledge of the areas of biodiversity and heritage.

The changes to conservation reflect this increased knowledge and also reaffirm the connection between previous studies still considered relevant.

What information was used in selection of these areas?

Specific research has assisted in defining the conservation areas shown on the Structure Plan. These are the Riparian Corridor Management Study, the West Dapto Ecological Study and the West Dapto Urban Release Area Vegetation Mapping and Biodiversity Conservation Options (refer to the draft Vision document for more detail).

Do the conservation principles apply to areas not identified?

Although there are defined areas considered to be for conservation on the Structure Plan 2018, there may be other areas that present high values, such as heritage or biodiversity that will require conservation, retention or some form of planned management. The principles would guide consideration of those areas.

How do the principles relate to legislation?

The Conservation Principles follow the intent of environmental legislation, which is to protect and maintain a healthy, productive and resilient environment. The principles reiterate the importance legislation places on ecologically sustainable development.

The principles also reflect the intentions of legislation in recognising heritage and decisions around what should be considered.

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The Structure Plan goes a step further in that the identification of conservation areas is closely related to other work occurring at Council with support from the department of Planning and Environment and Office of Environment and Heritage relating to progression of a Biodiversity Certification Strategy for the release area.

Will I have opportunity to be involved in future projects?

The release area has a projected development timeframe of 50 years. The Vision document paves the way for other strategic, design and construction projects to follow and Council will be calling on the community to get involved and provide guidance and input.

There will be essential infrastructure investment and delivery and a range of planning reviews, designing, community facilitation, construction and other important projects. Each of these projects will entail their own range of engagement activities.

Where can I get more information?

The Vision Document will be on exhibition from the 30 July till 10 September 2018. The document outlines the Vision, Principles and Structure Plan as well as some explanation around all of these. There are a number of FAQs available that explore different sections of the document.

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How can I have my say?

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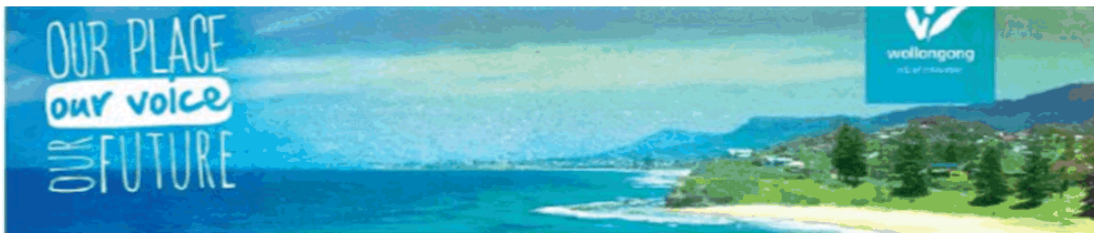
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West Dapto Vision 2018 Community facilities, open space and active network

Council has prepared the West Dapto Vision document, which includes review and update of the West Dapto Structure Plan and we are inviting you to Have Your Say. The principles outline the requirements and tasks involved to achieve the vision for West Dapto from a community facilities, open space and active network perspective.

Feedback must be received by 5pm, 10 September, 2018

What are Community facilities open space principles?

The principles establish a vision or desired outcome with considerations to be made while planning for uses in the Urban Release Area. There are a number of community and open space facilities that will be delivered over time in the release area. These facilities are important provisions that need to provide a level of service to the future communities of the release area. The principles for these will help frame and guide the outcomes required.

How do they relate to the Structure Plan?

The principles were developed alongside the Structure Plan to support and explain the decision processes that informed the land uses, features and items included on the Structure Plan. The larger level open space items are indicated on the structure plan.

However the details of the more local facilities, community facilities, the function of the open space and how they connect to each other through an active network of shared paths were not included on the structure plan. Although they are not mapped, these elements are discussed as principles and are an important part of the provisions for the release area in achieving the vision.

If they're not on the Structure Plan, Where will the community centres be?

The community centres principles include planning them in 'hubs' where they are co-located with other services that support their functions. These principles will drive outcomes that will likely see centres located in villages and town centres with other community services located, and close to or next to open space areas. Councils West

Dapto Section 94 Development Contributions Plan 2017 includes more details around facilities. Implementation of the West Dapto Vision will include revision of the Section 94 Plan to reflect the Structure Plan 2018 and apply in making a plan for facilities and infrastructure.

What information informed the need for facilities and the selection of the locations shown?

There are some specific pieces of research and Council staff knowledge that have assisted in understanding the needs for our future population. Work undertaken by Elton consulting for Council in 2007 looked at the social and recreational needs of the whole release area and this work is still relevant combined with Council staff existing knowledge. The larger open space locations were established on the structure plan as guided by New South Wales Government, Department of Planning, Recreation and Open Space Planning Guidelines for Local Government, 2010.

Ongoing efforts will continue working towards understanding the needs of the future communities and the types of community facilities and services needed in context with the exiting provisions, projected urban development forms, population characteristics and so on. This work will be ongoing as part of the infrastructure planning and delivery.

How will the open spaces, town centres and community facilities be connected?

They will all be connected with shared paths for cycle and pedestrian access in an active transport network between

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open space and community facilities, town centres and residential areas.

The Structure Plan identifies key collector roads for the transport network that will be utilised by the public transport system as well as private cars. The collector roads will also have shared paths on either side providing for separated and safe active transport (cycling and pedestrians). The transport principles provide guidance around road, public and active transport considerations for the release area.

Will this impact the existing community facilities?

Yes and No, the existing community facility at Wongawilli (Wongawilli Hall) is a small and aging existing facility. This has been identified for upgrade to cater for the existing and new population moving in. In terms of the existing facilities of Dapto with the Ribbonwood Centre, there are no changes proposed to the uses of the facility in relation to the release area and its new population.

How will the open space, active network and community facilities be financed?

Open space, community facilities and the road network are all items funded through development contributions and Council rates. There is a current West Dapto Section 94 Development Contributions

Plan 2017. Following adoption of the Structure Plan, Council will embark on developing a new development contributions plan to reflect the directions proposed through the Structure Plan and principles.

Where can I get more information?

The Vision Document will be on exhibition from the 30 July till 10 September 2018. There are a number of FAQs available that explore different sections of the document. All the material will be available for download and there will be hardcopies to view at Wollongong Central Library, Dapto Library and Ribbonwood centre.

There will be a community information session at the Dapto Ribbonwood Centre Thursday 9 August 2018. Drop in anytime between 6.30 and 8.30pm and chat to one of Council's Urban Release team.

How can I have my say?

The easiest way to provide your feedback on the draft West Dapto Vision 2018 is to complete a feedback form available on this website, or from Council libraries. For further questions please call 4227 7111 or email engagement@wollongong.nsw.gov.au

Will I have further opportunity to be involved with local planning and future projects?

YES! The Vision document paves the way for other strategic, design and construction projects to follow. The release area has a projected development timeframe of 50 years for essential infrastructure investment and delivery. With that will come with a range of planning reviews, such as the Development Contributions Plan. Each project will have a range of engagement activities depending on the nature of the project itself. Council will be calling on the community to get involved and provide guidance and input to the Release Areas development projects when they occur.

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West Dapto Vision 2018 West Dapto Town Centre Principles

Council has prepared the West Dapto Vision document, which includes a review and update of the West Dapto Structure Plan. We are inviting you to Have Your Say on the Vision document. The document includes Town Centre Planning Principles that relate to the sites indicated on the Structure Plan as either a Town Centre or a Village Centre. We are inviting you to Have Your Say on the draft material.

Feedback must be received by 5pm Monday, 10 September, 2018

How do the principles work?

The town centre principles outline a range of considerations for how centres are to develop and how they will contribute to the built form, the social infrastructure and the employment landscape of the release area. The aim of the town centre principles is to help promote vibrant, inclusive, unique and accessible centres for the existing and future communities.

What centres are on the Structure Plan 2018?

There are three town centres on the Structure Plan which are already zoned:

- Darkes Town Centre in Stage 1/2
- Bong Bong Town Centre in Stage 3, and
- Marshall Mount Town Centre in Stage 5.

These centres will provide the greatest commercial outcomes for the release area and this has not changed.

There are five village centres on the Structure Plan.

- Wongawilli Village
- Jersey Farm Village
- Fowlers Village
- Huntley Village
- Avondale Village

Wongawilli, Village is the most progressed through planning and is the northern most village in the release area. Jersey Farm Village (name may change) may be the subject of a planning proposal and Council will work with the proponents to identify the most appropriate site

and scale. The remaining villages are placed as indicative on the Structure Plan and will require more investigation, planning and design before an exact sites are confirmed. The town centre principles will support further planning for these village centres.

Are the proposed town centres different to what was shown on the last Structure Plan?

There are no changes to town centres but there has been a reduction from eight to five villages proposed for the release area. Changes to the number of centres reflect an increased understanding of the roles for these centres and how they will relate to each other as a network and support Dapto as a Major Urban Centre.

There has been a number of changes to town centre plans reflecting trends occurring to the economic settings, broader shifts to service economies, technology and connectivity which all influence the role and functional requirements of town centres.

What informed the revision of centre locations?

There are some specific pieces of research that have assisted in refining town centres shown on the Structure Plan. These included the Dapto Town Centre study (Wollongong City Council, 2017) and informing economic study (SGS Economics, 2017), Town Centre Review study for West Dapto (Urbacity, 2015) and also new understanding of road network requirements through detailed traffic modelling. This work was used in combination to better understand movement, impacts of

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commercial and business development along with delivering residential outcomes and the spatial differences of the release area to optimise centre planning.

Will this change Dapto?

The new town centres are in addition to Dapto, reinforcing its role as the Major Urban Centre. As the population of the release area grows, the opportunity is for Dapto to attract business and industry with its central location and transport links to other major centres.

Council will be working with all town centre developments as they roll out to ensure any impacts to Dapto are minimised.

Is business outside the town centres possible?

Although there are defined areas considered to be most appropriate for customer based businesses, which is in the town and village centres, there will also be permissibility for a limited range of businesses to operate in the R2 Low Density residential zone, subject to consent. In addition there is substantial employment lands business opportunity at Kembla Grange.

Where can I get more information?

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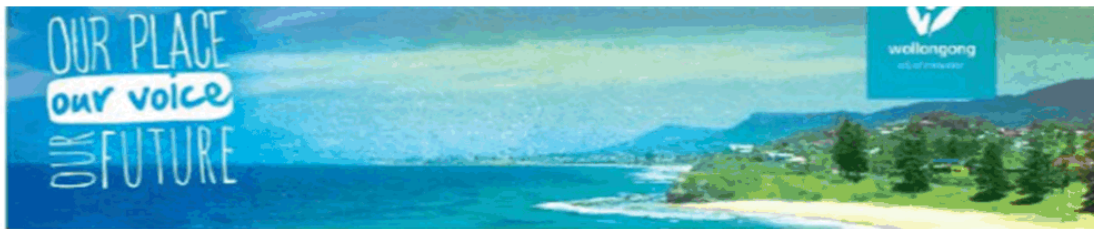
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West Dapto Structure Plan 2018 Housing Principles

Council has reviewed and updated the West Dapto Structure Plan and we are inviting you to Have Your Say on the plan and the guiding principles that support the plan and inform decisions around its implementation. The principles for Housing will guide planning decisions and create an opportunity to establish sustainable, appealing and functional residential living. We are inviting you to Have Your Say on the draft material.

Feedback must be received by 5pm Monday, 10 September, 2018

How will Housing Principles guide development?

The establishment of the Housing Principles for the West Dapto Urban Release Area provides for ongoing strategic planning decisions. As a new release area, there is an opportunity to establish sustainable, appealing and functional residential living.

Considered in conjunction with the other planning principles, they all contribute to achieving the vision for the West Dapto Urban Release Area and ultimately sustainable housing outcomes.

The principles should also be used to guide site-by-site considerations. The Housing Principles should be read in conjunction with Council's LGA-wide Housing Policy, which is updated from time to time to ensure we are addressing the challenges of a changing housing environment.

Principle 1

Encourage housing diversity

Diversity can be delivered through different products at different stages of planning by promoting and providing a range of density and lot size and shapes to offer a range of choice to better meet changing community needs.

Mixture of density low to high, single dwellings, dual occupancy, town houses and apartments in appropriate locations should all be considered at neighbourhood

planning and subdivision design stages.

Promote increased densities and innovative design types close to town and village centres and transport infrastructure where possible.

Principle 2

Promote housing affordability

Residential neighbourhoods cater for a variety of demographic and socio-economic characteristics. Promoting housing mixture is one tool that provides opportunity for more affordable housing options and reduces housing stress.

Principle 3

Establish sustainable, energy efficient, appealing and functional residential living

Target an increased use and uptake of renewable energy through housing and neighbourhood design. Seek to promote best practice design excellence in housing provision and neighbourhood planning.

Principle 4

Creating local amenity and a sense of place

This principle is about designing safe, healthy and active neighbourhoods with interactive interfaces between residences, the streets and surrounds. It is about ensuring there is connection between housing and the streets, parks and activity areas they adjoin and interface other uses.

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Encouraging and supporting housing design that responds to place. Creating site responsive built form and lot layouts that consider existing features and landscape context, natural land form and surrounding land uses.

Manage housing growth to protect and promote the conservation values that contribute to concepts of 'place' in West Dapto.

Principle 5

Housing transition to the Illawarra Escarpment

Reduce housing density on the fringe of the urban release area to provide delineation to the housed urban areas and a buffer to the Escarpment and important environmental features.

Will I have opportunity to be involved future projects?

The release area has a projected development timeframe of 50 years. The Vision document paves the way for other strategic, design and construction projects to follow and Council will be calling on the community to get involved and provide guidance and input.

There will be essential infrastructure investment and delivery and a range of planning reviews, designing, community facilitation, construction and other important projects. Each of these projects will entail their own range of engagement activities.

Where can I get more information?

The Vision Document will be on exhibition from the 30

July till 10 September 2018. The document outlines the Vision, Principles and Structure Plan as well as some explanation around all of these. There are a number of FAQs available that explore different sections of the document.

All the material will be available on the Council web site for download and there will be hardcopies to view at The Dapto Library at the Ribbonwood Centre.

There will be a community information session at the Dapto Ribbonwood Centre Thursday 9 August 2018. Drop in anytime between 6.30 and 8.30pm and chat to one of Council's Urban Release team.

How can I have my say?

The easiest way to provide your feedback on the draft Structure Plan and Principles 2018 is to complete a feedback form available on the Council website, or from Dapto library. For further questions please call 4227 7111 or email engagement@wollongong.nsw.gov.au

*We want to know what you think
of West Dapto Structure Plan
and Principles 2018.*

Now's the time to have your say...

You can have your say by:

Visiting www.wollongong.nsw.gov.au/xxx

email engagement@wollongong.nsw.gov.au

or fax to 02 4227 7580

For more information please phone 4227 7111

www.wollongong.nsw.gov.au



Revised Northern Link Road West Dapto Structure Plan 2018

Council has reviewed the plan which guides the strategic direction of the urban release area in West Dapto. A key change is the route the northern link road takes. It is proposed a road will connect Northcliffe Drive to West Dapto Road, between Reddalls Rd and just east of Shone Ave. The proposed road is indicated by the yellow line in the image below.



Background

A structure plan guides the future strategic direction of an urban release area. It takes into account the issues affecting an area, including buildings, open spaces, land uses, activities and transport.

Under the current West Dapto Structure Plan, West Dapto Road was planned to be the major flood reliable road to carry traffic in and out the northern part of the release area. The road was to connect with Reddalls Road and then join with Northcliffe Drive via a new overpass over the Railway Line and Princes Highway.

The Structure Plan has since been reviewed. The road network in the revised Plan keeps the Northcliffe Drive extension east of Reddalls Road, and then extends westward to connect to West Dapto Rd just east of Shone Avenue.

The new road link would be designed to be flood reliable in a 1 in 100 year flood event. West Dapto Road would still be upgraded to a standard urban road, however, would not be flood reliable.

Why is a new road proposed?

We have undertaken a range of detailed investigations to update the draft Structure Plan. This has included design analysis and flood and traffic modelling. The new information has helped us increase our understanding of the area and determine a better route for the link road.

Upgrades to make West Dapto Road flood reliable are extensive. We estimate the new proposed alignment will save approximately \$70M of the community's money.

The new road link also has a number of other advantages including improved accessibility and public transport opportunities.

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How will this affect me?

The approved lots near the new proposed road will not change; however some minor changes to the West Dapto Road/Sheaffes Road (south) Neighbourhood Plan will be required as the proposed road runs through a small western portion.

Some land will need to be purchased for the road corridor. We have started conversations with these land owners.

When will the new road be built?

Based on population needs, the proposed road will be needed in 15 to 20 years. Some sections may be staged earlier, however, anticipated timing of all roads in the Structure Plan will be defined during implementation of the Section 94 Plan review (now called Section 7.11).

Where can I get more information?

The West Dapto Vision document outlines and explains the Vision, Principles and Structure Plan. There are a number of FAQs available that explore different sections of the document.

All the material will be available on the Council web site for download and there will be hardcopies to view

at the Dapto Library located in the Ribbonwood Centre

How can I have my say?

The West Dapto Vision, draft Structure Plan and Principles 2018 will be on exhibition from 30 July – 1 September 2018. You are invited to provide your feedback on the draft Structure Plan and Principles 2018 by completing a feedback form available on the Council website, or from Dapto library.

For further questions please call 4227 7111 or email engagement@wollongong.nsw.gov.au

*We want to know what you think
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or fax to 02 4227 7580

For more information please phone 4227 7111

www.wollongong.nsw.gov.au

Appendix 4: Feedback Form



**West Dapto Vision
Community Feedback Form**

The West Dapto Vision guides the strategic direction of West Dapto, the region's largest strategic urban release area. Wollongong City Council is inviting you to Have Your Say on the Vision, Principles and Structure Plan.

All feedback must be received by 10 September 2018

Do you feel The West Dapto Vision document clearly sets out the future direction for West Dapto?

Do you agree with the West Dapto Vision statement?

What are your thoughts on the West Dapto Principles?

Please return completed form to:
Wollongong City Council Community Engagement Unit
Locked Bag 8821
Wollongong NSW 2500
Telephone: 02 4427 7111
Facsimile: 02 4227 7580
Email: engagement@wollongong.nsw.gov.au

More overleaf....

www.wollongong.nsw.gov.au



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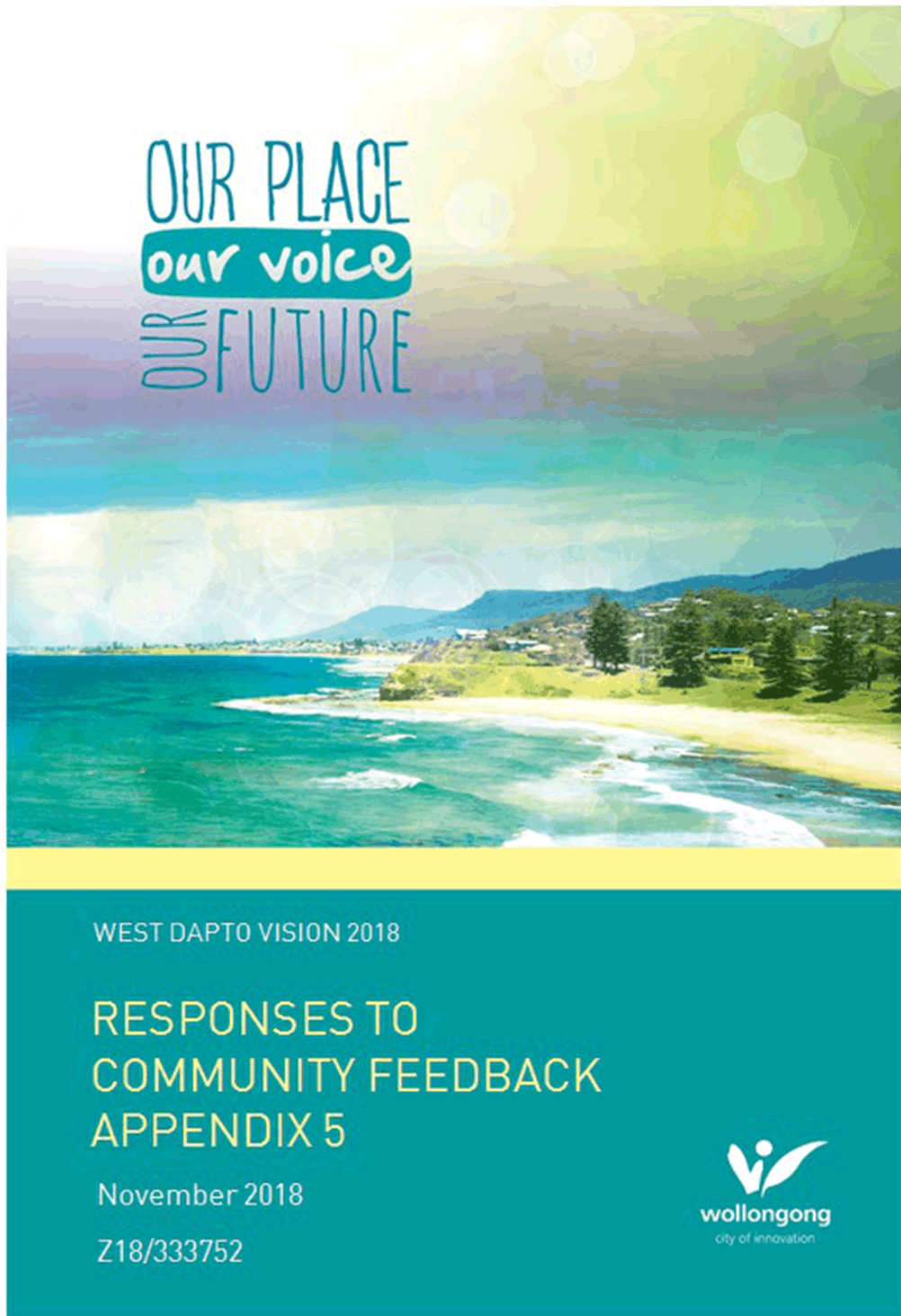
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Appendix 5: Responses to community feedback





Responses to community feedback		
Stakeholder	Main comments	Council Response
NSW Office of Environment and Heritage (OEH)	<p>Biodiversity and Bio certification</p> <ul style="list-style-type: none"> - Proposed amendment to conservation area extents in Stage 5 Yallah Marshall Mount (YMM) and proposed orbital road. - NSW Government commitment to pursuing biodiversity certification for the West Dapto Urban Release Area in 2018. 	<p>The conservation areas on the draft Structure Plan for Stage 5 represent the recent rezoning that occurred on the 8/6/18. The E2 and E3 areas zoned have been reflected in the green conservation area. Council look forward to collaborating with OEH to secure Bio certification that reflects the Vision and Structure for the release area.</p>
	<p>Aboriginal Cultural Heritage</p> <ul style="list-style-type: none"> - Support for heritage principles 1 and 2. - Important to back up with resources and funding. - Early detailed assessments promoted. - Opportunity to align open space and recreation with aboriginal heritage conservation. 	<p>Noted.</p> <p>This will be explored more with implementation.</p> <p>Agree where possible.</p>
	<p>Flooding and Water Quality</p> <ul style="list-style-type: none"> - Recommend changes to principle 2.4.6 to better link the lake Illawarra Coastal Management Plan and include stormwater quality and quantity to insure no impacts to Lake Illawarra with pollution targets set through the Wollongong Development Control Plan (DCP). 	<p>Noted. DCP will be reviewed during implementation phase to best activate a pollution target as established through the Lake Illawarra Coastal Management Program.</p>
Urban	Vital the vision supports growth and increased demand for small lots	Noted. The housing principles promote housing mix and increased

<p>Development Institute of Australia</p>	<p>and denser housing.</p> <p>Important that the boundaries in structure plan, Local Environment Plan (LEP) and DCP are consistent. UDJA NSW suggests that Calderwood should not be included in the Structure Plan.</p> <p>Housing development standards for small lots.</p> <p>Town and village centres</p> <ul style="list-style-type: none"> - Relocation of MM town centre - Flexible zoning in future local centres may be necessary. - Allow for flexibility for future village centres not identified and very small neighbourhood centres outside of identified centres such as corner stores etc 	<p>housing density around town centres.</p> <p>Noted. The boundary of the Structure Plan is relevant to the greenfield urban development in the Wollongong Local Government Area (LGA) and Principles for West Dapto. The structure plan includes the Wollongong LGA component of the Calderwood development area. The structure plan reflects the Calderwood Concept Plan approval and provisions of State Environmental Planning Policy (SEPP) (State Significant Precincts) 2005.</p> <p>These additional development standards for small lot <u>torrens</u> title housing (terrace homes) and rear lane developments would be an implementation task following the adoption of the Vision Document.</p> <p>The location shown on the Structure Plan reflects in current Wollongong LEP zoning.</p> <p>Noted. Implementation options will be explored to consider flexibility and promote excellence in design of centres.</p> <p>Noted. This sort of outcome for small shops in residential neighbourhoods is already permissible in R2 zoned land. Council would consider the merit of these developments as they are proposed.</p>
<p>Food Fairness Illawarra</p>	<p>Support for elements of the Vision and Principles.</p> <p>Suggest additional controls for neighbourhood planning in the DCP.</p> <p>Edible landscapes concept to be included in the DCP and promoted.</p> <p>Subdivisions to include community Gardens and Agricultural plots.</p>	<p>Noted.</p> <p>This is something that would be considered as part of implementing the Vision Document.</p> <p>Noted and would be considered when implementing the Vision Document.</p> <p>There is opportunity to promote this concept and include in the DCP through subdivision and through review of Chapter D16: West Dapto Release Area of the DCP.</p>

	<p>Restrict fast food signage and visibility</p> <p>Town centres to have colour scheme controls to limit identification with fast food.</p>	<p>These are suggestions to be considered in the more detailed review of the DCP.</p> <p>This element is considered to be represented by the Centres Principles, Principle 3 – Diversity and Identity. How this principle is implemented through designs needs to create sense of place and belonging, whilst implementing the vision.</p>
<p>National Trust of Australia (NSW) Illawarra Shoalhaven Regional Branch</p>	<p>Does not support loss of rural lands and prime agricultural and dairying lands <u>continues</u> to be under threat.</p> <p>Support water management principles and bio certification strategy</p> <p>Protected areas should be determined by needs of species and communities and thresholds for their viability. This may be less than 4ha. Connectivity of these areas through riparian and ridge tops is essential to maintaining resilience of threatened species.</p> <p>Heritage conservation. Conservation of dairying lands, connection between them, and need to conserve the cultural landscape of dairy farming through neighbourhood planning and development applications to ensure preservation of archaeology and historical connections.</p> <p>Landscape heritage and visual connections protected with development controls such as:</p> <ul style="list-style-type: none"> - visual impacts assessment - road and subdivision layout maintaining view corridors and vistas - building height restrictions - maximum site coverage and lot sizes <p>Recommends extended village curtilage around historic precincts to</p>	<p>The 1980s identified the role of West Dapto as an urban release area and the extent of the urban release boundary remains unchanged by the draft Vision 2018.</p> <p>Noted.</p> <p>We recognise the value of ridges and hilltops to conservation, both heritage and biodiversity. High land between stage 4 and 5 of the release area are identified as Endangered Ecological Community (EEC) and have been presented in the structure plan as conservation land given the need to protect the endangered community as well as noting this exists along hilltops also.</p> <p>Noted. Council considers representing and preserving the cultural heritage of the urban release area to be important. It is a requirement in the neighbourhood planning and development application process to consider Aboriginal cultural and other historical heritage of the area.</p> <p>These are details that would be considered during implementation of the Vision and principles.</p> <p>Noted. Opportunity to deliver urban outcomes that also maintain</p>

	<p>maintain village feel.</p> <p>Housing principles transitional areas supported to delineate between natural areas and urban.</p> <p>Structure Plan 2018.</p> <ul style="list-style-type: none"> - Reduced conservation area due to rezoning of YMM - Support inclusion of heritage elements to the structure 	<p>"village feel" can be promoted through the Town Centres principles principle 3 – diversity and identity. It is anticipated that during implementation changes to the DCP and specifically Chapter D16, town centres will be designed to capture the heritage values and other elements important to the site.</p> <p>Noted.</p> <p>YMM June 2018 rezoning has been represented in the Structure Plan 2018. The plan did <u>not</u> <u>revisit</u> this recent rezoning process.</p> <p>Noted.</p>
Community member	<p>Vision doc waste of time in context of NSW Government decisions.</p> <p>Vision doc not in line with NSW Government actions</p> <p>Gaol and risk to community investment</p>	<p>Noted.</p> <p>Council considers it important to have a vision and principles supported by the community, residents and future residents to guide the desired future development patterns.</p> <p>Council opposed Gaol. State is no longer investigating.</p>
Community member	<p>Good governing principles to result in a well-structured community. Supports the structure</p> <p>Opportunity to link prominent environmental features of the area, Lake Illawarra to Escarpment with a walk/bike trail</p> <p>Linking the new estates to existing areas of Horsley and Dapto</p> <p>Link between Darkes Rd and Horsley west of the Rail (North South Link Rd) would be beneficial even if not flood proof.</p> <p>Opportunities for access and transport if the Maldon-Dombarton Rail Link is ever completed. Structure plan may benefit from highlighting this and planning for it.</p>	<p>Noted.</p> <p>Valuable comments to be considered in implementation actions such as open space planning, and transport network optimisation.</p> <p>Agree. Integrated & connected <u>communities</u> part of the Vision.</p> <p>Active transport opportunities would be on ongoing implementation consideration.</p> <p>Structure Plan revised to highlight opportunity for South West Illawarra Rail Link (Maldon-Dombarton). Council continues to encourage planning of the link by the State Government.</p>
Transport For	Road Network	Road Network

NSW	<p>Public Transport</p> <p>Active Transport</p> <p>Railway Crossings</p>	<p>A road hierarchy has previously been prepared for West Dapto (refer DCP) and to inform the Section 94 (now Section 7.11) Contributions Plan (S94) costings. This can be further explored/refined as part of the DCP & S94 updates during implementation of the Vision, with consideration given to the Movement & Place Framework.</p> <p>Public Transport Council agrees that early and regular dialogue is important between all public transport stakeholders including the State, Council and operators.</p> <p>Active Transport The West Dapto Vision is a high level document and as such detailed plans of pedestrian and cycle routes are not included. Whilst we don't have a specific West Dapto Bike Plan or PAMP (pedestrian access) study, we do have detailed routes for riparian and road shared paths in the existing DCP, S94 plan. Furthermore, our Wollongong Bike Plan 2014-18 shows how the West Dapto network connects to the broader regional routes.</p> <p>Railway Crossings Council has developed a railway crossings strategy for the Dapto & West Dapto area in consultation with Sydney Trains and Roads and Maritime Services, which essentially aligns with State Government Policy of reducing risk through removing level crossings where possible. Where this is not possible (for example due to physical &/or cost constraints), then other safety measures will be considered. The future strategy for treatment of crossings on the South Coast Line would ultimately result in a significant reduction in the proportion of road vehicle movements across level crossings when compared to the current situation.</p>
Community Organisation	<p>Supports overall vision/principles</p> <p>Wants additional items incorporated: - Minimal changes to escarpment vistas, with land verging on</p>	<p>Noted.</p> <p>Agree – no change to Structure Plan required as addressed through</p>

	<p>conservation areas to mirror already developed suburbs, in line with Housing Principle 5 & land use structure of conservation areas with equal importance in bio-certification areas</p> <ul style="list-style-type: none"> - Housing Principle 5 must ensure transition: large lots 5-10acres at fringe, then 5 dwellings/hectare, then 10dwellings/hectare, then R2 zoning with min 450m2 blocks - Wollongong Coal land adjacent to conservation areas should be transitional lands as per rest of URA (in line with Housing Principle 5) and also classified as Landscape Management Zone A (DCP) 	<p>principles. But transitional lands mapped on the Structure Plan could be modified in the future as part of further work on conservation strategy (refer P18 of the draft Vision).</p> <p>This is a Vision document implementation consideration. Where urban zoning has already occurred (stages 1-2 & 5) transition opportunities would be considered during Neighbourhood Planning and Development Application (DA) processes. Where land is yet to be rezoned for urban development transition opportunities could be considered during the rezoning process, Neighbourhood Planning and DA processes.</p> <p>See point 1 above. Further work to be done re conservation priority areas, possible to amend transitional lands in future.</p>
<p>National Parks Association</p>	<p>Support the principles and the West Dapto Vision statement</p> <p>It is the ongoing implementation (or lack of it) that is what many people would now like to comment on.</p> <p>Concerned at proposals that involve downgrading environmental zonings but acknowledge that the most important remnants of Illawarra Lowland Grassy Woodland are still zoned.</p> <p>Applaud the Water Management principles but continue to be concerned at the impacts of the West Dapto plan on the health of Lake Illawarra. 'Protecting people and property from flooding' may be unrealistic as West Dapto is by nature a floodplain.</p> <p>It is hard to take the housing principles seriously when we look at what has been built. It hardly conforms <u>with</u> the principles.</p>	<p>Noted</p> <p>There will be continued opportunity to comment on many implementation processes, including through exhibition of proposed LEP amendments, DCP amendments, S94 plan reviews for example.</p> <p>Changes to environmental zonings would be considered as part of broader biodiversity conservation strategy for the Urban Release Area, which is yet to be developed.</p> <p>Principle 6 intended improved outcome for lake health.</p> <p>Improved outcomes expected through updates to DCP through implementation of the vision.</p>

	<p>We do agree that the planning has introduced a graded system to create a 'housing transition to the Illawarra Escarpment'. Concerned at the lack of access to the escarpment from West Dapto for bushwalking.</p> <p>Huntley mine site has high conservation values and should be part of the Illawarra Escarpment State Conservation Area.</p> <p>Concerned at the cumulative impacts of many approvals for scattered developments without adequate consideration of the overall vision and its requirements.</p> <p>The structure plan is vague on the need for housing diversity.</p> <p>It also outlines some laudable principles of public transport provision but we are not aware of them being put into practice.</p> <p>We note that the structure plan has little to say about employment lands. We note that the major use of these lands so far is to park new cars and consider this to be a waste of valuable land. Nor are many jobs being generated.</p> <p>We would like to see Council instigate a way of measuring the impacts of each approval on the overall vision. When it's becoming clear that for example a school will be necessary, or higher density</p>	<p>Can be considered through implementation, e.g. ensuring reasonable public access to escarpment etc. in consultation with National Parks & Wildlife Service (NPWS).</p> <p>Support ongoing consideration, this is a State responsibility.</p> <p>See response above re better outcomes through improved implementation policy, guided by the high-level vision & structure plan.</p> <p>Housing Principle 1 – Encourage housing diversity, will guide future planning decision where detail would be outlined. For example higher density expected where it is viable, i.e. around town centres, but town centres not likely to develop until sufficient surrounding residential catchment.</p> <p>The State Government has primary responsibility for public transport policy and provision. However it is important to also acknowledge the 'critical mass' of patronage catchment required for viable service provision. Public Transport is therefore expected to improve over time with development of overarching public transport strategy. Housing Principle 1.</p> <p>Agreed. The Vision document is being improved with inclusion of employment principles and clear identification of employment lands on the Structure Plan. Existing landuse zoning at West Dapto allows for more employment generating land uses in the future.</p> <p>This analysis is essentially done as part of assessment of planning proposals, Neighbourhood Plans and Development Applications.</p>
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	housing, then Council should consult the relevant authorities and stakeholders to ensure that necessary <u>action</u> is taken before more proposals are considered.	With the new vision document we are in a better position to do this effectively. Even with this in place it is sometimes out of Councils hands. However, we will continue to work with relevant agencies such as the Department of Education in planning for new facilities.
Community member	It sets out a desirable direction but the work to date does not inspire confidence that it will be adhered to. They are excellent but what has been done so far does not illustrate adherence to them. Not significantly different to its predecessor. It's a pity Council didn't invite people to comment on the implementation of the existing vision.	The purpose of the new vision/structure plan is to improve outcomes by providing a high level guide so development is not occurring in a vacuum. Council will invite comment on implementation documents in due course when they are being prepared.
Business	Comments in response to proposed North Corridor Link Lack of design consideration for adjoining development & constraints Doesn't align with principles Effects on existing Neighbourhood Planning Alternate alignments available	WCC did concept design (footprint) that looked at general alignment constraints and development in the area. The only compromise area where it affects planned development is the western corner of the one site. However, the benefits of the overall new road are considered to outweigh the impacts in having to modify development planning in this area. The link accords with the principles – it delivers improved connectivity (especially north-south) and creates opportunity for savings to be transferred to developers through reduced s94 levies. It will affect a minor area of one site which has an approved Neighbourhood Plan. The road has been located and refined following exhibition to address comments and minimise impacts. If the corridor was located further east or west it would have detrimental impacts. In terms of process, WCC will continue to work with stakeholders on the planning of their sites in the context of the improved strategic transport network. There has been extensive analysis of alternate options which were presented to Council. This work shows the extensive cost savings of the link compared to West Dapto Road only. It is important to note that the Northern Transport corridor still includes the upgrade of

		West Dapto Road to urban standard. Also the original West Dapto Rd alignment is fraught with engineering complexities (e.g. bridge/intersection design at <u>Sheaffes/Darkes</u>) and likely greater flooding impacts.
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<p>Business</p>	<p>Supportive of the amendment to relocate the Fowlers Village Centre to the east.</p> <p>Not supportive of Huntley Village relocation to west due to potential to impinge on viability of Bong Bong Rd Town Centre. Instead relocate Huntley Village Centre to the east opposite proposed Hospital so that it can provide services and retail to support hospital and providing commercial space for related medical consulting services.</p> <p>Supportive of removal of Cleveland Village Centre from the Structure Plan.</p> <p>Not supportive of any revision to town centres hierarchy as shown on the structure plan. Clarify the hierarchy of town centres in draft structure plan mapping to visually identify Darkes Rd Town Centre and Marshall Mount Town Centre reduced in size comparative to Bong Bong Town Centre.</p> <p>Supportive of Marshal Mount Town Centre being limited to 3500sqm given the extension of Yallah Rd to the Marshal Mount Town Centre.</p>	<p>Noted.</p> <p>Agreed.</p> <p>Noted.</p> <p>Noted – symbols only reflect indicative town and village centre locations – scale of each town centre is subject to zoning which has already occurred.</p> <p>Noted - scale of each town centre is subject to zoning. Marshall Mount town centre has already been zoned for a centre outcome.</p>
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<p>Business</p>	<p>Request that Council amend the boundary of the West Dapto Structure Plan to exclude the Calderwood Urban Development Project (CUDP).</p> <p>Supportive of strategic direction to <i>"promote increased densities and innovative design types close to town and village centres and transport infrastructure where possible"</i>.</p> <p>Contributions towards infrastructure required to service the increased densities close to town/village centres need to be balanced to ensure affordability and access to housing is maintained.</p> <p>It appears that Marshall Mount has now been elevated to a Town Centre which is in close proximity and could conflict with Calderwood town and village centres.</p> <p>Request that council provide copies of two studies to better understand proposed changes to town/village centres.</p> <ul style="list-style-type: none"> - West Dapto-Further Review of Release Area Centres and Controls (<u>Urbacity</u> June 2014); - Dapto Town Centre Economic Study (SGS Economics 2017). 	<p>No amendment to Structure Plan needed to remove Calderwood as this is a Council policy statement only. The structure plan reflects the <u>landuse</u> provided by the Concept approval for Calderwood.</p> <p>Noted.</p> <p>Noted.</p> <p>Marshall Mount town centre status remains unchanged. Urban zoning of the centre occurred in June 2018.</p> <p>Agreed.</p>
<p>Sydney Water</p>	<p>It is recommended that council continues to work in collaboration with all infrastructure/service agencies from initiation through to the strategic planning stage of new developments to effectively plan critical infrastructure, and allow sufficient time for its planning, procurement and delivery.</p> <p>Transport - Council is encouraged to identify all road and corridor layouts as early as possible and share GIS data with agencies and utilities to enable infrastructure co-location and minimise footprint.</p> <p>Biodiversity - Encourage council to consider the potential clearing within corridors identified in 2012 for indicative water and wastewater</p>	<p>Agreed.</p> <p>Noted.</p>

<p>infrastructure required to service development.</p>	<p>Noted.</p>
<p>Quality Infrastructure - Integrating delivery of infrastructure (e.g. services in roadways as they are upgraded) would be worth investigating with agencies. This would limit disruption to the community and road or footpath rehabilitation after upgrades.</p>	<p>Noted.</p>
<p>Active Transport - Council is encouraged to engage with agencies to identify opportunities for green/cycle - links along/within utility corridors.</p>	<p>Noted.</p>
<p>Transport Principle 3 - Design roads to compliment the environment. Are there possibilities for informal drainage? That would be a critical aspect if implementing water sensitive urban design (WSUD). Just 3 percent connected impervious area in a catchment causes ecological damage.</p>	<p>Noted - WSUD proposed as part of road cross sections.</p>
<p>Transport Principle 5 - Working with State Government to provide and improve public transport services Please consider co-planning/co-delivering major infrastructure, e.g. (but not limited to) trunk infrastructure for water, wastewater, and stormwater etc.</p>	<p>Agreed.</p>
<p>Water Management Principles - Recommend council closely considers the increased nutrient loads from the treatment of the wastewater from increased development in terms of establishing sustainable development around and within floodplain. The vision only discusses flood and stormwater management. All aspects of water including drinking water, waste water and recycled water need to be considered.</p>	<p>Agreed - new principle to be considered or incorporated into existing principles relating to all aspects of water and not just stormwater.</p>
<p>Water Management (WM) Principles - We believe land use planning</p>	<p>Agreed - new principle to be considered or incorporated into existing</p>

<p>and the role of it can be better used to manage water runoff. There is no vision for creating liveability or amenity outcomes linked to water/water use.</p> <p>WM Principle 5 - Protect people and properties from flooding, including through appropriate land use zoning.</p> <p>WM Principle 6 – Protect water quality - Additional actions that council may consider as part of protecting water quality may include development controls that limit impermeable space and the increase in runoff due to developments.</p> <p>WM Principle 9 – Preserve/Enhance the Environment - Encourage Council to engage with agencies to identify, co-develop and create integrated water cycle management solutions that deliver liveable outcomes e.g. irrigation of public open space and to manage wastewater from new growth and developments.</p> <p>There are connections between the Open Space and Recreation principles and the water management principle that need to be leveraged/considered.</p> <p>Conservation Principle 2 – Connectivity of habitat areas (Page 18): Council is encouraged to develop corridors based on /around already identified water and waste water infrastructure corridors. And to share GIS data of corridors with agencies to feed infrastructure servicing plans.</p> <p>Housing Principle 4 – Creating local amenity and a sense of place: Encourage council to consider the indicative locations of water and waste water infrastructure in land zoning and strategic planning decisions, to ensure local amenity outcomes are maximised e.g. minimise potential visual impacts/odour impacts from existing, or already identified.</p>	<p>principles relating to creating liveability/amenity outcomes for water and water re-use.</p> <p>Noted – DCP to be used to implement principles.</p> <p>Noted – DCP to be used to implement principles.</p> <p>Noted – implementation stage.</p> <p>Noted – agreed all principles are encouraged to be considered together and not in isolation.</p> <p>Noted – agreed that data should be shared between authorities.</p>
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		Agreed – need input from utilities for future re-zonings.
Community member	<p>Principles: The plan for West Dapto does not feel cohesive. More consideration should be given to community spaces, which bring communities together with purpose. Such spaces could be playgrounds, off-leash dog parks, sports fields, and a youth centre. An off-leash Dog-Park is <u>Further</u>, there is public Netball facility in Dapto.</p> <p>Structure Plan: There is not enough consideration given to transport access. Improved access from the motorway (M1) is required, with south facing ramps at Kanahooka Road, Emerson Road, and potentially Fowlers Road.</p>	<p>Open space and rec principles promote the outcomes mentioned. Provision for netball/tennis courts included in current S94 plan.</p> <p>The structure plan is a high level strategic document. RMS and WCC have an agreed in-principle strategy relating to the M1 around Dapto including longer terms southbound ramp at Emerson Rd, and northbound at <u>Tallawarra</u>. Also RMS is undertaking an independent strategy for the M1 between the University and Yallah.</p>
Community member	<p>The overall vision and future direction is a well put together document with good base principles.</p> <p>Include minimal changes to the Escarpment Vistas;</p> <p>Include minimum residential house lot sizes of 450sqm.</p> <p>Agree with the West Dapto Vision Statement but feel that the land verging onto conservation areas should be mirroring neighbouring suburbs.</p> <p>Housing adjacent to conservation areas need to be transitional in line with Housing Principle 5 and Land Use Structure with equal importance on bio-certification land areas.</p>	<p>Noted.</p> <p>Noted.</p> <p>Noted, however this will not cater for housing diversity, particularly for medium density areas.</p> <p>Noted.</p> <p>Agreed. Council to consider Principle 5 in decision making.</p>

	<p>Principle 5 Housing transition to the Illawarra Escarpment (pg. 27) must ensure - the fringe of conservation areas complies with large lots (5-10acres to fit landscape contour) then 5 dwellings per hectare, then 10 dwellings per hectare and then R2 zoning with 13-15 dwellings per hectare as per existing Vista Park & Haynes Lane areas.</p> <p>The following amends are requested to the structure plan:</p> <ul style="list-style-type: none"> - On Wollongong Coal Emplacement area adjacent to the conservation area, transitional lands need to be in place as per the majority of the release area and as per Housing Principle 5. Wollongong Coal's neighbourhood plan has no transitional land adjoining the conservation area. - Transitional land adjacent to conservation areas should be made Landscape Management Zone A high concern for Visual Resource. 	<p>Noted – details will be provided in DCP.</p> <p>Council will explore future opportunities to expand transitional areas where possible in implementation.</p> <p>Implementation of the Vision will include review of the DCP in detail. Transitional land management will be considered as part of that process.</p>
<p>Businesses / landholders</p>	<p>Objection to the draft northern transport corridor. Request Council maintain the existing policy alignment of the corridor.</p> <p>Response to issues in writing requested at the meetings.</p> <ol style="list-style-type: none"> 1. Impact on existing Business/landowner development. 2. Impact of northern corridor on future development. 3. Sterilisation of industrial land. 4. Amenity of residential lots. 5. Environmental degradation. 6. Inconsistency of Northern Transport corridor with West Dapto planning principles 	<p>The draft Vision document proposed norther corridor in a refined alignment form is preferred to the existing policy alignment. A refined alignment, post exhibition of the Vision, includes a more efficient, direct main road route with added flood reliability and serviceability for the release area compared to the existing policy alignment.</p> <p>The refined corridor has been informed through improved knowledge in civil road design analysis and costing as well as flood and traffic modelling. The existing policy position of upgrading West Dapto Rd to operate as a main route with flood reliability would present an increased cost burden on development contributions and rate payers.</p> <p>Council's Project delivery team has prepared a refined preliminary route alignment, position exhibition of the Vision, as the basis of Concept design. A contractor has been engaged and is undertaking</p>

		<p>concept design. The refined preliminary route maintains an east – west extent similar to the draft Structure Plan. The corridor is proposed to shift further south providing the following benefits in response to the submission issues:</p> <ol style="list-style-type: none"> 1. Avoids existing development operations on parcel. 2. Maximise serviceability of the corridor to collect traffic from the release area. Ongoing opportunity to improve efficiency of the corridor through design is available to ensure benefit to future development is maximised and potential impacts are reduced and managed. 3. Ensure industrial land would be accessible without the need for private funded riparian crossing, an improvement from existing policy setting. 4. Improved proximity to the main access road to the M1 & Princes Hwy for a larger proportion of existing and future residents & businesses. Increasing connectivity, directness & convenience. <p>Amenity impact considerations of all new infrastructure in West Dapto to be considering on merit through implementation (design, approvals). The serviceability of the future road has the potential to contribute to the desirability of living in this area.</p> <ol style="list-style-type: none"> 5. Refined alignment to cross watercourses perpendicularly minimising construction and maintenance impacts & extents. Refined alignment adjacent/outside of the riparian corridor, ease for access and maintenance is preserved as opposed to private ownership, and provides opportunity for passive transportation (pedestrian and cyclists) which increases Council’s commitment to maintenance. Refined alignment to remain in close proximity to the riparian corridor where possible to minimise impacts on developable land. <p>Refined alignment mainly within cleared and open areas with intent to avoid impact. On improvement in mitigation hierarchy when compared with potential impacts of the draft structure plan alignment. Further consideration will be given to biodiversity and</p>
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		<p>riparian matters through the mitigation hierarchy during concept design, the environmental impact assessment, with final mitigation and/or possibly offsetting committed to following detailed design phase, once all likely direct and indirect impacts can be accurately estimated.</p> <p>Any potential biodiversity impacts may be accounted for as part of the WDURA Biodiversity Certification Opportunity for refinement in design to reduce potential impacts</p> <p>6. Corridor informed by principles. Refined alignment further supports the principles as follows:</p> <p><u>Principle 1 – supportive land use patterns</u> – the refined alignment allows for efficient flood-reliable access for industrial land without isolating pockets.</p> <p><u>Principle 2 – a safe, connected and legible road network for all users:</u> West Dapto Road still part of network and will be upgraded to an urban standard. Traffic to be distributed between two routes. Forecast volumes on western (new) section similar to other collector roads in the release area.</p> <p>Improved pedestrian/cyclist amenity and accessibility at Darkes Town Centre (encouraging short trips to services) while still maintaining exposure.</p> <p><u>Principle 3 – design roads to complement the environment</u> – the engineering works required to achieve a flood reliable West Dapto Road would have significant riparian area impact and would include likely flooding impacts. The refined northern corridor alignment is higher in the catchment with less flooding impact while minimising impact on sensitive environmental areas.</p> <p><u>Principle 4 – quality infrastructure:</u> refined alignment is more direct, legible without 'kink' as is the case with existing policy.</p> <p><u>Principle 5 – road network to support sustainable transport</u></p>
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		<p><u>outcomes</u></p> <p>Refined alignment would provide improved directness and efficiency for traffic heading north to the M1 & Princes Hwy.</p> <p>Refined alignment distributes traffic over two routes meaning there is more network resilience during incidents such as flooding, accidents, road works, breakdowns etc. Refined alignment provides additional options for sustainable transport including bus routes, cycling and walking.</p>
Business/ landowner	Objects to the draft northern corridor. Request Council maintain existing policy alignment of the corridor.	Council responded to the business owner confirming receipt of submission, acknowledging the issues <u>raised</u> . Council has considered all issues <u>raised</u> . See detailed considerations above.
Health NSW Illawarra Shoalhaven Local Health District	<p>Support for the Vision & articulation that "communities will be healthy, sustainable and resilient", integrated & connected communities, active & passive open spaces accessible by walkways, <u>cycleways</u> & public transport, high quality suburbs with diverse housing choices, long-term strategy to oversee the timely implementation of infrastructure.</p> <p>Supports the planning principles.</p> <p>ISLHD constructing Health One for Dapto to increase capacity for services (integrated primary & community health initiative). Recommendations:</p> <ul style="list-style-type: none"> - Neighbourhood Plan preparation and need to consult with community service (Health) to ensure health outcomes achieved; - Centre based community facilities designed for colocation of services; large catchment based neighbourhood plans to promote strategic outcomes and reduce cross boundary issues; - Active transport links to Dapto and Health One; - Link with regional walk alliance; 	<p>Support noted.</p> <p>Many of the recommendations are to be considered in a comprehensive review of the Wollongong DCP, 2009 including but not limited to Chapter D16 West Dapto Release Area.</p> <p><u>Council supports continues</u> promotion of healthy outcomes in the planning and implementation of urban release development / communities at West Dapto.</p> <p>Establishment of Health One welcomed.</p>

	<ul style="list-style-type: none"> - Equity of access to reduce barriers to access facilities & services; - Ensure fresh drinking water in all public spaces; - Separate pedestrian & cyclists on main network connections; - Planting edible landscapes; - Allocate land for community landscapes; - Ensure shade through broad leaf trees; - UV protection open space & facilities design; - Consider safety by design (night / lighting) - Fiscal incentives to increase fresh food outlets in new developments; - Discourage overabundance of fast food; - DA should align with vision & principles; - Support supply of healthy food at community education facilities; - Minimise alcohol & gambling outlet density; - Allocate benchmark, at least 10% of new housing stock affordable. 	
<p>Housing Industry Australia</p>	<p>Supports Vision particularly delivery of infrastructure & creation of diverse housing choices.</p> <p>Supports revised structure plan.</p> <p>Supports planning principles identifying housing & town centres principles as highest priority.</p> <p>Specific comments regarding principles provided encouraging implementation actions by Council to deliver the principles outcomes.</p> <p>HIA GreenSmart program sustainable housing outcomes referred to.</p> <p>Clear centres hierarchy should be promoted.</p>	<p>Support noted.</p> <p>Importance of the role of clear DCP controls to ensure Vision outcomes are implemented is agreed.</p>

	<p>Importance of clear DCP controls to provide certainty has been highlighted by HIA as an implementation action Council should recognise.</p> <p>HIA supported use of appropriate land use zones to reflect constraints identified on the structure plan such as water management or conservation outcomes.</p> <p>Encourage State and Council to work together on infrastructure contributions, collection and allocation.</p> <p>HIA encourage Council urban release team to continue to engage with HIA and their members</p>	
Business	Supports the Vision and Centres principles including centres hierarchy & role of Wollongong as Regional City and Dapto as Regional Centre.	Support noted.
Community member	<p>Vision doc clearly sets out future direction</p> <p>Agree with Vision statement</p> <p>Principles should include a goal</p> <p>Structure Plan should provide schools.</p> <p>Structure Plan should provide for infrastructure roads, residential estates</p>	<p>Noted.</p> <p>Noted.</p> <p>Principles promote desired outcomes, which could be considered goals.</p> <p>Council agrees certainty required regarding future school sites. NSW Government is responsible for public school provision. Indicative locations of future schools will remain in Chapter D16 of Wollongong DCP. Council to continue to work with Government and private providers to promote sufficient education opportunities for West Dapto.</p> <p>Council will continue to ensure adequate infrastructure planning primarily through ongoing review of the West Dapto S94 (now Section 7.11) Local Contributions Plan</p>

	No gaol.	Council agrees no gaol. State no longer investigating.
Community member	<p>Good job at laying out plans for the region</p> <p>Supports no plans for gaol. Agree with Vision</p> <p>Supports principles</p> <p>Structure good</p> <p>Walking track into escarpment with lookout would be great could be in conservation land and provide education</p> <p>Need additional road out of West Dapto between Bong Bong and Darkes Rd</p> <p>Improve Dapto Town Centre</p>	<p>Support noted.</p> <p>Valuable comments to be considered in implementation actions such as open space planning, and transport network optimisation.</p> <p>An additional east west connecting road has many engineering constraints. Council staff have tested the road network using Council's TRACKS traffic model. The proposed network is considered to be the most efficient to meet the needs of the whole release area.</p> <p>Council has recently prepared and adopted the Dapto Town Centre Plan 2017-2027. This sets vision and strategies to guide the future of the centre and is supported by an implementation plan</p>
Community Member / Landowner	<p>The alignment of the northern transport corridor could be improved if it connected direct with the Shone Avenue intersection along the alignment of the existing ponds at the Sanctuary Ponds development to the west.</p> <p>It is important that proposed infrastructure does not sterilise useable land on his property.</p> <p>The structure plan identifies that the eastern extent of Community member / landowner land is flood prone (land currently zoned RU2 Rural Landscape & E3 Environmental Management). Community member / landowner considered this land is not flood prone.</p>	<p>Council's project delivery team is coordinating concept design of the northern transport corridor which will look at specific issues raised by the Community member / landowner including efficient layout while maximising serviceability of future residential land.</p> <p>Flood extents on the Structure Plan were informed by the Mullet Creek Flood Model update report. Council adopted the study in June 2018. The information on the Structure Plan is considered to be</p>

<p>Community member</p>	<p>Supports overall vision/principles</p> <p>Requests additional items be incorporated:</p> <ul style="list-style-type: none"> - Minimal changes to escarpment vistas, with land verging on conservation areas to mirror already developed suburbs, in line with Housing Principle 5 & land use structure of conservation areas with equal importance in bio-certification areas - Housing Principle 5 must ensure large lots 5-10 acres at fringe, then 5 dwellings/hectare, then 10 dwellings/hectare, then R2 zoning with min 450m² blocks - Wollongong Coal land adjacent to conservation areas should be transitional lands as per rest of URA (in line with Housing Principle 5) and also classified as Landscape Management Zone A (DCP) 	<p>reliable in reflecting up to and including the 1% AEP flood event. Noted.</p> <p>Agree – no change to Structure Plan as addressed through principles. But transitional lands mapped on the structure plan could be modified in the future as part of further work on conservation strategy (refer P18 of Vision). Also LMZs in DCP (p39) may be reviewed as a result of this (implementation).</p> <p>Stages 1-2 already zoned. Opportunities to consider in Stages 3 & 4. Implementation issue.</p> <p>See point 1 above. Further work to be done re conservation priority areas, possible to amend transitional lands in future</p>
<p>Community member</p>	<p>Draw up a detailed plan for land between Cleveland Rd and Bong Bong Rd showing plan and artistic elevation views for a public accessible botanic gardens and parkland on such land. With such a plan, crowd funding local groups and individuals may be engaged to help implement such a grand vision.</p>	<p>Noted.</p>

Part D – Locality Based DCPs / Precinct Plans
Chapter D16: West Dapto Release Area



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Rev No	Adoption Date	In force date	Revision Details
1	14/12/10	17/12/12	Adopted
2	27/7/11	3/8/11	Incorporate Shone Ave Neighbourhood Plan
3	26/11/12	8/12/12	Update Wongawilli North Neighbourhood Plan
4	27/5/13	1/6/13	Incorporate Sheaffes Rd Neighbourhood Plan
5	9/12/13	14/12/13	Incorporate Reddalls Rd Industrial Neighbourhood Plan
6	24/3/14	2/4/14	Incorporate Darkes Rd South West Neighbourhood Plan and updated road network diagrams
7	3/8/15	12/8/15	Incorporate Avondale Road North, Huntley Neighbourhood Plan
8	24/8/15	9/9/15	Incorporate Shone Avenue / West Dapto Road Neighbourhood Plan
9	19/10/15	24/10/15	Incorporate West Dapto Rd / Sheaffes Rd (south) Neighbourhood Plan
10			Draft May 2018
11	19/11/18	20/12/2018	Incorporate Bong Bong South Neighbourhood Plan
12	10/12/18	20/12/2018	Incorporate the West Dapto Vision, Structure Plan 2018 and planning principles

1 INTRODUCTION

This chapter is intended to implement the development structure of the West Dapto Release Area as outlined in the West Dapto Structure Plan (Figure 4.1) and to provide guidance on the future development of the land at West Dapto. It is aimed at achieving the vision for West Dapto which is:

West Dapto will grow and develop as a series of integrated and connected communities. Set against the spectacular Illawarra Escarpment and a landscape of riparian valleys, these communities will integrate the natural and cultural heritage of the area with the new urban form.

The communities will be healthy, sustainable and resilient with active and passive open space accessible by walkways, cycleways and public transport. To support these new communities, local centres will provide shopping services, community services and jobs while employment lands will facilitate further opportunities for the region.

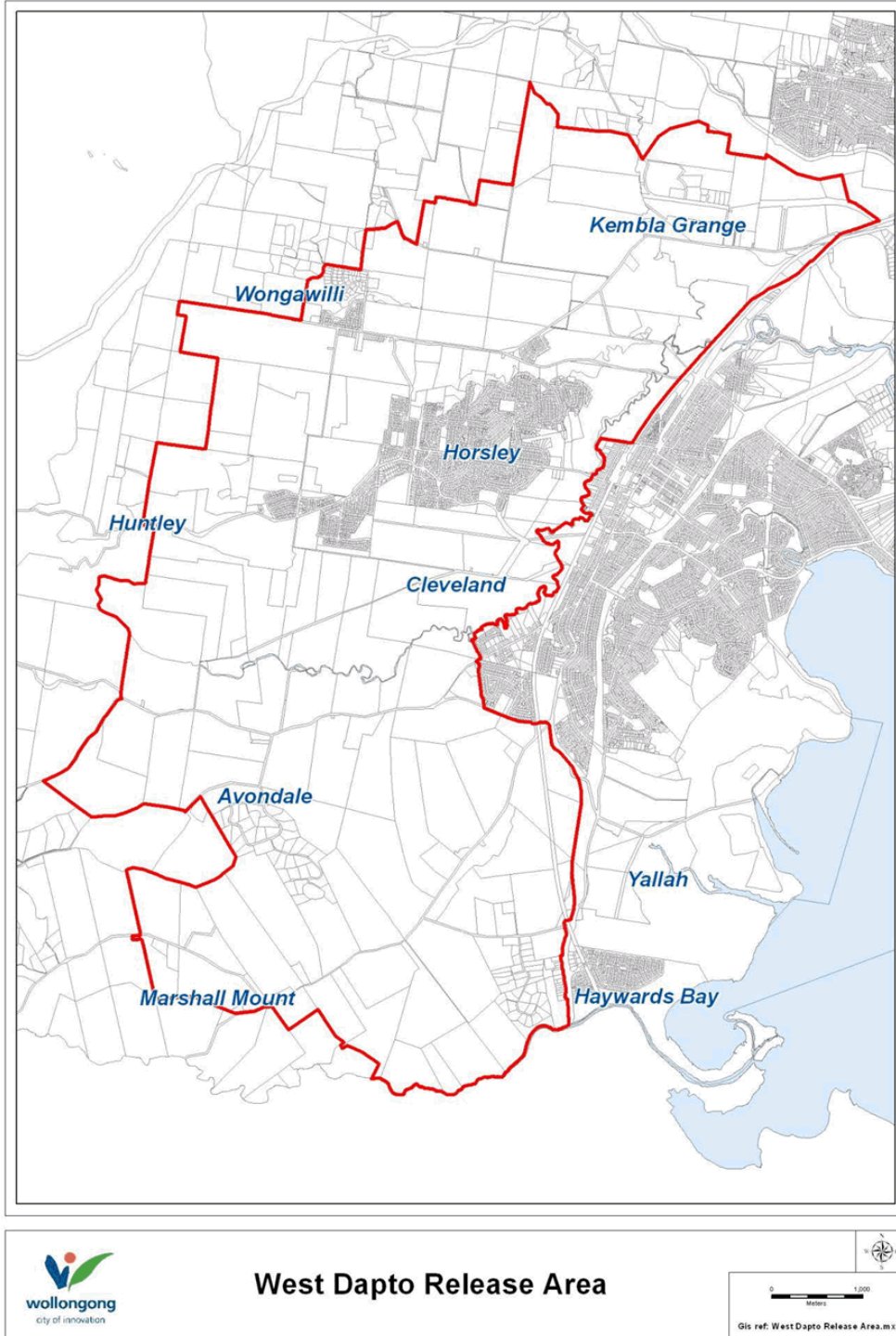
West Dapto will be supported by a long-term strategy to oversee the timely implementation of infrastructure to deliver sustainable and high-quality suburbs with diverse housing choices.

Other parts of this DCP continue to apply to the West Dapto Release Area in conjunction with this chapter. In this regard Part A of the DCP contains the Introduction and Part B Land Use Based Planning Controls. Part C provides Specific Land Use Controls and Part E General (City Wide) Controls.

2 LAND TO WHICH CHAPTER APPLIES

This chapter applies to all land within the West Dapto Release Area (Figure 2.1).

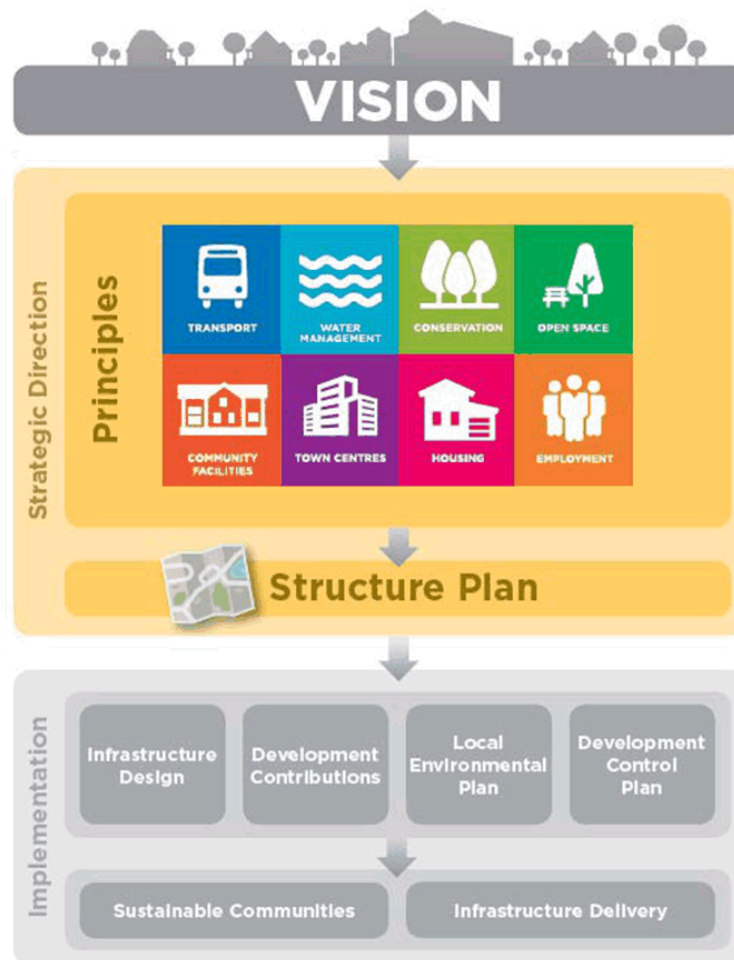
Figure 2.1 West Dapto Release Area



3 PLANNING PRINCIPLES

The West Dapto Planning Principles are intended to guide landuse planning decision associated with the release area. Each Planning Principal is detailed in the West Dapto Vision document 2018. **Figure 3.1** outlines the principles and their key components.

Figure 3.1 Structure and relationships of principles to planning tools



4 OBJECTIVES

The controls within this chapter are designed to deliver a development strategy for the West Dapto Release Area which will guide the growth of new suburbs and neighbourhoods, protect the environment and integrate with existing communities.

The objectives of this chapter as follows:

- (a) To enable the development of the West Dapto Release Area for residential, employment, industrial and environmental conservation areas in a manner consistent with the Wollongong LEP 2009 the West Dapto Vision document 2018 and the West Dapto Structure Plan (Figure 4.1).
- (b) To ensure the development of the West Dapto Release Area is carried out in an environmentally, economically and socially sustainable manner.
- (c) To provide for the retention and enhancement of the environmental qualities of the area whilst allowing for the appropriate development of land to support the economic and social needs of the community.
- (d) To provide for a range of dwellings to increase housing choice and availability in the Illawarra region (Refer to Figure 7.6).
- (e) To ensure that housing is of a high design standard, ecologically sustainable and energy efficient.
- (f) To improve employment opportunities and economic growth in the Illawarra region whilst ensuring that commercial and industrial development is of a high design standard, ecologically sustainable and energy efficient.
- (g) To ensure new development is consistent with the desired future character for the area as stated within the LEP and this chapter.
- (h) To ensure the creation of safe, secure and liveable environments.
- (i) To support the provision of safe and efficient public transport services which link the surrounding areas and release area, for the use of residents and workers within the region.
- (j) To protect, conserve and enhance riparian and environmentally sensitive areas and only allow for development which is compatible with the conservation values of these areas.
- (k) To ensure that development in the Darkes Road, Bong Bong and Marshall Mount town centres contributes to the creation of retail, business, commercial and community hubs and provides significant local employment opportunities.
- (l) To preserve the environmental, cultural and built heritage of West Dapto.
- (m) To protect development in the area from flooding and the threat of bushfires.
- (n) To protect areas of high scenic value.

5 URBAN STRUCTURE

The West Dapto Structure Plan (Figure 5.1) has been prepared to guide the development of the release area.

The future urban structure is shown in Figures 5.1. It is characterised by a series of residential precincts generating around 19,500 dwellings. It may be appropriate for development to occur simultaneously within several separate sites of Stages 1, 2 and 5. The residential precincts will be separated by an extensive system of riparian/open space corridors. The release area will also include protection and integration of heritage landscapes and items into the urban structure.

The approval of the Wollongong LEP (West Dapto) 2010 released the potential for 6,676 dwellings and 175 hectares of employment land in Stages 1 & 2 of the release area. The release of Stages 3 & 4 of the release area have been deferred pending further review. Stages 1 & 2 are characterised by:

- Development potential for approximately 6,676 dwellings representing lot supply to cater for the predicted demand of the next 15-20 years.
- The expansion of the Dapto Town Centre to a major regional centre, acting as the primary retail destination within West Dapto to provide higher order goods, regional community facilities, employment opportunities, higher density housing and a transport interchange, serving both the existing and future communities.
- Bong Bong Town Centre to service the southern part of the release area comprising approximately 15,000m² of floor space providing for retail needs, local services, community facilities and the like.
- Darkes Road Town Centre comprising approximately 7,500m² of floor space to provide for a range of shops, to meet local convenience needs, local services, community facilities and the like.
- Integration of Horsley into the overall urban structure for West Dapto by providing direct access from new development to the west through Horsley via Bong Bong Road and providing a new north-south link to the east of Horsley.
- The Kembla Grange employment area, containing 175 hectares of new employment land.
- Protection and rehabilitation of conservation areas, including remnant vegetation areas

Stages 3 & 4 which will be the subject of further review and are currently deferred will ultimately include:

- Further development potential for approximately 8,749 new dwellings.

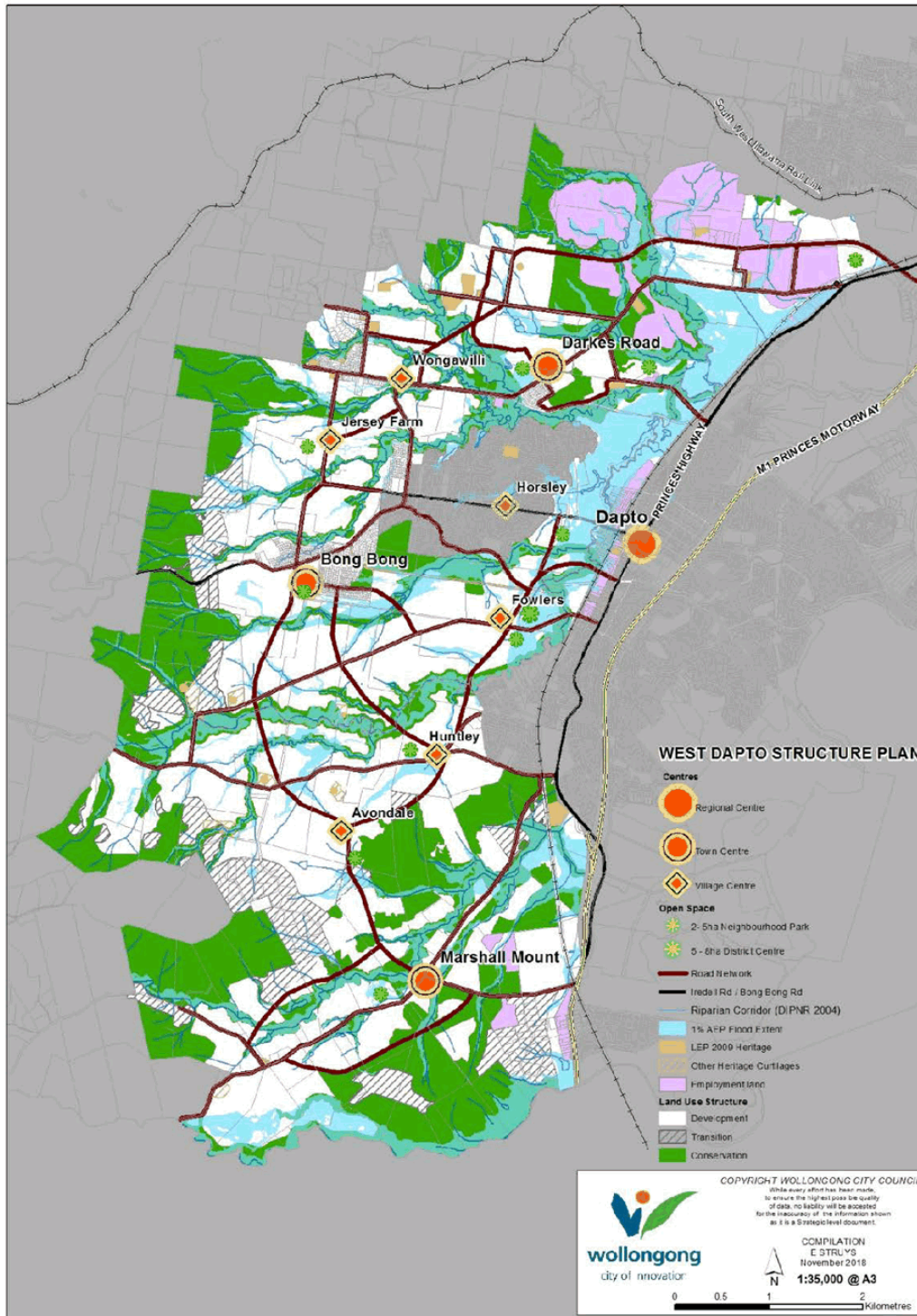
Stage 5, Yallah-Marshall Mount precinct is characterised by:

- 4,000 new dwellings.
- Marshall Mount Town Centre comprising approximately 3,500 sqm floor space in a traditional main street format to provide for retail shops, local convenience needs, local services, community facilities and the like.
- Integration of the precinct into Cleveland, with access via an extension of Yallah Road (Road No. 8) as part of the overall West Dapto road hierarchy.
- Protection of significant vegetation and landscape areas.
- Utilisation of Duck Creek as a focal feature of the community.

The Yallah-Marshall Mount precinct will utilise traditional urban design principles, with relatively high densities around the town centre and concentrated along the main access roads. The precinct will have a diverse range of housing types and densities.

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Figure 5.1 West Dapto Structure Plan 2018



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Development of the West Dapto Release Area could potentially take over 40 years to develop, depending on the rate of lot take up. If the take up is slow, this is likely to have major implications in terms of the provision of social and physical infrastructure to service the area. It is critical that development does not occur on multiple fronts as this will result in the early years in a fragmented urban structure and insufficient mass of people in any one area to support the provision of services.

Land will be released according to a logical and progressive land release program which builds upon existing infrastructure and services and which avoids multiple development fronts.

The development front will commence in the north of the release area where existing water and sewer are available without the need for extensive augmentation. Starting from the north will also facilitate the early upgrading of West Dapto Road and consolidation of Kembla Grange as a major employment precinct.

Stages 1 and 2 of the release will be rezoned initially as this area provides a lot supply that caters for the predicted demand over the next 15-20 years. Later stages of the release will be subject to further review and will be rezoned over time as work is completed and demand requires. The potential staging of the Yallah Marshall Mount precinct in the south of the site will be subject to adequate servicing.

6 NEIGHBOURHOOD PLANS

A Neighbourhood Plan is an immediate step between the West Dapto Structure Plan and a Development Application. The Neighbourhood Plan allows issues to be considered on a neighbourhood/precinct/ catchment scale.

A Neighbourhood Plan enables adjoining land owners to jointly consider common constraints and design issues. The Neighbourhood Plan will be exhibited as an amendment to this Chapter and should be in place prior to the determination of the development application.

6.1 Requirement for a Neighbourhood Plan

A Neighbourhood Plan is required:

- To be consistent with the West Dapto Vision, Planning Principles and Structure Plan detailed in the West Dapto Vision document 2018.
- To confirm the defined neighbourhood consistent with Figure 6.1 or as agreed with Council officers if the area is not defined in Figure 6.1.
- To supplement the information prepared by Council to support the rezoning of West Dapto. Council did not have sufficient resources to consider every property in detail and Council's consultants were not granted access to all properties. Copies of the studies undertaken by Council are available on CD (Note the West Dapto Aboriginal Heritage Study is not a public document).
- To consider issues, mitigate impacts or propose solutions on a precinct / neighbourhood / catchment scale, rather than property by property.
- To ensure adjoining land owners consider the proposals, concepts and development timeframes of each other.
- To encourage the integration of development sites, development sequencing and economies of scale.
- To provide more detailed neighbourhood specific information guided by the West Dapto Structure Plan (Figure 6.1).
- To avoid problems of other release areas, where development on adjoining lots is not integrated.

After the exhibition and adoption of a Neighbourhood Plan, Development Applications can be lodged by individual landowners (or their consultants), for development in their part of the neighbourhood. A Development Application can be submitted on behalf of a number of landowners, provided owners consent is obtained. Any proposed variation to the agreed Neighbourhood Plan will require justification and any variation on or near a property boundary will require agreement of the adjoining owner.

The Neighbourhood Plan process:

1. Discuss site with Council's Land Use Planning Team

2. Prepare draft Neighbourhood Plan
3. Council officers review and report draft Neighbourhood Plan to Council as an amendment to the Wollongong DCP 2009 – Chapter D16 West Dapto Release Area
4. Exhibition
5. Council officers review submissions, consult with landowner / consultant over any amendments and report submissions and revised Neighbourhood Plan to Council
6. Council adopts Neighbourhood Plan as an amendment to the DCP (including where relevant update of Figure 6.1)
7. Lodgement of Development Applications

6.2 Matters to be addressed in a Neighbourhood Plan

A Neighbourhood Plan should include:

1. Site location and description
2. Land capability assessment, addressing issues such as:
 - Existing land use.
 - Wollongong LEP 2009 provisions (including Zoning, Minimum Lot Size, FSR, Building Height, Flooding, Heritage, Acid Sulfate Soils, riparian corridors etc).
 - Any other relevant legislation (eg any SEPPs, Illawarra Regional Strategy).
 - The neighbourhood's setting within West Dapto, eg proximity to commercial centres, main roads, community services.
 - Flooding.
 - Bushfire.
 - Topography, known Geotechnical constraints, known Contamination constraints.
 - Biodiversity (EECs, bushland, significant trees, habitat).
 - Known or likely Heritage sites, including Indigenous Heritage cultural issues.
 - Existing road network.
 - Available utilities & services and existing easements.
 - Need for community and recreation facilities.
 - Visual character.
 - Noise impacts (e.g. from the main roads, industrial areas or public & private railways).
3. A Neighbourhood concept plan, and supporting documentation, showing proposed:
 - Residential, retail, employment, recreation and conservation areas.
 - Road layout & hierarchy.
 - Indicative dwelling density & yield.
 - Public transport, bicycle and pedestrian routes.
 - Drainage management concepts (water quantity & quality).
 - Note – where a drainage/water quality solution is developed at a catchment or neighbourhood level, Council will acquire the agreed detention basin site through the West Dapto Section 94 Plan.
 - Buffers to heritage items.
 - Riparian corridors, buffers and proposed future use.
 - Location of schools, community facilities, recreation facilities and parks, including any proposed public land.

6.3 Matters to be addressed in Development Applications

The documentation accompanying the Development Application for subdivision will have to provide more detailed site specific information and specialist reports, addressing issues such as:

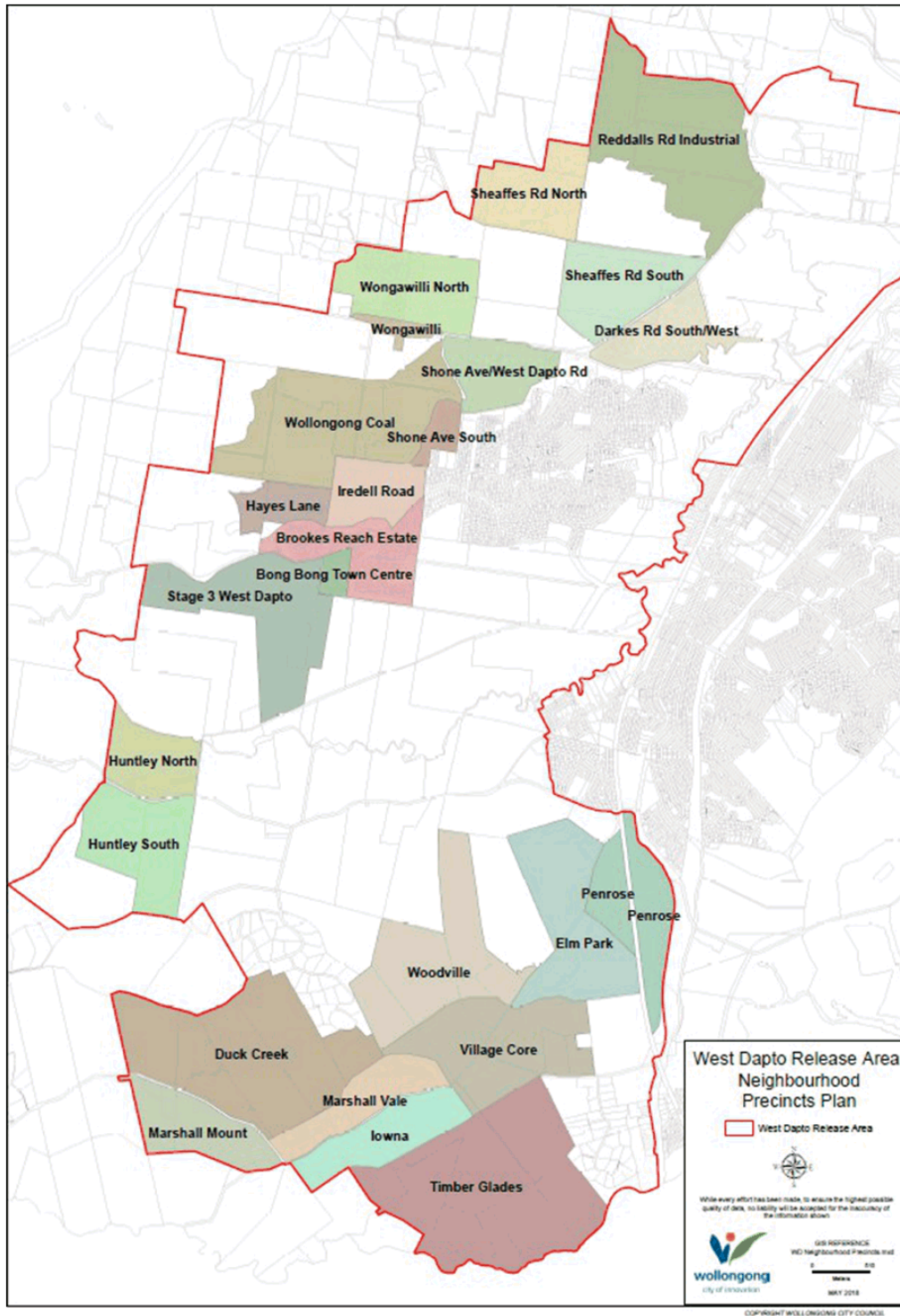
- Detailed site survey by a registered surveyor.
- Development plans – lot layout, road design.
- Flora and fauna assessment and future management (Chapters E18, E23).
- Drainage/flooding/water quality modelling (Chapters E13, E14, E22).
- Land contamination assessment (Chapter E20).
- Bushfire management (chapter E16).
- Traffic assessment (Chapter E3).
- Aboriginal heritage assessment (Chapter E10).
- Noise assessment (where relevant) (Chapter E4).
- Pedestrian and bicycle routes, including accessibility for persons with a disability (Chapter E1).
- Crime Prevention through Urban Design (Chapter E2) etc.

The documentation accompanying a Development Application for a Dwelling House on a newly subdivided lot should have regard to Part A and B1 (Dwelling Houses) of this DCP and any variations to the generic controls under this chapter (e.g. the standard setbacks in individual neighbourhoods may have been varied).

An application for a Dwelling House can also be undertaken in accordance with the requirements of SEPP Exempt and Complying Development, which can be assessed by Council or a Private Certifier.

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Figure 6.1 Defined Neighbourhoods



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Adopted Neighbourhood Plans

The following Neighbourhood Plans have been adopted for the purposes of this Part:

Neighbourhood Plan	Submitted by	Adoption Date
6.3.1. Bong Bong East and north	Stockland	14 December 2010
6.3.2. Bong Bong Town Centre (draft – see chapter 6.1.2)	Vinta Group / Bong Bong Town Centre	14 December 2010
6.3.3. Wongawilli north (excluding the village area)	Cardno Forbes Rigby and Jones Flint and Pike.	26 November 2012
6.3.4 Shone Avenue south	KF Williams	26 July 2011
6.3.5 Reddalls Road Industrial	Beadnell	9 December 2013
6.3.6 Sheaffes Road North	SMEC Urban	8 April 2013
6.3.7 Darkes Road South West	Don Fox Planning	24 March 2014
6.3.8 Avondale Road North, Huntley	Urbis	3 August 2015
6.3.9 Shone Avenue / West Dapto Road	KF Williams	24 August 2015
6.3.10 West Dapto Road / Sheaffes Road (south)	Watts Consulting for Wollongong City Council	19 October 2015
6.3.11 Bong Bong South	Stockland	19 November 2018

6.3.1 Bong Bong East and North

Figure 6.3.1.1 Neighbourhood Plan 1 - Bong Bong East and North



The following variations to development standards have been accepted:

Chapter B1 Residential Development - Section 4.5 Front setbacks – controls 1 and 2 are replaced with:

1. The following setback requirements apply from the primary street frontage to the front façade of the building:
 - (a) Front building line: 4.5 metre minimum setback, except for garages which must be setback at least 5.5 metres from the property boundary on the primary road.
 - (b) Articulation zone: An articulation zone up to a maximum of 1.5 metres measured from the foremost edge of the building line may be incorporated within the front setback zone. The following building elements are permitted in the articulation zone:
 - i) an entry feature or portico,
 - ii) a balcony, deck, patio, pergola, terrace or verandah,
 - iii) a window box treatment,
 - iv) a bay window or similar feature,
 - v) an awning or other feature over a window,
 - vi) a sun shading feature.
 - (c) A building element must not extend above the eave gutter line, other than a pitched roof to an entry feature or portico that has the same pitch as the roof on the dwelling house.
 - (d) The maximum area of all building elements within the articulation zone, other than a building element listed in (v) or (vi) above, must not be more than twenty five percent of the area of the articulation zone, measured through the horizontal plane of the elements.
2. For corner allotments the following setback requirement applies from the secondary street frontage to the façade of the building:
 - (a) Secondary building line: 2 metre minimum setback.

Chapter B1 Residential Development - Section 4.6 Side and rear setbacks – controls 1 to 3 are replaced with:

1. A dwelling house and any carport, garage, balcony, deck, patio, pergola, terrace or verandah that is attached to the dwelling house with a building height at any point up to 3.8 metres on an allotment with an area greater than or equal to 450m² must have a setback from a side boundary of at least 900mm. This control does not apply to a secondary street frontage.
2. Any part of a dwelling house that has a building height in excess of 3.8 metres and any carport, garage, balcony, deck, patio, pergola, terrace or verandah that is attached to a dwelling house on an allotment with an area greater than or equal to 450m² must have a setback from a side boundary of at least the sum of 900mm and an amount that is equal to one quarter of the additional building height above 3.8 metres. This control does not apply to a secondary street frontage.

N.B. A two storey dwelling house may have its ground floor component (up to 3.8 metres in height) setback 900mm from the side boundary with the second storey setback further as required by the formula in (2).

A dwelling house that is part two storey and part single storey may have the single storey portion of the dwelling house (up to 3.8 metres) setback 900mm from the side boundary and the two storey portion of the dwelling house setback further as required by the formula in (2).

3. On an allotment with an area less than 450m² and a lot width 10m or less, where an easement for access and maintenance as well as driveway crossing locations (which are located so as no to adversely impact on-street parking capacity) are provided on title, a zero side setback may be applied to one side for the single storey component of the dwelling. The two storey component of the dwelling is to be setback further as required by the formula in (2). This control does not apply to a secondary street frontage.

The following additional controls to apply:

1. A dwelling house and any carport, garage, balcony, deck, patio, pergola, terrace or verandah that is attached to the dwelling house with a building height at any point up to 3.8 metres must have a setback from the rear boundary of at least 3 metres.
2. A dwelling house with a building height of more than 3.8 metres and any carport, garage, balcony, deck, patio, pergola, terrace or verandah that is attached to the dwelling house must have a setback from the rear boundary of at least 3 metres, plus an amount that is equal to three times the additional building height above 3.8 metres up to a maximum setback of 8 metres.
3. Despite (6) and (7), an allotment that has a rear boundary with a laneway may have a building line that abuts that boundary for up to 50 per cent of the length of that boundary.

Chapter B2 Residential Subdivision – Section 13 Cut and Fill land reshaping works – does not apply to master planning of land and precinct subdivision applications.

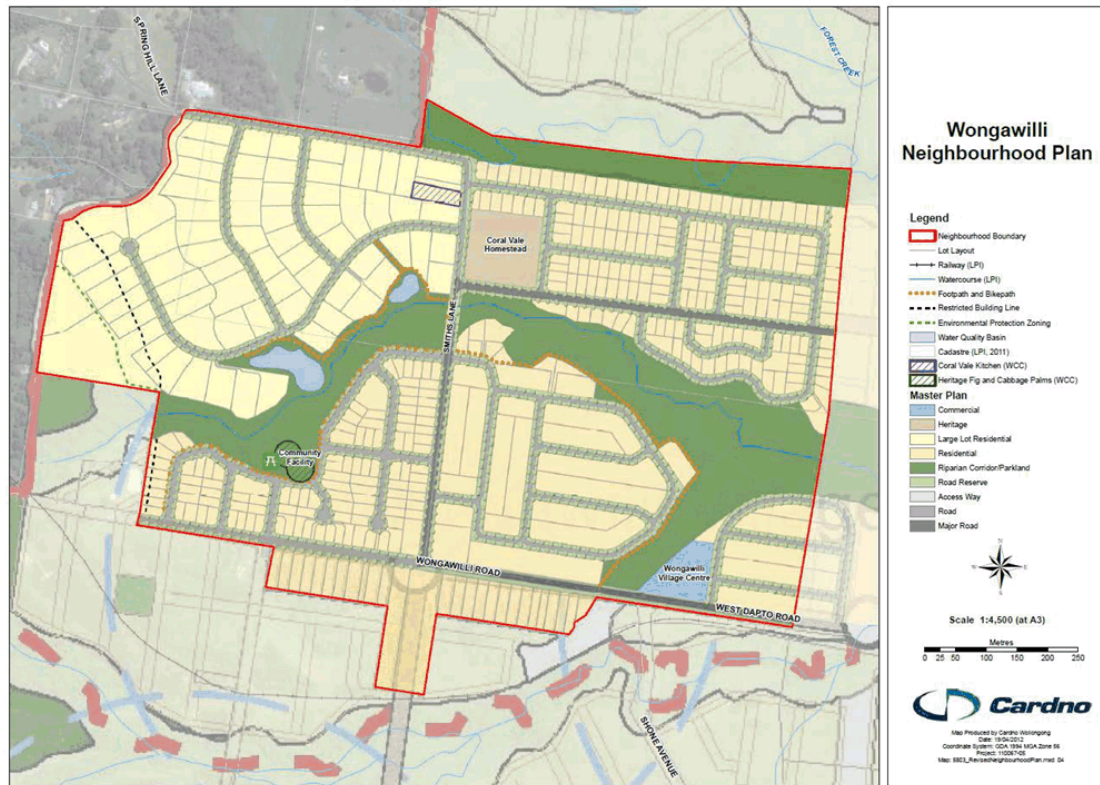
6.3.2 Bong Bong Town Centre

Refer to Section 6.1.3.

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6.3.3 Wongawilli - North

Figure 6.3.3.1 Wongawilli north Neighbourhood Plan



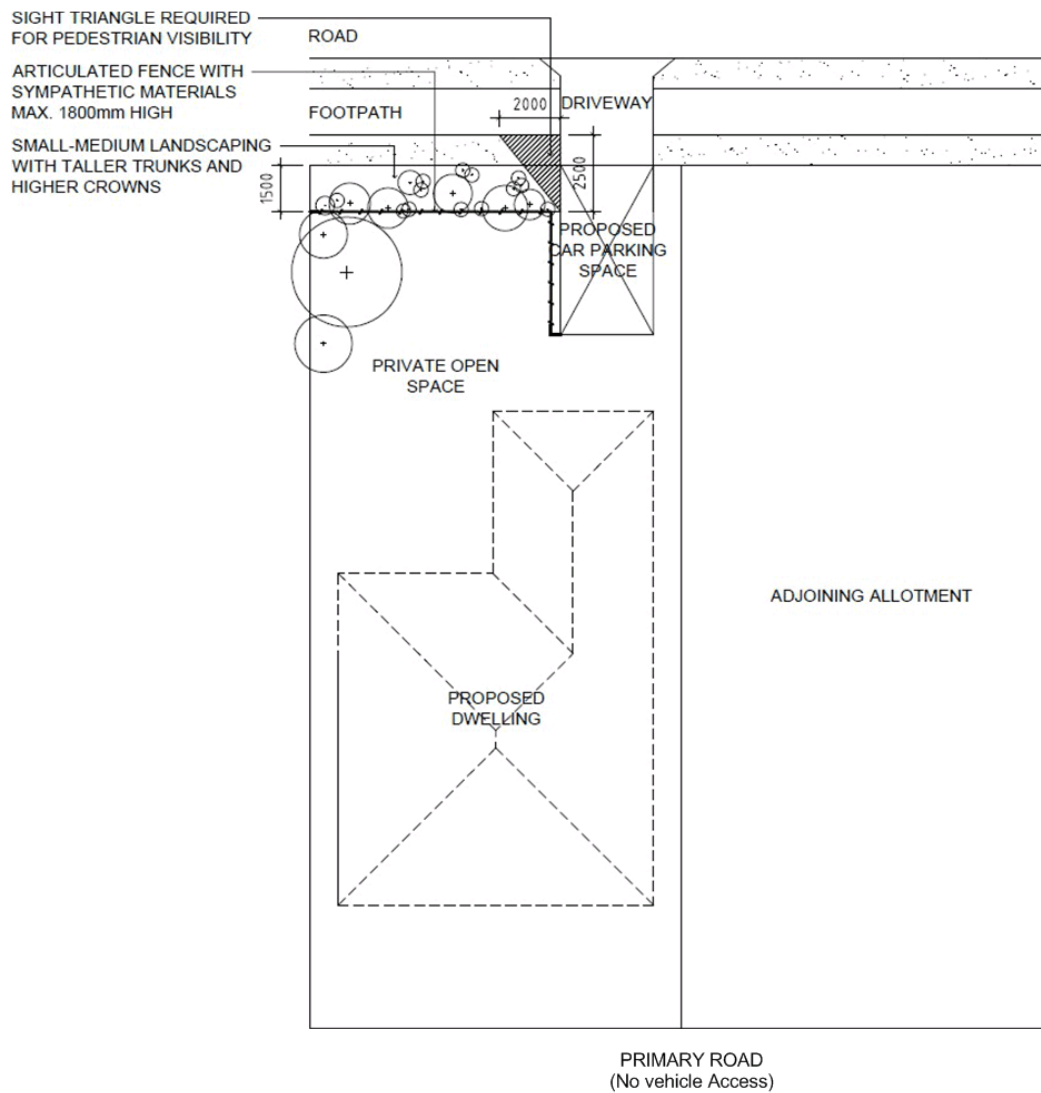
The following modified and additional controls to apply:

- Minimum Lot width fronting Wongawilli Road and Smiths Lane of 15m;
- Minimum front building line setback of 4.5m for all lots fronting Wongawilli Road and Smiths Lane;
- The maximum length of cul-de-sacs that provide access to lots fronting Wongawilli Road Should not exceed 130m;
- For Lots with a dual road frontage:
 - Wongawilli Road and Smiths Lane is considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;
 - All dwellings must face, address and activate the primary road frontage of Wongawilli Road and Smiths Lane;
 - Car ports or garages must be located and accessed from the secondary road frontage rear of the lots;
 - Minimum rear setbacks are to remain in accordance with Chapter B1, garages and carports are to have a minimum rear setback of 5.5m in accordance with the principles shown in figure 6.3.3.2;
 - Fencing and landscaping treatment of the secondary road frontage is in accordance with the principles shown in figure 5.3.3.2. Examples of Articulated fencing include, but are not limited to:
 - Masonry to 1.2m high with open type lattice or slates above with masonry elements no wider than 150mm;
 - Timber Lap and Cap;
 - Colourbond solid to 1.2m with Colourbond lattice style top sections.
- For Lots backing onto or adjoining the Rural Fire Service (RFS) Property:

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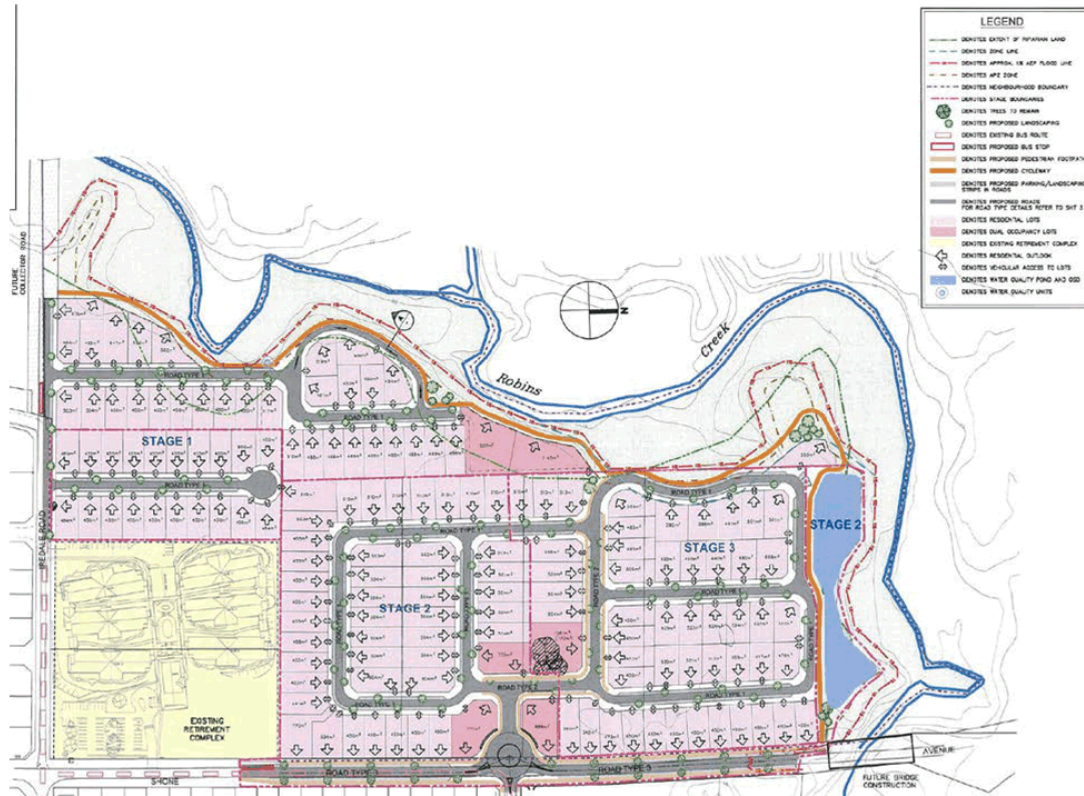
- (a) Dwelling house, secondary dwelling and any habitable areas must be setback at least 10m from the rear or common property boundary that adjoins the RFS property;
- (b) Outbuildings and garages must be setback at least 5m from the rear of common boundary that adjoins the RFS property.

Figure 6.3.3.2 Dual frontage property secondary frontage treatment



6.3.4 Shone Avenue - South

Figure 6.3.4.1 Shone Avenue south Neighbourhood Plan

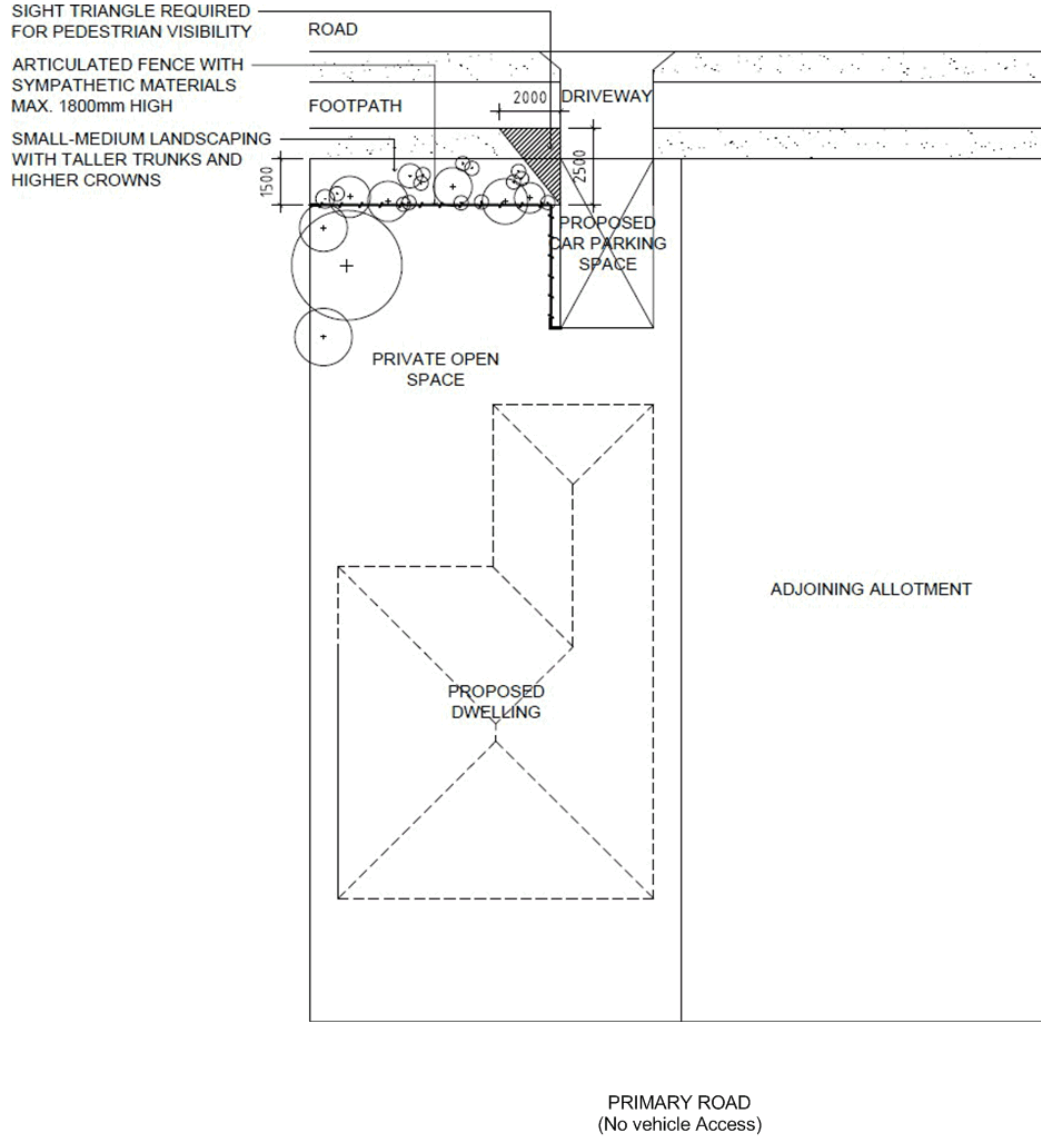


The following modified and additional controls to apply:

1. For Lots with a dual road frontage:
 - (a) Shone Avenue and Iredell Road are considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;
 - (b) All dwellings must face, address and activate the primary road frontage of Shone Avenue and Iredell Road;
 - (c) Car ports or garages must be located and accessed from the secondary road frontage rear of the lots;
 - (d) Minimum rear setbacks are to remain in accordance with Chapter B1, garages and carports are to have a minimum rear setback of 5.5m in accordance with the principles shown in figure 6.3.4.2;
 - (e) Fencing and landscaping treatment of the secondary road frontage is in accordance with the principles shown in figure 6.3.4.2. Examples of Articulated fencing include, but are not limited to:
 - i) Masonry to 1.2m high with open type lattice or slates above with masonry elements no wider than 150mm;
 - ii) Timber Lap and Cap;
 - iii) Colourbond solid to 1.2m with Colourbond lattice style top sections.

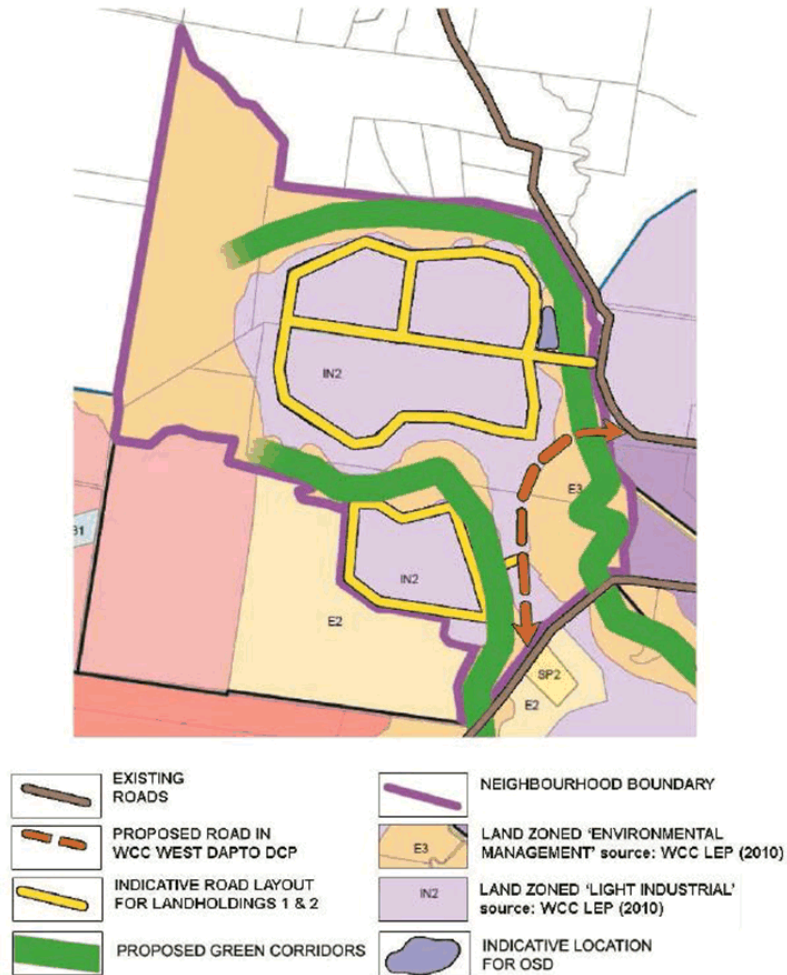
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Figure 6.3.4.2 Dual frontage property secondary frontage treatment



6.3.5 Reddalls Road Industrial

Figure 6.3.5.1 Reddalls Road Industrial Neighbourhood Plan



The following additional controls to apply:

1. The proposed cycleway must have adequate passive surveillance to ensure safety by design.
2. Indicative future bus stop locations should be identified and shown on road types capable of handling bus routes. A minimum number of stops should be located in a manner to ensure that the majority of lots are within 400 metres of a bus stop.
3. Any proposed development of the neighbourhood will require the applicant upgrading the relevant section of Reddalls Road to a standard that is suitable for the normal range of Heavy vehicles at no cost to Council. These upgrade works would also include any required intersection treatment to Reddalls Road and the new proposed Access Road as well as any necessary road safety works.

6.3.6 Sheaffes Road North

Figure 6.3.6.1 Sheaffes Road North Neighbourhood Plan

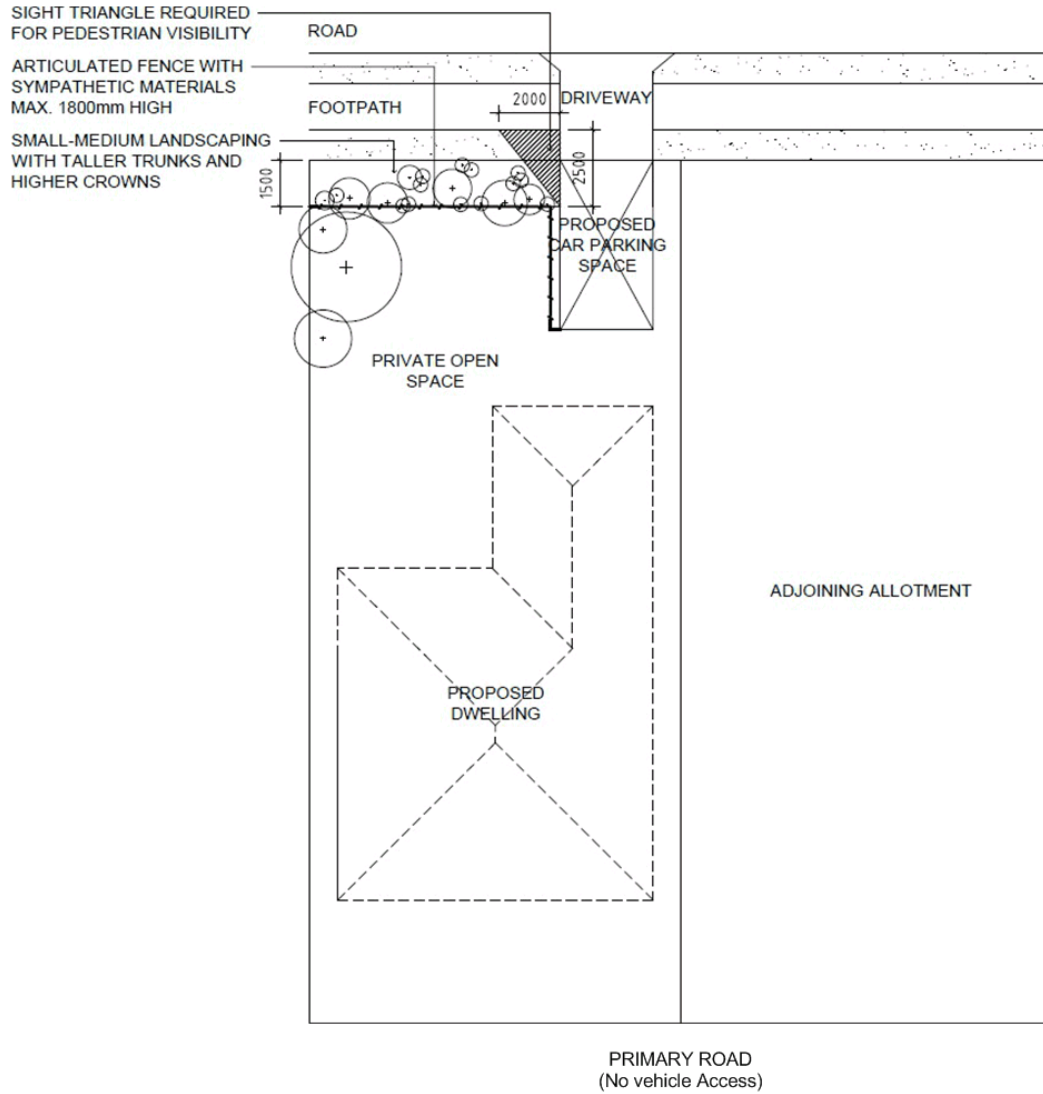


The following modified and additional controls to apply:

1. For Lots with a dual road frontage:
 - (a) Sheaffes Road and Paynes Road is considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;
 - (b) All dwellings must face, address and activate the primary road frontage of Sheaffes Road and Paynes Road;
 - (c) Car ports or garages must be located and accessed from the secondary road frontage rear of the lots;
 - (d) Minimum rear setbacks are to remain in accordance with Chapter B1, garages and carports are to have a minimum rear setback of 5.5m in accordance with the principles shown in figure 6.3.6.2;
 - (e) Fencing and landscaping treatment of the secondary road frontage is in accordance with the principles shown in figure 6.3.6.2. Examples of Articulated fencing include, but are not limited to:
 - i) Masonry to 1.2m high with open type lattice or slates above with masonry elements no wider than 150mm;
 - ii) Timber Lap and Cap;
 - iii) Colourbond solid to 1.2m with Colourbond lattice style top sections.

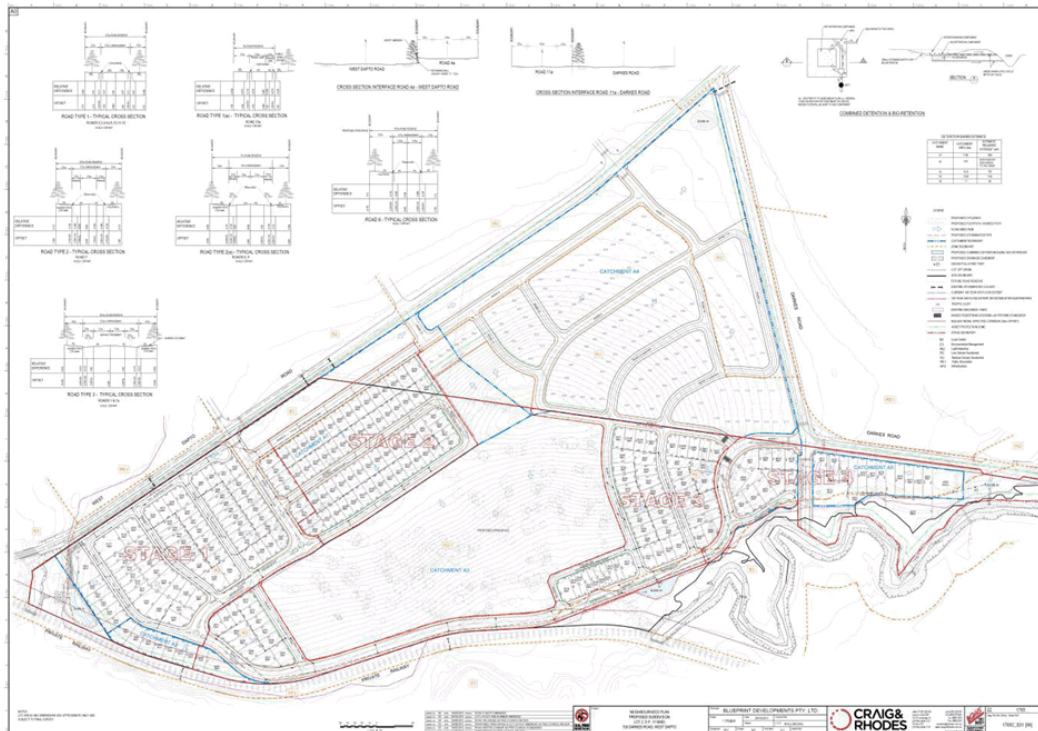
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Figure 6.3.6.2 Dual frontage property secondary frontage treatment



6.3.7 Darkes Road South West

Figure 6.3.7.1 Darkes Road South West Neighbourhood Plan



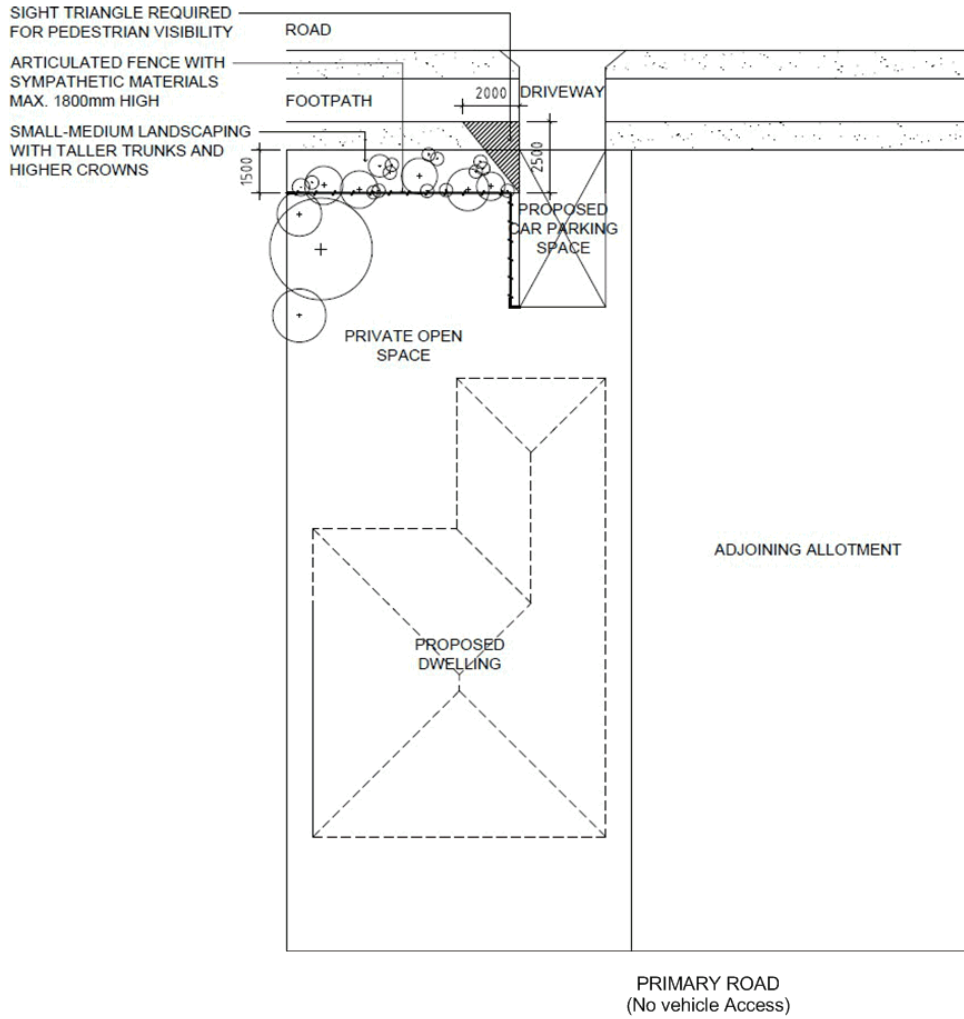
The following modified and additional controls to apply:

1. Lot Width, Depth and Aspect are to be in accordance with Figure 6.3.7.1 above and are not required to comply with Chapter B2 Section 6 Subdivision Lot Layout – Aspect & Solar Access Orientation as well as Section 8 Lot Width & Depth Requirements. The relevant issues have been considered and the lot layout and details shown are considered acceptable. Should the lot layout depart substantially from that shown then compliance with Chapter B2 is required unless variation is sought in accordance with Chapter A1.
2. On an allotment with an area less than 450m² and a lot width 10m or less, where an easement for access and maintenance as well as driveway crossing locations (which are located so as not to adversely impact on-street parking capacity) are provided on title, a zero side setback may be applied to one side for the single storey component of the dwelling. The two storey component of the dwelling is to be setback further as required by the formula in (2). This control does not apply to a secondary street frontage.
3. For Lots with a dual road frontage:
 - (a) West Dapto Road and Darkes Road is considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;
 - (b) All dwellings must face, address and activate the primary road frontage of West Dapto Road and Darkes Road;
 - (c) Car ports or garages must be located and accessed from the secondary road frontage rear of the lots;
 - (d) Minimum rear setbacks are to remain in accordance with Chapter B1, garages and carports are to have a minimum rear setback of 5.5m in accordance with the principles shown in figure
 - (e) 6.3.7.2 below;
 - (f) Fencing and landscaping treatment of the secondary road frontage is in accordance with the principles shown in figure 6.3.7.2. Examples of Articulated fencing include, but are not limited to:

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- i. Masonry to 1.2m high with open type lattice or slates above with masonry elements no wider than 150mm;
- ii. Timber Lap and Cap;
- iii. Colourbond solid to 1.2m with Colourbond lattice style top sections.

Figure 6.3.7.2 Dual frontage property secondary frontage treatment

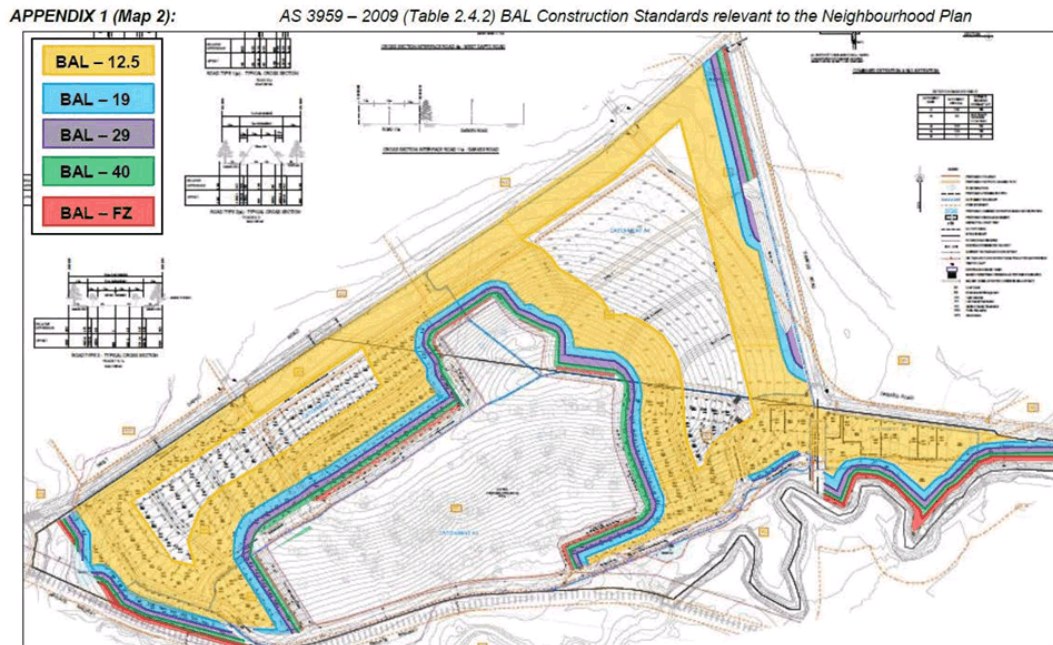


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1. For all development applications outside of the area denoted as Stage 1:
 - (a) An Aboriginal Heritage Assessment is to be undertaken in accordance with the Wollongong Development Control Plan 2009 Chapter E10.
 - (b) Additional archaeological investigations are required to be undertaken to the previously recorded archaeological sites and three (3) potential archaeological deposits (PADs) identified. This work is required in order to better determine the significance and extents of these areas.
 - (c) In-principle support for the intended mitigation or Aboriginal Heritage Impact Permit (AHIP) proposals is to be gained from the NSW Office of Environment and Heritage (OEH) prior to the determination of the associated development application.
 - (d) Further consultation with Local Aboriginal Groups is to be undertaken within the assessment of any future Development Applications.
 - (e) Consideration of the impacts of the proposal on identified Non-Indigenous Archaeological Deposits located on the site during the preparation of the Heritage reports and which are subject to Section 140 of the NSW Heritage Act 1977.
 - (f) Conservation planning related to any retained structures or features on the site (e.g. The Silo and gardens).
 - (g) Interpretation planning relating to the history and heritage significance of the development area.
2. Bushfire Matters
 - (a) Certain construction standards apply for development on Bushfire Prone Land. The applicable Construction Standards for proposed development are to reflect the Bushfire Attack Level (BAL) as identified at Figure 6.3.7.3 below.
 - (b) Given that the site is identified as Bush Fire Prone Land, when a development application for subdivision is made, the development will require a Bush Fire Safety Authority to be issued by the NSW RFS under Section 100B of the Rural Fires Act 1997. The RFS has indicated that it is likely that by condition of the Bush Fire Safety Authority, restriction on the titles of the lots requiring the provision and maintenance of the necessary APZ's will be required.

Figure 6.3.7.3 BAL Construction Standards relevant to the Neighbourhood Plan

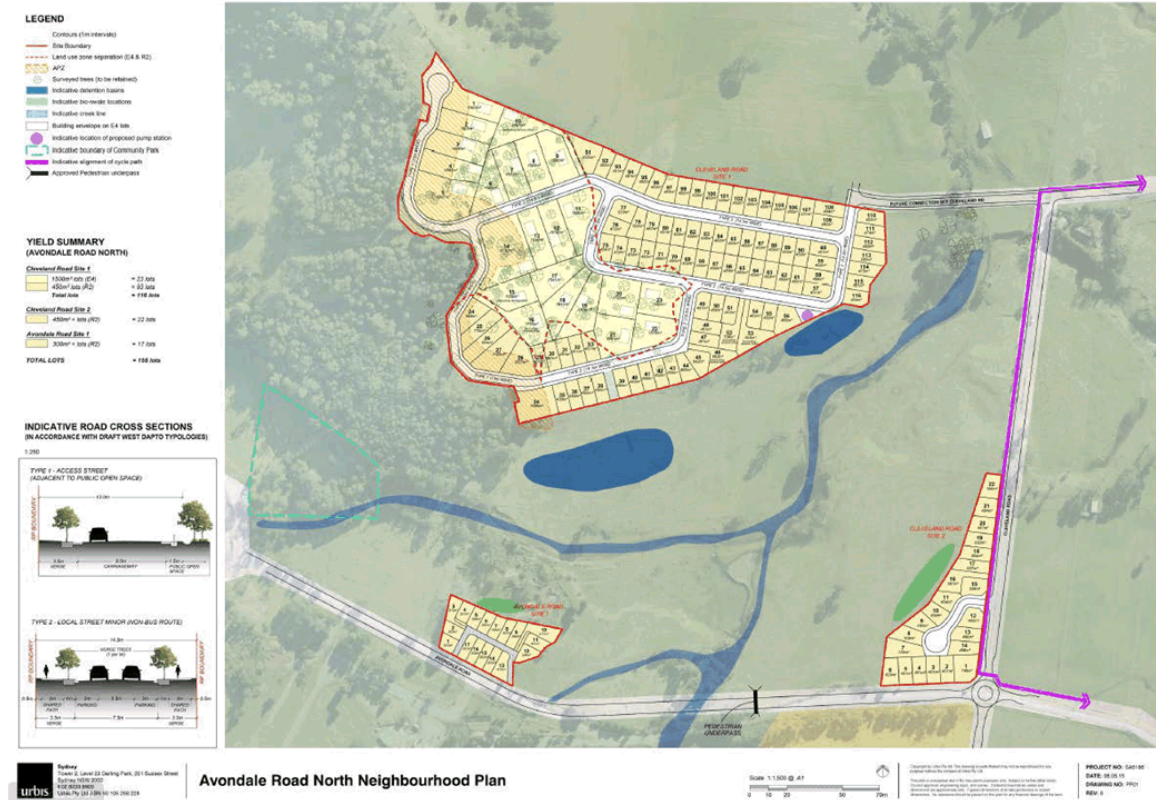


1. Access
 - (a) An appropriate access track is to be provided to the Detention Basin A1 to facilitate sufficient maintenance access for Council.
 - (b) Appropriate access is also to be provided to the Wongawilli Rail Spur Line from the Detention Basin A1 and from Road 01.
 - (c) The final form of the access track is to be determined in conjunction with Council Engineering Officers within the assessment of future Development Applications. Hardstand access will be required.
2. There may be scope to amend the current Council Drainage Acquisition Maps to reflect more up to date flood mapping of the area. This is to be further investigated within future Voluntary Planning Agreements (VPAs) and assessment of Development Applications.

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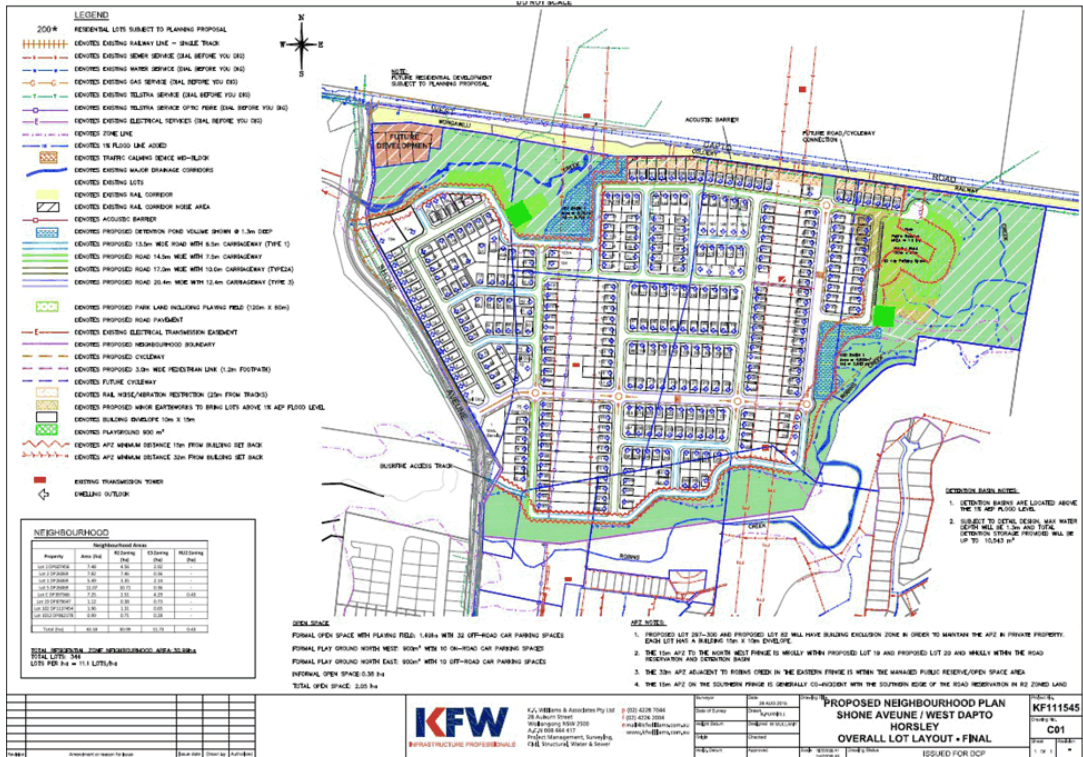
6.3.8 Avondale Road North, Huntley

Figure 6.3.8.1 Avondale Road North, Huntley Neighbourhood Plan



6.3.9 shone Avenue / West Dapto Road

Figure 6.3.9.1 Shone Avenue and West Dapto Road Neighbourhood Plan



The following modified and additional controls apply:

1. For Lots with a dual road frontage:
 - (a) Shone Avenue is considered to be the primary road frontage and the internal unnamed road is considered to be the secondary road frontage and the rear of the lots;
 - (b) All dwellings must face, address and activate the primary street frontage of Shone Avenue – this is the main address of the dwelling;
 - (c) The minimum front setback on Shone Avenue is 4m (being a greenfield site) and the minimum setback from the secondary road is 4m;
 - (d) No car access to residential lots is permitted from Shone Avenue (ie lots are access denied). Carports or garages must be located and accessed from the secondary road frontage rear of the lots;
 - (e) Garages and carports must be setback a minimum of 5.5 metres from the property boundary on the secondary road to enable a vehicle to park or stand in front of the garage or carport (ie allow off street parking that does not impede the footpath) and in order to be a non dominant component of the streetscape;
 - (f) Fencing controls for the primary street frontage of Shone Avenue are outlined in Chapter B1: Residential Development and are designed to complement the objectives of passive surveillance;
 - (g) Fencing and landscaping treatment of the secondary road frontage must ensure that clear lines of sight are maintained for motorists and pedestrians to and from the lot, and ensure the design complements the objectives of passive surveillance. To help soften the visual impact and improve the streetscape appearance of the fence, and allow visual connection between the dwelling and the street, any fence will be required to be well articulated and landscaped with appropriate planting. Articulated fencing should be provided to a maximum height of 1.8 metres. Examples of articulated fencing include, but are not limited to:

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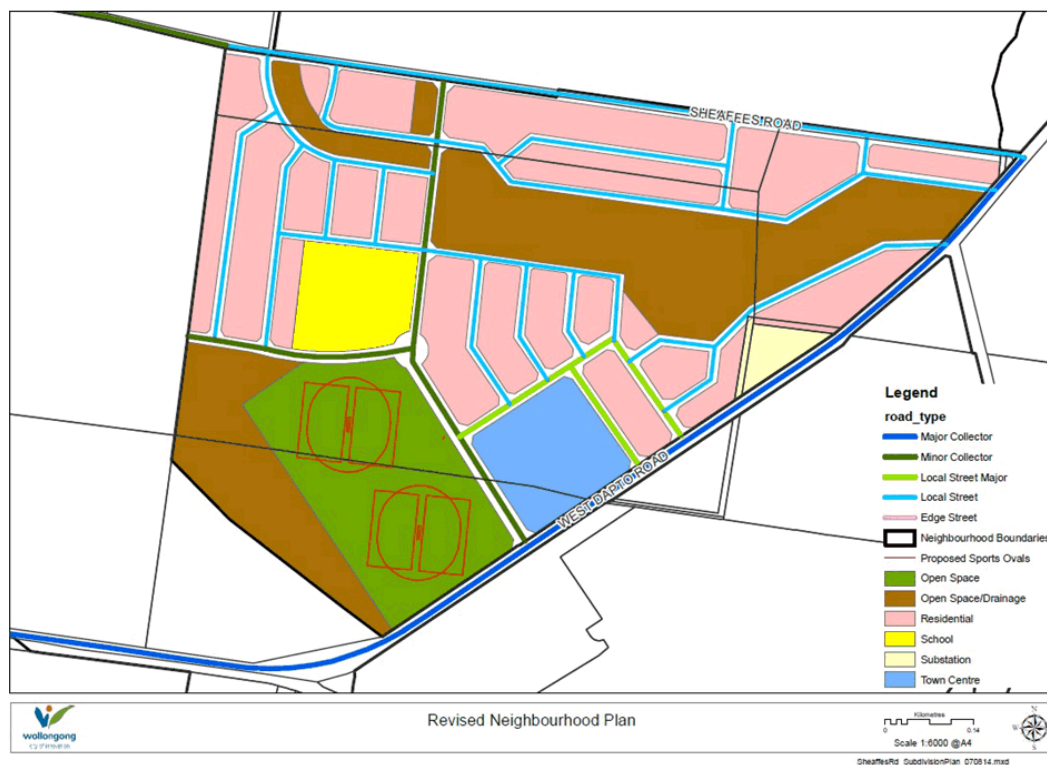
- i) Masonry to 1.2m high with open type lattice or slates above with masonry elements no wider than 150mm;
- ii) Timber Lap and Cap;
- iii) Colourbond solid to 1.2m with Colourbond lattice style top sections.

NB. Fences in bush fire prone areas shall be of a metal or masonry construction only.

- (h) Any gates associated with the secondary street fence should open inwards so as to not obstruct the road reserve.
 - (i) Where garage door openings face the secondary road they shall be a maximum of 50% of the width of the dwelling. Refer to Chapter B1: Residential Development for other car parking and access controls.
2. For Lots backing onto West Dapto Road:
- (a) An acoustic building exclusion zone of 25 metres applies along the length of the rail corridor to reflect Noise Report recommendations;
 - (b) A sound wall is to be erected by the developer along the length of the rail corridor, as indicated in the Neighbourhood Plan.

6.3.10 West Dapto Road / Sheaffes Road (south)

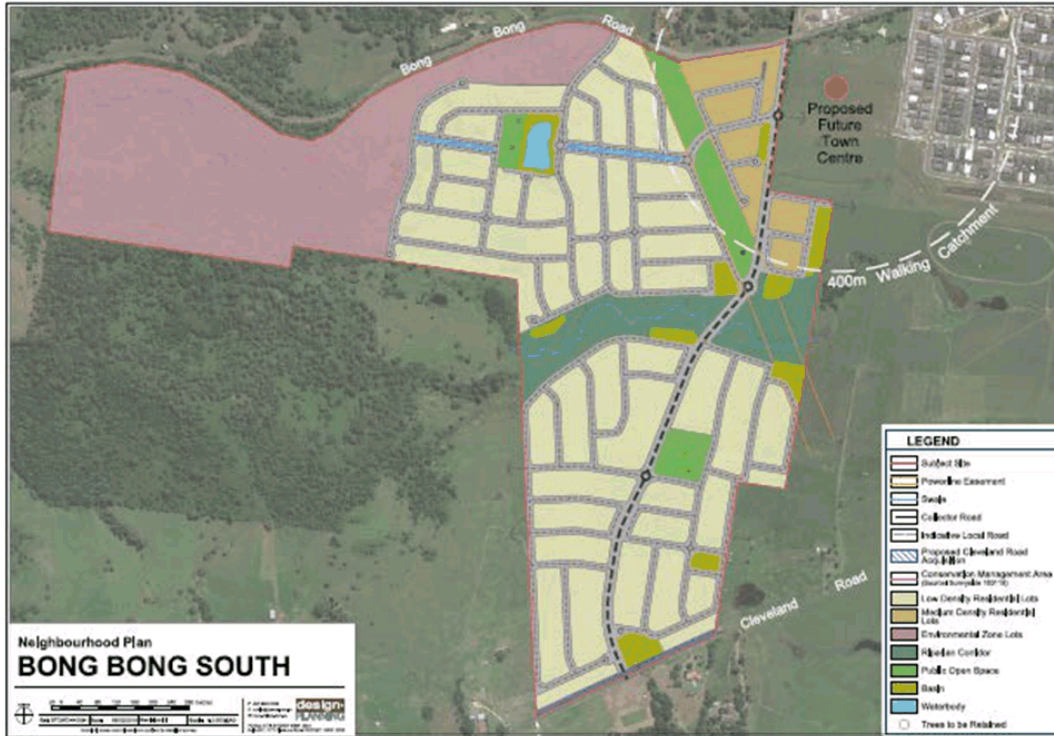
Figure 6.3.10.1 West Dapto Road / Sheaffes Road (south) Neighbourhood Plan



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6.3.11 Bong Bong South

Figure 6.3.11.1 Bong Bong South Neighbourhood Plan



7 DEVELOPMENT CONTROLS

7.1 Town Centres

7.1.1 Town Centres and Villages

Dapto major regional centre, Bong Bong Road district centre, Darkes Road village centre and the three village centres are key elements in the overall structure of West Dapto, providing focal points and contributing to the “legibility” of the urban framework, particularly as important nodes in the bus network.

A district centre (~15,000m²) is planned within the central western (Bong Bong Road) part of the release area and a village centre (~7,500m²) planned in the northern (Darkes Road) area to service the release area. These are intended to create local retail, business, commercial and community hubs providing significant local employment opportunities. They will complement rather than compete with the higher order major regional centre of Dapto.

The Town Centres will form the most urban parts of West Dapto and have a variety of building typologies with urban characteristics such as increased height, minimal or zero street setbacks and street level awnings and verandahs. The public domain is intended to reflect an urban character, with high quality hard and soft landscape and paved footpaths with advanced planting of shade trees. Parking will be at the rear of blocks and underground as well as good on street provision of kerbside parking – building setbacks to accommodate front parking lots will not be permissible, as these detract from the street qualities sought in these centres.

In addition three small village centres are planned (Wongawilli, Avondale and Yallah) to meet local shopping needs. They are to comprise a few local shops (like the existing Horsley shops), as well as providing opportunities for local business, a bus stop, community facilities such as a primary school and a choice of housing types. These would take on the role of the local centre and be the focus for the new communities at West Dapto in addition to convenience stores to be co-located with service stations if demand requires.

Controls for Neighbourhood Plans must give consideration to the ability to develop adjoining areas including linkages to those areas. New town centres are encouraged to prepare a Workplace Travel Plan and Travel Access Guides.

Objectives:

- (a) To ensure that the residents of West Dapto have access to well designed, attractive town and village centres which act as retail, business, commercial and community hubs consistent with the overall centre hierarchy for West Dapto.

Controls:

- (b) Development Applications for the development of including town centres are to be consistent with the matters contained in sections 5.1, 5.2, 5.3 and 6 of this chapter in relation to centres.

7.1.2 Design Principles

Town Centres are to be designed to comply with the following principles:

1. Establish streets with at least two storey buildings where possible. Taller buildings of 4-6 stories are encouraged in the core of the town centre.
2. Active retail street frontages are encouraged. Upper floors can be commercial or residential uses.
3. Create a lively mix of uses within the centres, providing opportunities for employment, commerce, retailing, living, entertainment and community activities.
4. Early stages of development are likely to focus on Supermarket and associated small specialty shops, therefore these should be designed as complete compositions which create places within their own right.
5. Buildings are to present urban characteristics to the street in relation to setback, form and streetscape/building design.
6. Residential densities in and around the centres are to be increased in line with density requirements at Section 2.3.1 in order to create a choice of housing opportunity within the West

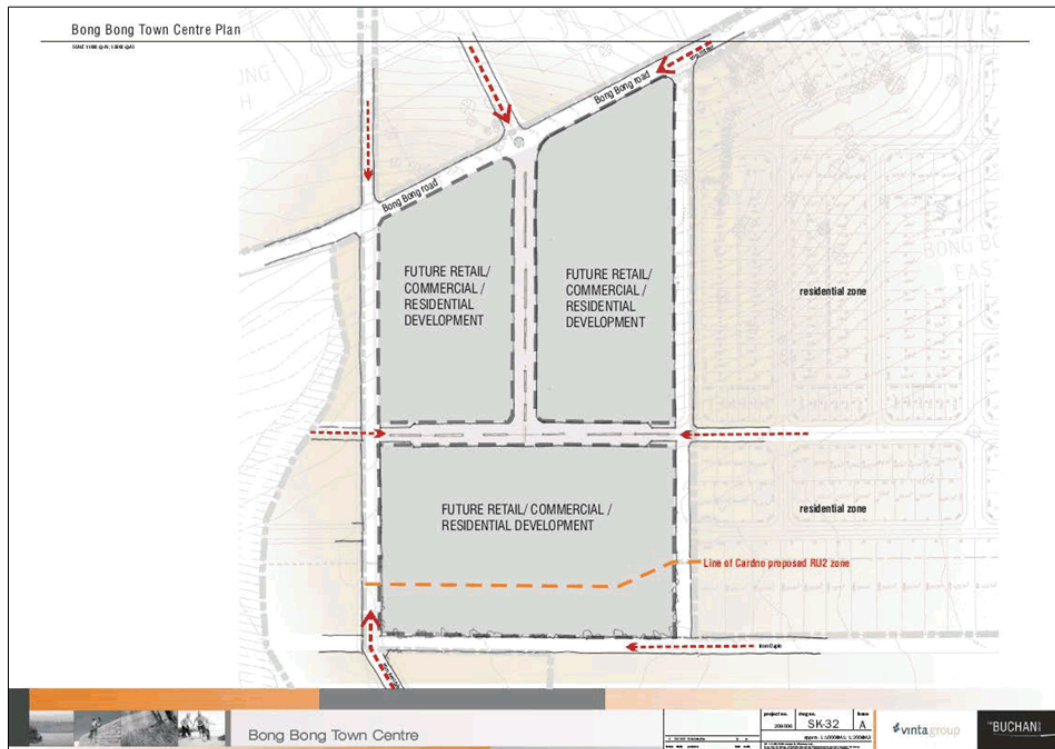
Dapto development area at locations with high amenity which are well serviced.

7. Parking lots and areas are generally not to be visible from the streets, allowing built form to perform its correct street defining urban function.
8. Establish a high quality, high value public domain with strongly urban characteristics and design.

7.1.3 Bong Bong Town Centre

In the area where Bong Bong Road adjoins the north-south arterial route a new district town centre is to be established, based on a north-south running main street. The Bong Bong Town Centre is to be the primary town centre in the release area being centrally located and at a greater distance to Dapto Town centre than the proposed Darkes Road Town Centre. The Bong Bong Town Centre is to be a supermarket based centre with a range of shops and would accommodate around 15,000m² of retail floor space.

Figure 7.1 Bong Bong Town Centre – Conceptual layout



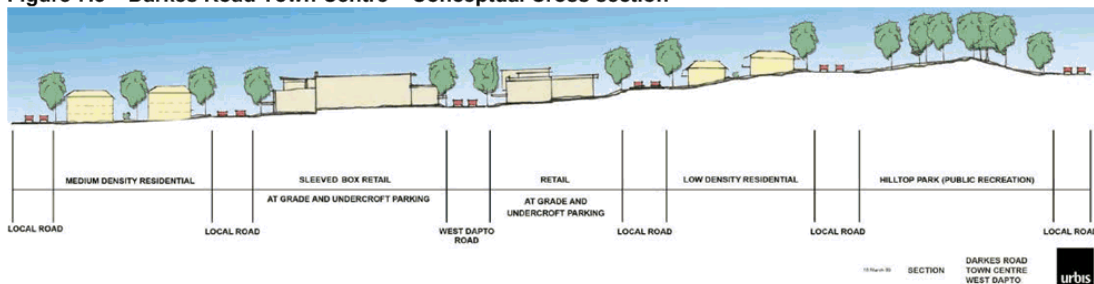
7.1.4 Darkes Road Town Centre

Along West Dapto Road a smaller secondary town centre (large village centre) is to be established based on the east–west route becoming a main street. While activity in terms of residential and business use is expected along the length of the centre, only the core part will contain the primary retail and commercial functions. It is envisaged that this centre would accommodate around 6,000m² of retail floor space to support the employment lands.

Figure 7.2 Darkes Road Town Centre – Conceptual layout



Figure 7.3 Darkes Road Town Centre – Conceptual Cross section



7.1.5 Development Controls

Development in the Town Centres is to comply with the following development controls:

1. Taller buildings of 4-6 stories are encouraged in the core of the town centre. Lower scale buildings up to 3 stories in height should surround and support the in the centre core.
2. The street wall height should have a 2-3 storey building form.
3. Single storey buildings should have a 2 storey front façade.
4. Building setbacks on main streets to be nil (zero) while other streets are generally to have a setback of between 0 – 2.5 m.

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5. Side and rear building setbacks are as follows:

Setbackk	Distance
Side	Zero
Rear	Zero where adjoins allotment zoned B2 Local Centre or 5-6m where adjoins allotment zone R3 Medium Density Residential

6. No requirements for on site open space / landscaping in the 'core' area.

7. Provision of a shared parking facilities area is encouraged with access via laneways of minor streets.

7.2 Village Centres / Local Nodes

Three small villages are proposed totalling ~7,500m² of floor space possibly at Wongawilli, Avondale and Yallah. These, in addition to 2,000m² spread through the release area in convenience stores attached to petrol stations and the like, will cater for local convenience shopping throughout the release area.

Village and local centres are to develop as localised business and higher density residential opportunities at key places / intersections where bus stops, community facilities and local open space come together to create an urban focal point for the local community.

Figure 7.4 Wongawilli Village Centre – Conceptual design



7.2.1 Design Principles

1. Establish a strong urban form that clearly distinguishes the village centre / local node from surrounding areas.
2. Create a lively mix of uses and building types within the village centre / local node that creates the opportunity to meet the daily convenience needs of surrounding communities. Village centres should accommodate a 1,000-1,500m² supermarket and variety shops.
3. Parking lots and areas are generally not to be visible from the streets, allowing built form to perform a clearly street defining urban function.
4. Positive Interface with the street and activation of the street is important.
5. Establish a high quality, high value public domain with strongly urban characteristics and design.
6. Ensure a focus on amenity taking into consideration factors such as prevailing winds, shade and shelter. Ensure positive interface with any adjacent open space or water body as an attractive feature.

7.2.1 Development Controls

1. Building setbacks can be either street aligned (zero) or setback up to 5m to create commercial forecourts or residential courts to the street.
2. Variation of setback is encouraged to create an informal organic character.
3. Building height of up to 2 storeys is encouraged to create an urban village character with upper floor uses including small scale commercial and residential developments.
4. Parking to be provided at the rear of buildings in the form of rear laneways and parking areas accessed from the rear laneways / car courts.
5. All shops should address street and be entered by front from the major street where possible or secondary street.
6. Size of shops is limited to 1500m².
7. Community congregation areas to be north facing and where possible take advantage of escarpment views.
8. Major and Secondary street parking to be maximised.

7.3 General Development Controls

Development controls in this chapter are closely linked with and cross reference other chapters of the Wollongong Comprehensive Development Control Plans.

Development controls applying to development in the West Dapto Urban Release Area should also address the following chapters:

- E1: Access for People with Disability
- E2: Crime Prevention through Environmental Design (CPTED)
- E6: Landscaping
- E16: Bush Fire Management

Variation control – Bushfire Management Activities should not occur in land zoned E2 Environmental Conservation which aim to protect Endangered Ecological Communities or significant bushland. Bushfire Management Activities can occur within the floodplain and riparian land management areas, to maximise residential development in the Residential zones for West Dapto.

- E20: Contamination
- E22: Erosion and Sediment Control

7.3.1 Flora and fauna

Environment Protection Areas

The intrinsic West Dapto environment has formed the basis for the creation of a new urban structure

and a backdrop to the creation of new communities. Areas of sensitivity have been included in environmental protection zones and will be subject to stringent development controls with rigorous controls applying in the most sensitive areas.

Areas of highest sensitivity have been, or will be in future stages, zoned Environment Conservation with minimal development allowed in these areas. This includes the main development interfaces with the escarpment on the western edge of the release area and interfaces with the predominantly west-east running creek corridors. Environment Conservation land will form a transitional development edge with lower densities of development adjacent to these areas. Increased opportunity for planting will be accommodated to complement the wooded slopes and riparian corridors.

Areas which have high conservation values and where revegetation and ongoing management is required have been, or will be, zoned Environment Management. Limited compatible development is allowed in these areas.

Areas of lesser environmental significance, but which still require sensitive design and siting have been, or will be, included in the Environmental Living zone. In these areas residential development will be allowed but on large lots and having regard to environmental criteria.

Elsewhere, areas of significant remnant vegetation will be conserved and enhanced and incorporated into the open space network as areas for passive recreation.

1. Refer to Chapter E17: Preservation and Management of Trees and Vegetation, Chapter E18: Threatened Species.

7.3.2 Indigenous and European Heritage

Heritage

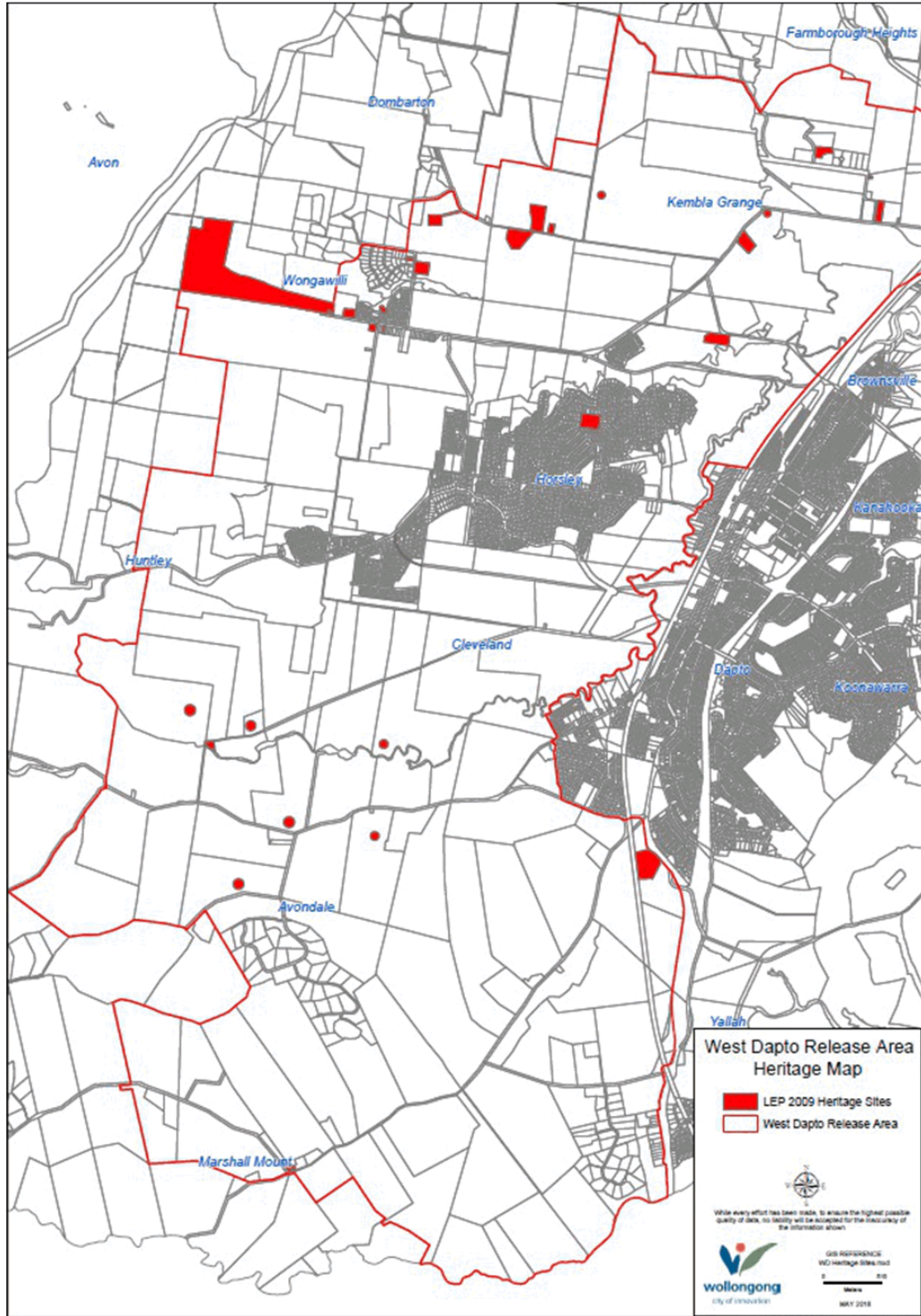
The West Dapto area has strong links to the past, both in the recent history of pastoralism and mining, and the prehistoric and post-contact Aboriginal occupation of the coastal hinterland. As well as the presence of known archaeological sites within the study area, the coastal floodplain has been identified as having potential to demonstrate further archaeological evidence of Aboriginal occupation.

This chapter aims to conserve the heritage significance of West Dapto. The identification of heritage items has been factored in to the formulation of the development structure. As a result, a number of heritage items are identified to be retained in the future development of West Dapto and have been identified as items of environmental heritage under West Dapto LEP. These have been selected for their level of significance, physical condition and integrity, contribution to the cultural landscape and character of the area, interpretive value and ability to represent a key historic theme. Figure 4.7 identifies relevant items within the West Dapto Release area. In addition to the statutory controls contained under the LEP this DCP contains requirements in relation to these items.

1. Refer to Chapter E10: Aboriginal Heritage for specific controls relating to Aboriginal Heritage.
2. Refer to Chapter E11: Heritage Conservation, "NSW Heritage Manual" and the heritage provisions of West Dapto LEP.

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Figure 7.5 Heritage Map



7.3.3 Views and Vistas

Land within the release area has been assessed for visual quality. Land falls into three categories of visual sensitivity, as indicated on Figure 6.5 and in the following table:

Zone	Objective
Zone A: High Concern for Visual Resource	Development within areas of high scenic quality must be sympathetic to that visual quality as the ability of the area to absorb change is low.
Zone B: Moderate Concern for Visual Resource	Changes to landforms, final contouring and revegetation programs will significantly contribute to reduce the visual impact and therefore must be minimised wherever possible.
Zone C: Low Concern for Visual Resource	Proposed development within this zone should remain visually subordinate to the characteristic existing landscape (note figure 6.5 does not show any land as Zone C)

Objectives:

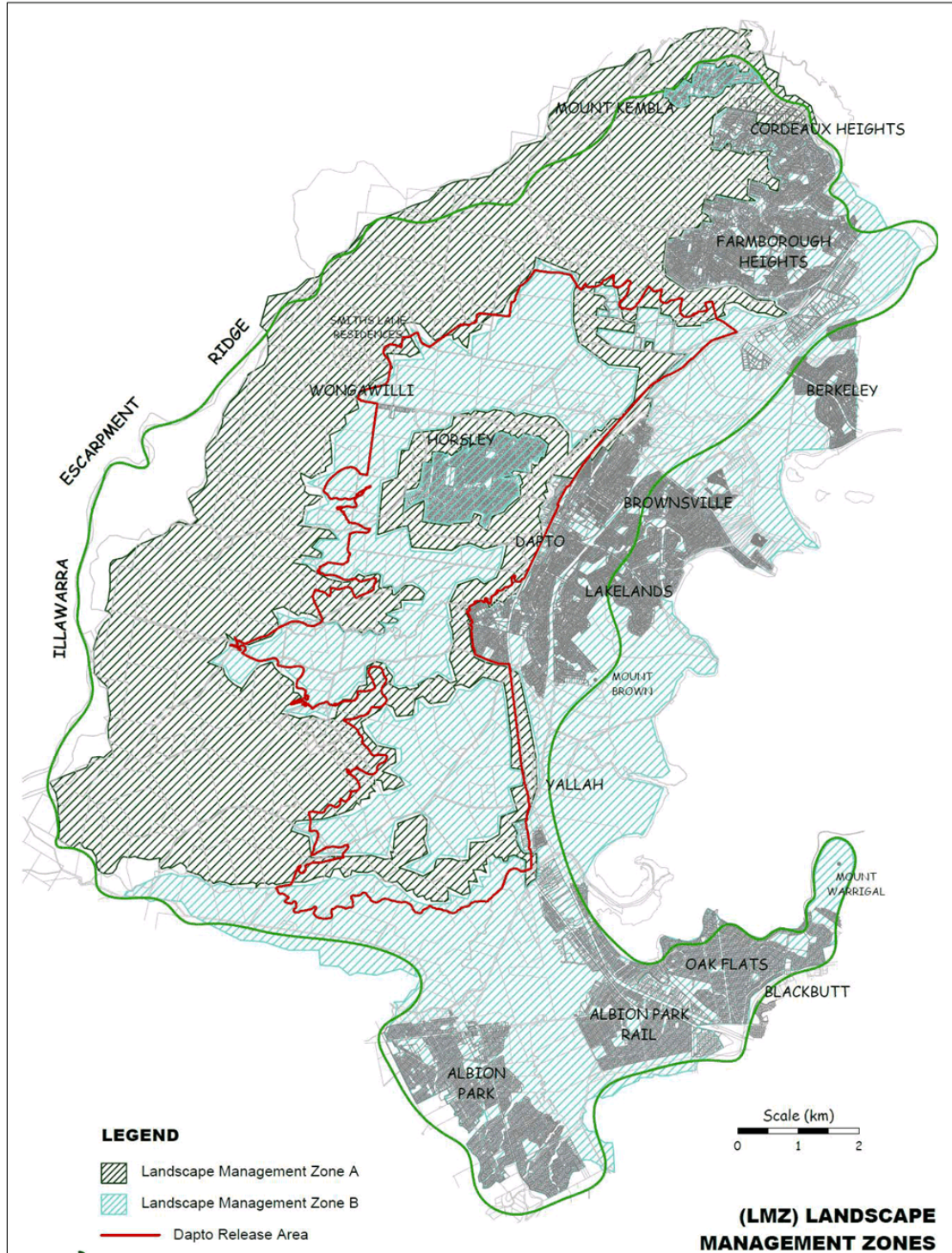
- (a) To minimise the impact of development on the scenic quality of the release area and surrounding visual catchment.
- (b) To ensure development within the visual zones identified above is consistent with the objective for that zone.

Controls:

1. A visual impact assessment is to be prepared by the applicant and submitted with any Development Application. The visual impact assessment is to demonstrate how retention of the visual quality of the area in which development is proposed has been considered in the design of the proposal particularly having regard to the visual zone in which the land is located.
2. Subdivision patterns and road layouts are to have regard to the retention of view corridors and vistas through, and to, areas of high scenic quality.
3. Primary Street planting is to be undertaken and established prior to the commencement of individual lot development or housing construction to minimise the visual impacts of proposed development.
4. In areas of high visual scenic quality (Zone A), development is to have a maximum height of 2 storeys and a maximum site coverage of 50%.

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Figure 7.6 Views and Vistas



7.3.4 Water Management

West Dapto is bisected by a series of watercourses that form part of the Mullet Creek and Duck Creek catchments. During heavy rain they can experience intense floods of short duration (rapid rise & fall of the creek levels). The residential areas of West Dapto have been designed to be above the 1% Annual Exceedence Probability (AEP) flood level. Larger flood events could occur which could result in inundation in residential areas.

To manage the increase in runoff due to increased hard surfaces, Stormwater detention is proposed to be managed within Neighbourhood planning precincts which will take into account either individual or multiple Mullet Creek sub catchments to reflect existing conditions. In addition, each neighbourhood plan will need to address water quality requirements which may or may not be a function of the proposed basin. The location of each basin will be determined as part of the Neighbourhood Plan for each precinct.

To support the neighbourhood planning process in achieving an efficient stormwater system and address the potential inequity (that only some not all land owners within a Neighbourhood precinct will lose potential developable land area) Council will provide section 94 contributions funding. This will be equivalent to the land value for approved detention basins constructed in accordance with approved Neighbourhood plans or within individual developments considered sufficiently large enough to warrant their own detention basin. The funding is available provided that the location and design of the individual basin is not done so to the detriment of the applicable Neighbourhood precinct.

To provide for long term drainage management, Council will acquire the watercourses and provide for enhanced storage areas as sites are developed, through the section 94 contributions.

Objectives:

- (a) To create a network of interconnected multi-functional creek corridors within the West Dapto release area which act as creeks, flood ways, flora and fauna habitat, water quality treatment areas, cyclist and pedestrian access, and drainage corridors.
- (b) To conserve and restore remnant native vegetation along creek lines, escarpment vegetation to provide linkages and "stepping stones" for wildlife movement.
- (c) To introduce wildlife corridors and establish riparian vegetation within natural creeklines, providing a functioning habitat for birds, fish and diverse native flora.
- (d) To protect and restore a range of aquatic habitats within the creeks.
- (e) To enhance long-term environmental protection of the receiving waters and Lake Illawarra.
- (f) To facilitate the provision of an integrated approach to Water Management development within West Dapto.
- (g) To ensure the integration of various functions into the multiple use drainage systems of West Dapto to achieve aesthetic, recreational, environmental and economic benefits.
- (h) To provide appropriate landscape treatments that enhance the required functions of the riparian corridors and reduce the impact of utilitarian drainage structures on the amenity of the open space.
- (i) To ensure that development is designed to minimise the risk posed by flooding.
- (j) To protect the environment of Lake Illawarra.

Controls:

1. A water cycle management report is to be submitted with Development Applications for subdivision in accordance with the Water Cycle Management Study (URS, 2004) and the Floodplain Risk Management Study and Plan (Bewsher Consulting, 2006). The report must address water cycle management, water quality management, watercourse and corridor management, conservation and rehabilitation of aquatic habitat, and floodplain management. It must also address the requirements of the NSW Department of Environment, Climate Change and Water (DECCW).
2. Land that remains below the 1% AEP flood level after flood management works, approved by the consent authority, is not suitable for urban development.
3. Subdivision of land is not to create any additional flood affected residential allotments. A flood affect allotment is defined as being wholly or partly below the Flood Planning Level (FPL) (i.e. the

1% AEP flood level plus a freeboard of 500mm).

4. There is to be no net removal of flood plain storage capacity.
5. Residential dwellings are to be located clear of the effect of the FPL with floor levels above the FPL (i.e. the 1% AEP flood level plus a freeboard of 500mm).
6. Subdivisions are to be design according to Water Sensitive Urban Design principles. Development applications are to include a statement indicating how the proposed design complies with these principles. Refer to Chapter E15: Water Sensitive Urban Design.
7. Detention basins are required for each sub-catchment to control the increase in runoff. Consideration will be given to proposals for larger basins that serve multiple sub-catchments or other innovative design. The location of basins needs to be agreed to by adjoining land owners as part the Neighbourhood Plan. Where a basin is on an adjoining property, owners consent and the creation of an easement is required. The design of detention basins shall enable the colonisation by native fish species moving upstream from Mullet and Duck Creeks.
8. Refer to Chapter E13: Floodplain Management and Chapter E14: Stormwater Management for additional controls relating to floodplain and stormwater management.

Note: Flood events may be larger than the Flood Planning Level of 1% AEP which may impact on properties and dwellings.

7.3.5 Riparian Corridors

Open Space and Riparian Corridors

West Dapto is dissected by fast flowing creeks and extensive areas of flood prone land. These areas are not suitable for residential development but instead offer an opportunity for recreation, visual separation and conservation. The corridors will result in significant amounts of open space creating wider landscapes within easy reach of all parts of the new development areas, meaning walking, cycling, recreation and nature will form a part of daily life. These riparian corridors have been, or will be, zoned for Environment Protection with limited development being allowed in these areas.

Adjacent to this land certain land is, or will be, zoned Rural Landscape. The intention of these areas is to provide a buffer to the riparian corridors where the land is either not suitable for residential development or has environmental values. The outdoor recreational facilities will be located outside of the core riparian area to protect the environmental values.

Open space is to be provided throughout the development area in the form of local parks and district parks for primarily passive recreation, larger formal areas for active recreation, environmental reserves of retained bushland habitats, and riparian corridors which link the escarpment to the wide floodplains. These will be combined with avenues of intensive planting and water management running through the urban street pattern to create a connected web of open space. This will encourage walking and create a sense of nature interacting with urbanity.

Existing parks and recreational facilities have been zoned through the LEP and new parks will be designed into new neighbourhoods.

To provide for long term drainage management, Council will acquire the main watercourses as sites are developed, through the section 94 contributions. Land between the watercourse and the 1% Annual Exceedence Probability flood level can either be:

1. Retained in private ownership and used for grazing, recreational activities or other permissible uses, or
2. Dedicated to Council at no cost to Council, for use as bushland, agricultural purposes or recreational purposes. There is no Section 94 off-set for the dedication / transfer of this land.

Objectives:

- (a) To conserve and rehabilitate riparian corridors within the West Dapto release area having regard to the significant environmental and other values of this land.
- (b) To ensure that revegetation of riparian corridors is consistent with the Flooding Strategy.

Controls:

1. Development Applications shall identify the proposed land use and ownership of the riparian land.

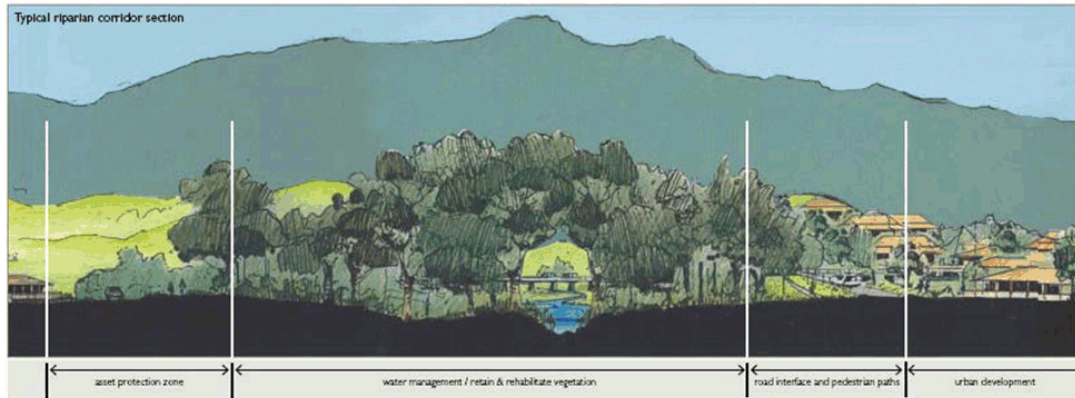
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2. Revegetation of riparian corridors shall not increase the flood risk to surrounding residential land.
3. Refer to Chapter E23: Riparian Land Management for controls relating to riparian lands.

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4. The extent of riparian management activities is limited to the width of the 1% AEP flood level, which has been typically mapped as the boundary of the E3 Environmental Management and R2 Low Density Residential zone.
5. The Riparian Land Management Area can include land used for bushfire mitigation activities.



7.3.6 Open Space and Recreation

Objectives:

- (a) To ensure the future residents of West Dapto have access to a range of high quality, functional areas for passive and active recreation.

Controls:

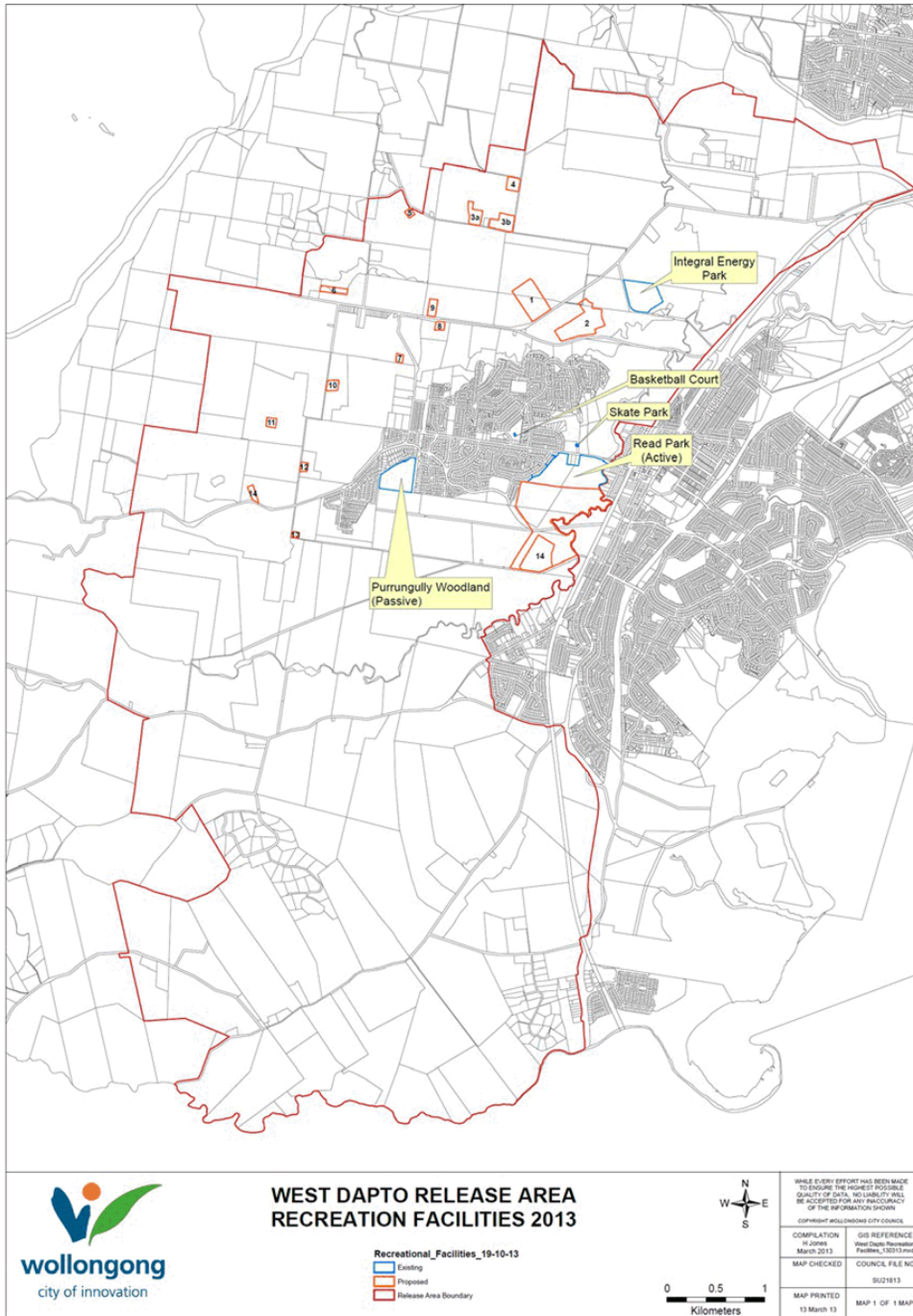
1. Development Applications must include facilities and open space areas that are unique, either in design or characteristic, and which fit into the overall hierarchy of the West Dapto release area.
2. Playing fields should be located to take advantage of reasonably level land that may intersect with riverine corridors (maybe partially flood liable or filled) environment land (e.g. tree stands), senior schools or village nodes.
3. Neighbourhood Parks are to be generally located with a 1-2km radius (overlapping) and be 2-4ha in area. Neighbourhood Parks are to provide for an even mix of active and passive recreational opportunities across the release area. They will be designed for formal and informal sports, walking, picnic / barbeque areas, retained vegetation particularly shade bearing canopy trees and where size permits, opportunity for safe dog off leash areas.

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- Local parks are to be generally located within 400m of all residential uses (i.e. parks located with a 400m radius) and be generally 0.5ha or larger in area. Local parks should preferably incorporate stands of trees or environmental features to create a strong landscape character. They should also provide children’s play areas, pavilions and kick around areas.

Figure 7.6.1 Recreation Facilities 2013

NB: Refer to West Dapto Section West Dapto Section 94 Plan – “Figure 4.2.1 Existing and proposed open space facilities” for details of each proposed facility



7.3.7 Acid Sulfate Soils

Certain land in West Dapto is subject to Acid Sulfate Soils (refer to the maps in the Wollongong LEP (West Dapto) 2010). If not correctly managed, the soils can adversely impact on the environment and development.

Objectives:

- (a) To ensure that development is designed, constructed and maintained to minimise and contain the risk posed by acid sulfate soils.
- (b) To protect downstream receiving waters and Lake Illawarra.

Controls:

1. Land which is subject to Acid Sulfate Soils shall be accompanied by an Acid Sulfate Soils Management Plan which demonstrates that the subject land is suitable for the proposed purpose, or will be suitable following remediation.

7.3.8 Services

Objectives:

- (a) To ensure adequate services are provided to facilitate new development.
- (b) To minimise the visual impact of services on neighbourhoods and land requirements for the provision of essential services.

Controls:

1. All services, including telecommunications, cable television, and the National Broadband Network (where appropriate) are to be provided underground.
2. Common trenching of services is encouraged, and consideration must be given to the location of underground services and landscape planting.

7.3.9 Subdivision Layout

Residential Density Distribution

The urban structure is predicated on providing for varying housing densities. In particular, medium density housing is proposed around the regional, district and village centres. Medium residential densities are essential to make the provision of efficient public transport viable and to provide support for viable and vibrant centres.

Housing areas will enable the provision of a range of housing products, including 3-4 storey apartments, 2-3 storey townhouses and single storey villas and courtyard homes. A range of housing types are to be provided to ensure that the housing needs of all household types are met. A diverse demographic profile will help ensure a sustainable and vibrant community in the long term.

In the early stages of the release the areas of lower residential density (R2 Low Density Residential zone), should provide an average of 13 dwellings per hectare and then in later stages, 15 dwellings. In the more sensitive areas, the structure plan proposes around 5 to 10 dwellings per hectare to enable protection of environmental values and minimize visual impact.

The areas of medium residential density (R3 Medium Density Residential zone) should provide an average of 20 to 25 dwellings per hectare.

Walking and Cycling Networks

The urban structure has been designed around the notion of walkable villages, with a series of town centres, village centres, and local nodes providing bus stops, local shops and amenities, community facilities and schools, denser housing types and mixed use job opportunities. By locating facilities close to people and by co-locating them the aim is to reduce vehicle kilometres travelled (VKT) and to increase the proportion of local trips made on foot or by bicycle. This is a traditional approach to 'townmaking' which resulted in a series of places of character, as opposed to the placelessness of urban sprawl.

The riparian corridors are to be designed to promote walking and cycling through extensive pathway systems, and will clearly link to key destinations such as schools to promote walkability. The walkways and cycleways should be located outside of the 'core' riparian areas.

To promote cycling, key routes have been identified for on-road and on-footpath cycle provision. These link key places and destinations, and will connect with the east-west running cycle routes running along the riparian corridors (Figure 4.6). This will create a web of cycling opportunities to encourage a sustainable and healthy approach to local travel.

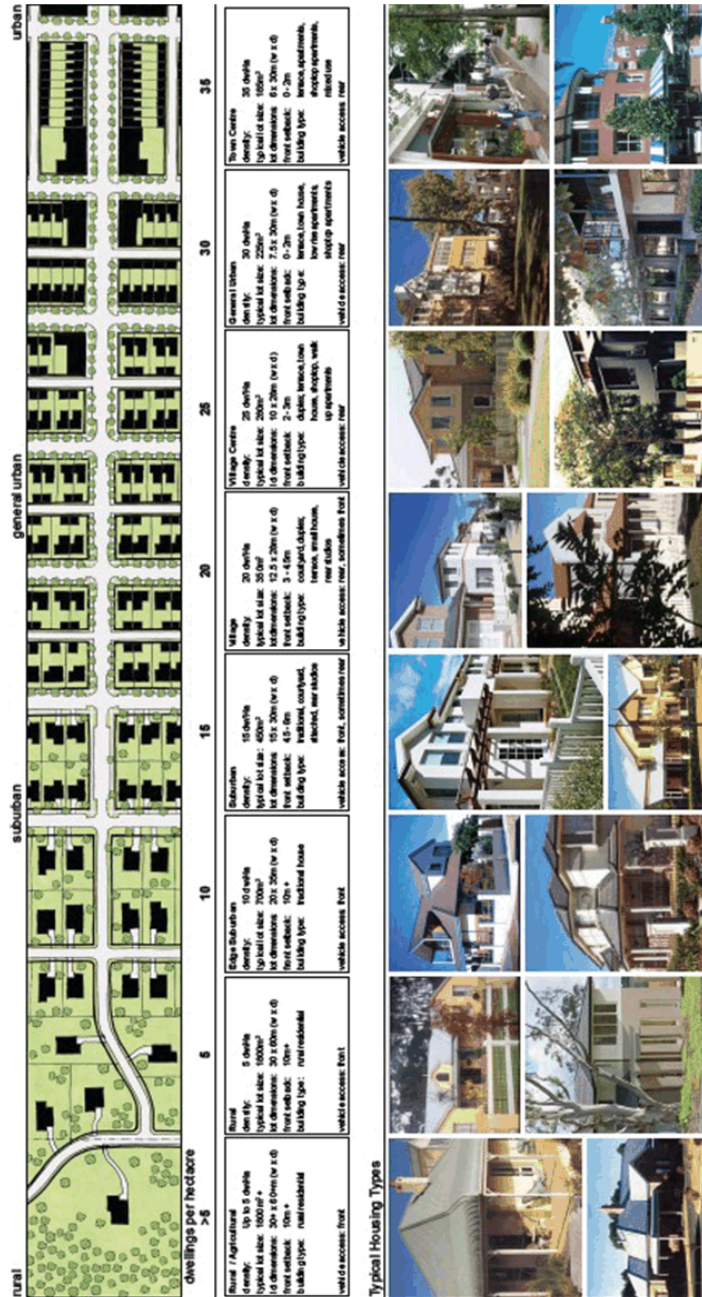
Objectives:

- (a) To achieve a superior design of development.
- (b) To maximise solar access and microclimatic benefits to residential lots.
- (c) To have regard to topographical features, site characteristics and constraints, and special features within a sector.
- (d) To meet a range of housing needs and provide housing diversity and choice.
- (e) To facilitate surveillance of public open spaces.
- (f) To encourage non-motorised modes of transport and accessibility within the development.
- (g) To develop and maintain an ecologically sustainable environment, reduce use of fossil fuels and encourage use of renewable energy.

Controls:

1. Lot size and layout must respond to the physical characteristics of the land, such as slope and existing significant vegetation, and site constraints including bushfire risk.
2. A variety of lot sizes and dimensions must be provided to achieve the density requirements for residential development (Refer to Figure 6.6).
3. The subdivision layout is to incorporate adequate pedestrian, cycle and vehicle links to the road network, public transport nodes, pedestrian/cyclist network, and public open space areas. The street and subdivision layout should minimise fuel use by reducing travel distances and maximising public transport effectiveness. Connectivity within neighbourhoods is essential to ensure the majority of dwellings are within 400 metres walking distance to bus stops.
4. Lot design is to facilitate housing fronting onto creek line corridors and other areas of public open space, to incorporate these spaces into the living environment, facilitate surveillance, and prevent isolation and degradation of these spaces.
5. The subdivision layout provides for a neighbourhood in which a range of basic retail services are within easy walking distance of a large proportion of residents.
6. The majority of lots should achieve a 5 star rating with the remainder achieving a minimum 4 star rating, as defined by an analysis determined from the Sustainable Energy Development Authority's (SEDA) "Solar Access For Lots" document.
7. Lots must have the appropriate area and dimensions for the siting of dwellings, canopy trees and other vegetation, private outdoor open space, rainwater tank, and vehicular access and on-site parking.
8. Lots must be of sufficient size and orientation with the main living room(s) able to receive northern sunlight in winter.

Figure 7.7 Housing choice transect



7.3.10 The Road System

Road Network

West Dapto is to have a strong structure or 'skeleton' to create easy movement routes and to help with way finding. This is called a 'legible' street pattern and provides a clear street hierarchy. The hierarchy of different streets is clearly demonstrated by their design, width as well as a number of other attributes.

The existing routes of West Dapto Road, Shone Avenue, Bong Bong Road, Cleveland Road, Avondale Road, Huntley Road, Marshall Mount Road and Yallah Road have all been incorporated into the new pattern, both as reminders of the past and as key routes in the future.

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The necessary road network will be implemented in stages and will incorporate a package of networks which will provide a timely and affordable response and ensure that there is adequate flood free access to Horsley and the greater release area.

Public Transport

The structure of the West Dapto release area gives primacy to accessibility and in particular accessibility by public transport.

To this end the existing railway station at Dapto will be linked to the developing suburbs by local and feeder bus routes using Bong Bong Road, Fowlers Road, Darkes Road and a new access link running north south to the west of Mullet Creek.

The Kembla Grange Station will continue to serve the employment area and Kembla Grange race track and may also contain a bus interchange and commuter parking facilities.

In order to create a sustainable development outcome for West Dapto an effective bus transport system is one of the keys to reducing the use of private vehicles for all trips. The main road structure has been designed with this in mind, whereby a primary bus loop has been created for express services, linking key centres within the new pattern. Secondary routes link all other centres to this, meaning that the majority of residents will be within a five minute (400m) walk of a local bus stop.

Objectives:

- (a) Sustainable transport and travel to, from, and within West Dapto together with less use of private motor vehicles, fewer motor vehicle kilometres travelled, and improved air quality.
- (b) Safety for all road users, particularly pedestrians, cyclists, children and older people.
- (c) Safe, convenient and direct access by non-motorised means from residences to public transport, employment areas, adjoining sectors, open space, community facilities and other services.
- (d) To encourage travel by pedestrians, cyclists and public transport rather than travel by private motor vehicle.
- (e) To become less car dependent and reduce the private motor vehicle kilometres travelled (vkt).
- (f) To provide a range of traffic and transport routes throughout the area.

Controls:

1. Development Applications must include a traffic analysis and road master plan, prepared by a suitably qualified professional, and demonstrate that the objectives and controls in regard to the roads will be achieved.
2. Streets are to be designed in accordance with the Street Hierarchy identified in the West Dapto Master Plan as amended and shall have regard to function. The road hierarchy is as follows:
 - (a) Arterial Road – These streets are to be the main structural routes connecting the West Dapto development area together. They also serve to link to the surrounding areas and are the primary public transport routes. Street based uses fronting the road with generous footpaths (on both sides where appropriate) and street trees typify these streets especially in town and village centres.
 - (b) Collector – Along key connecting streets between local centres and containing bus routes will be the main avenues. These will be attractive tree lined routes for buses, private vehicles and pedestrians to share. They will contain a footpath on one side or both sides where appropriate.
 - (c) Local Streets – Neighbourhood streets with good landscape/verges and on-street parking to limit speeding. They will contain a footpath on one side or both sides where appropriate.
 - (d) Edge Streets – Along bushland and open space edged, low key streets which front open space are intended. These help in managing water and fire and give good outlook to houses on the edge. They will contain a footpath on one side or both sides where appropriate.
 - (e) Rear Lanes – Where denser housing occurs, for instance around local centres, rear access allows good street frontages for attached or smaller dwellings. Lanes and car courts can have garages with studies above for security and housing choice. They will contain a footpath on one side where appropriate.

See Figures 6.9 Road Types Plan and Figure 6.10 Road Sections below, for more detail.

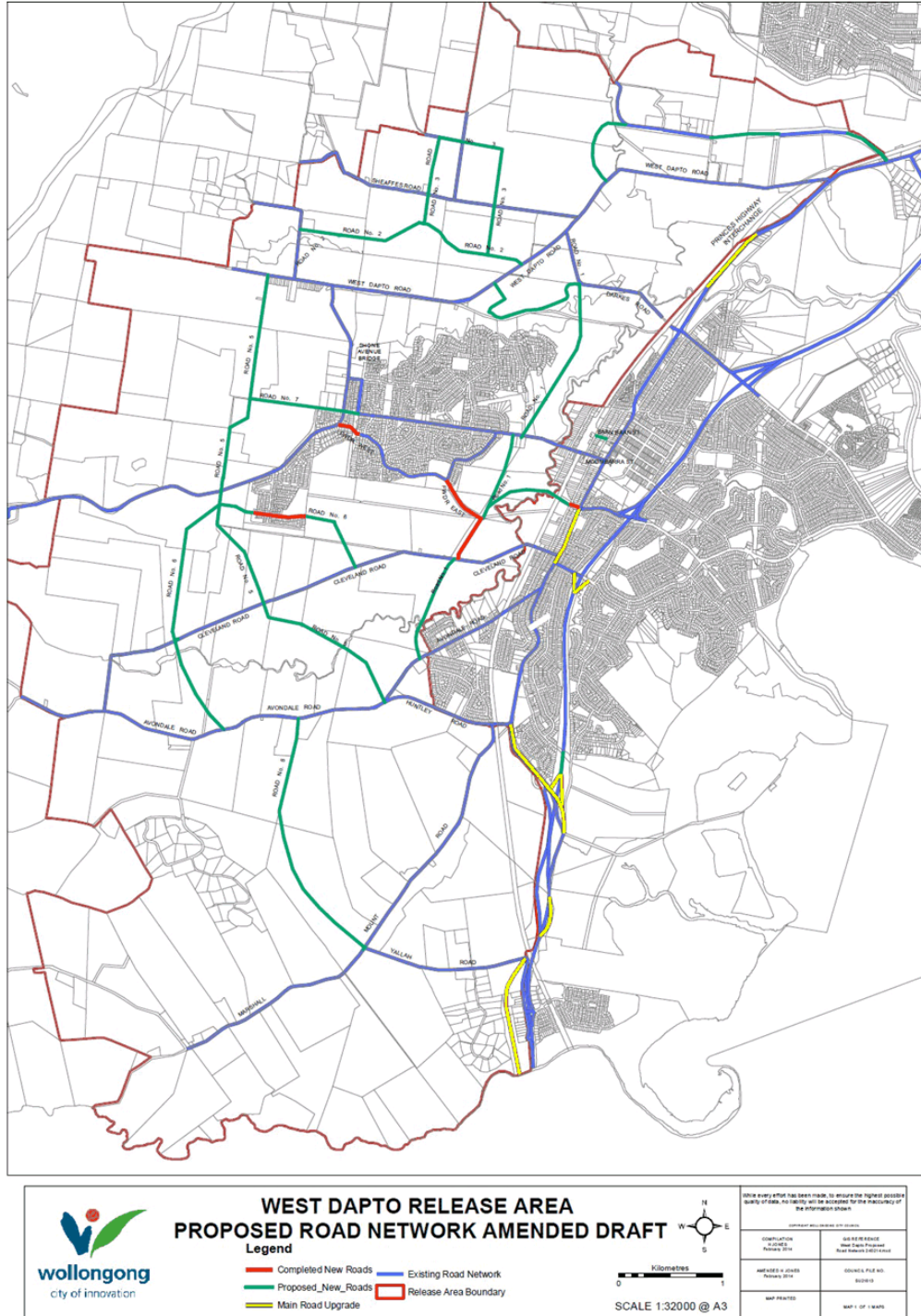
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3. Land to create road reserve of sufficient width to enable the construction of the typical road cross section is required to be dedicated to Council.
4. The street pattern must provide direct, safe, and convenient pedestrian and cyclist access from housing and employment areas to public transport stops.
5. Each new neighbourhood is to provide safe and convenient walking and cycling connections to adjoining neighbourhoods, and to adjacent areas of open space, services and other facilities.
6. Connectivity within neighbourhoods is required to ensure the majority of dwellings are within 400 metres walking distance to bus stops.
7. Construction over or within waterways should have regard to the Fish Passage Guidelines developed by NSW Fisheries.

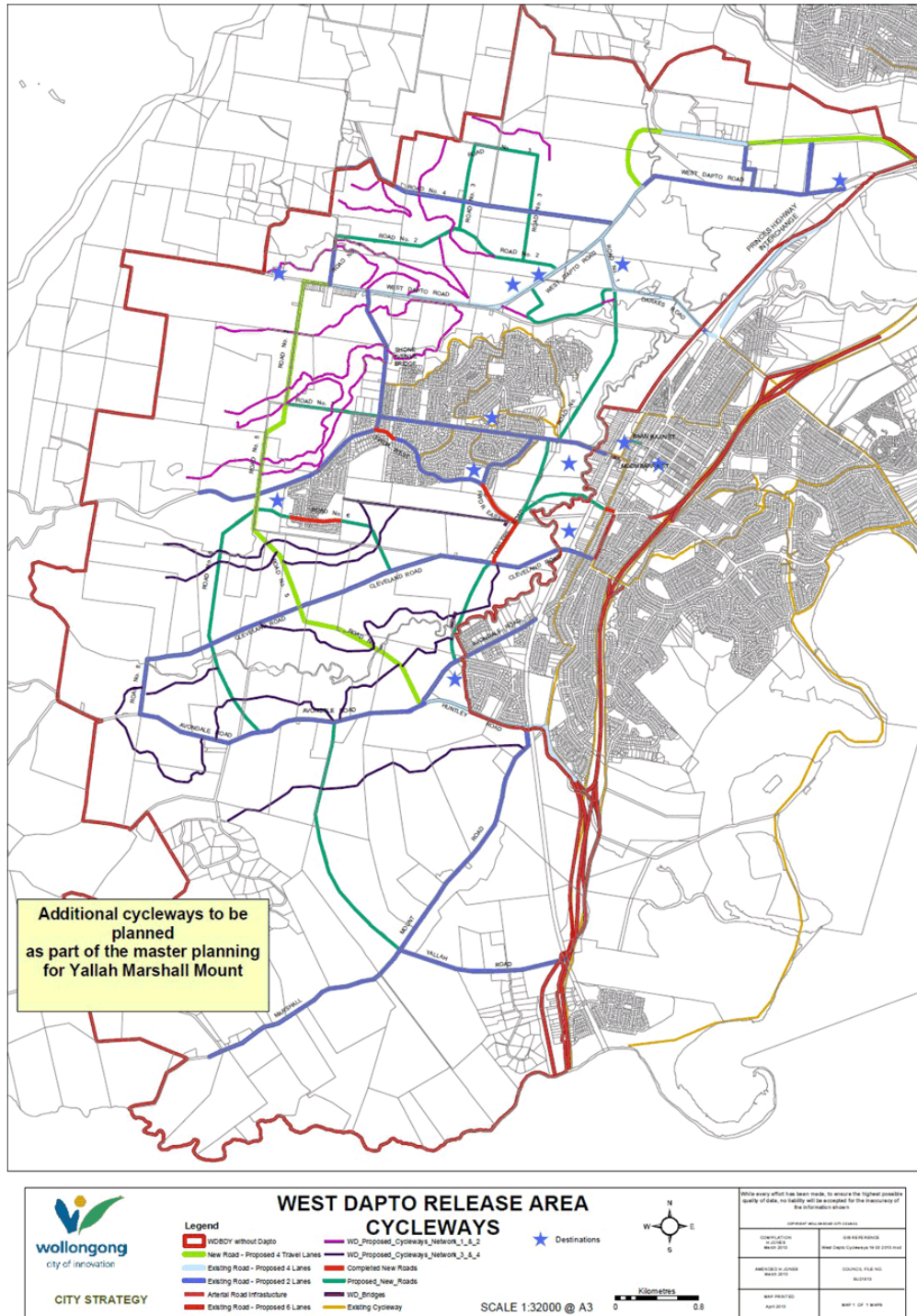
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Figure 7.8 Proposed Road Network



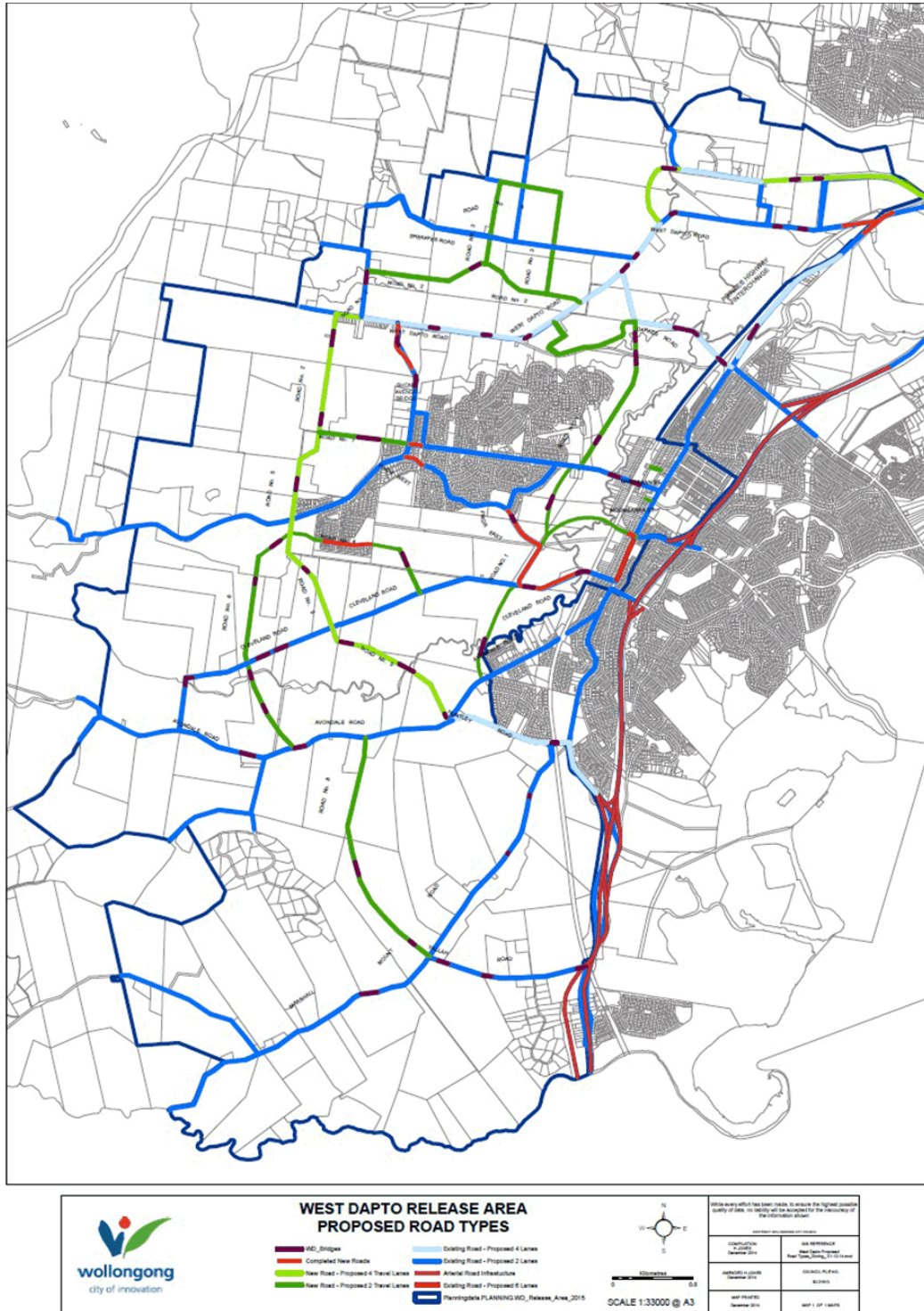
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Figure 7.9 Cycleway network



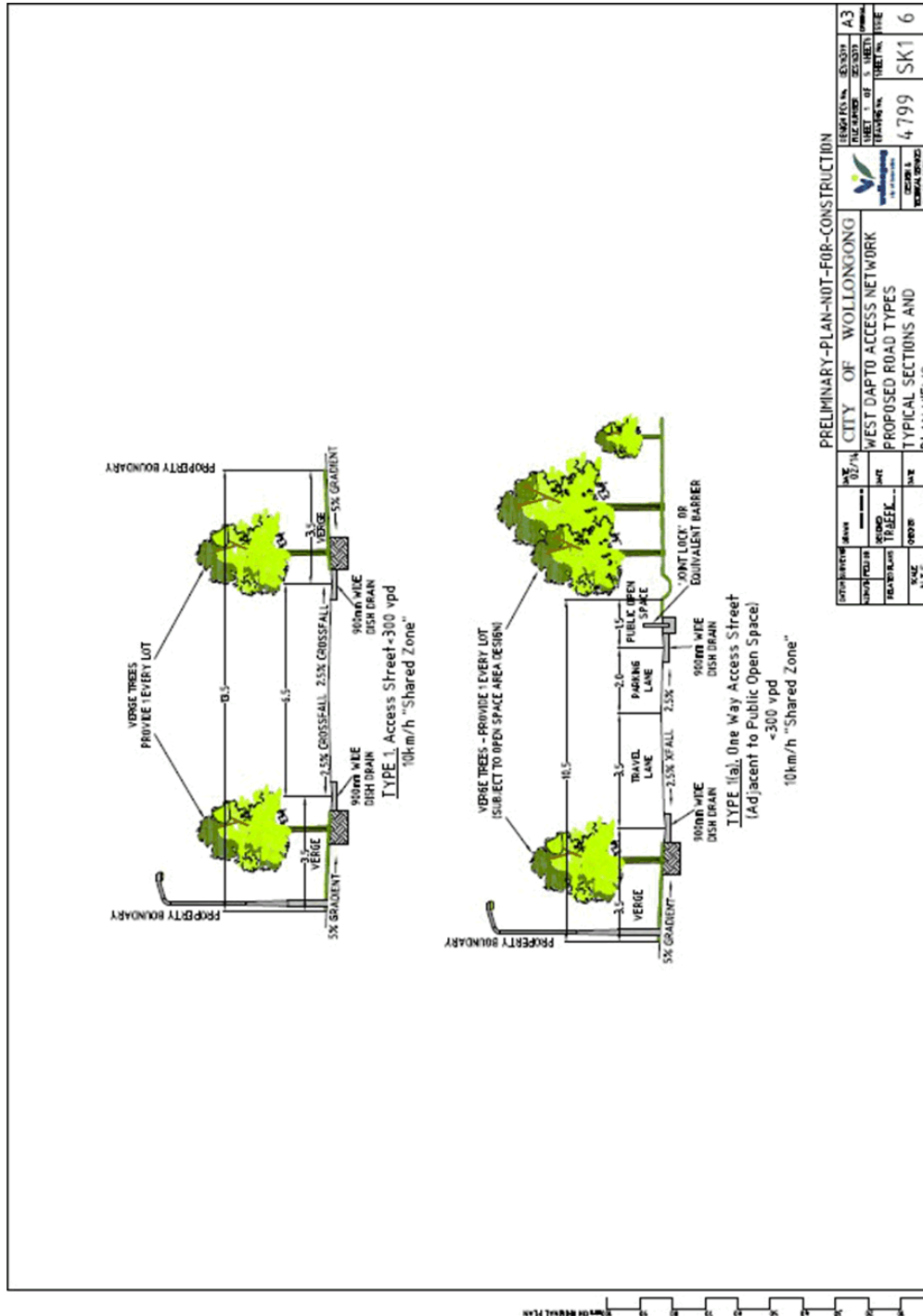
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Figure 7.10 Road Types

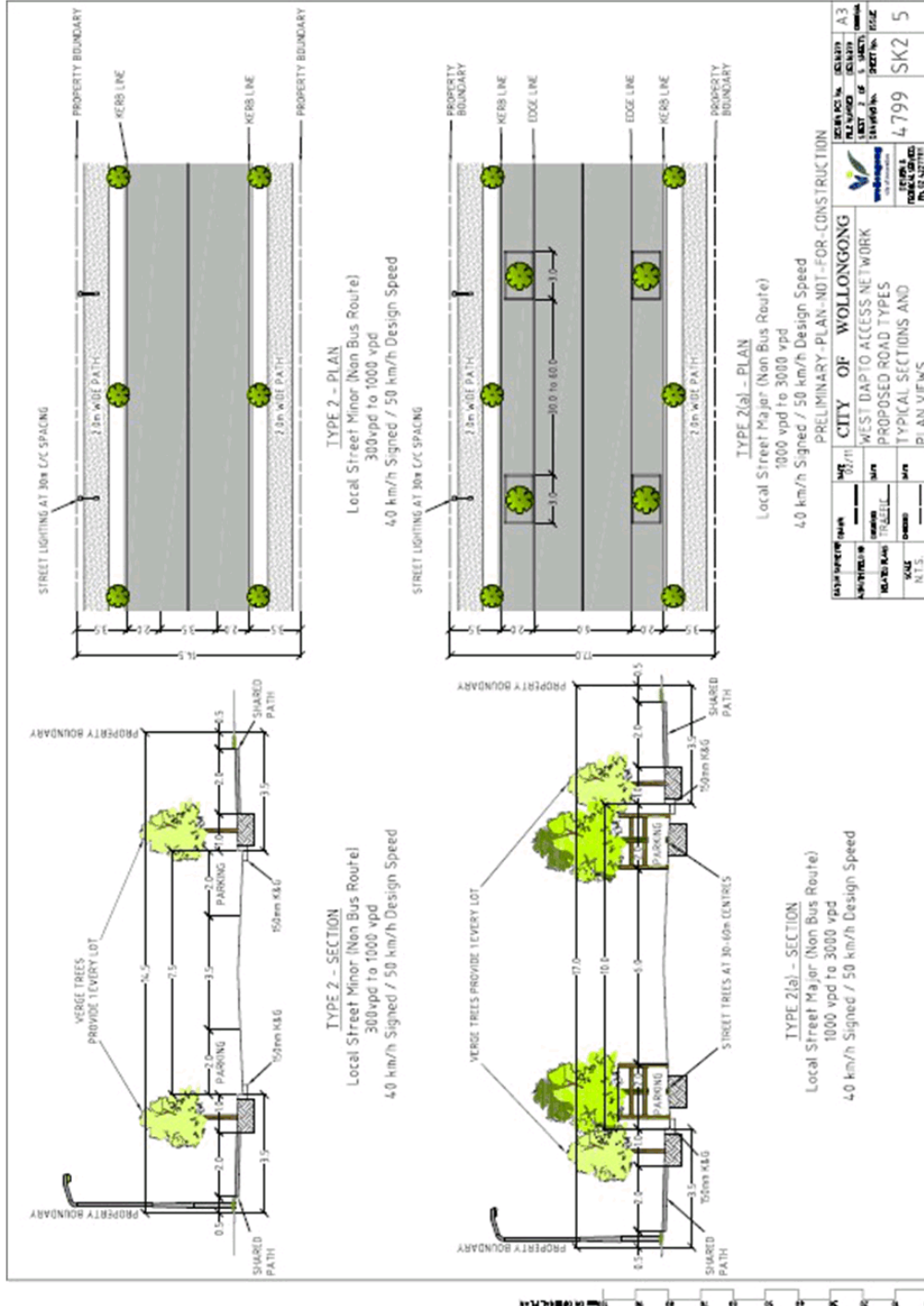


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Figure 7.11 Road Cross Sections

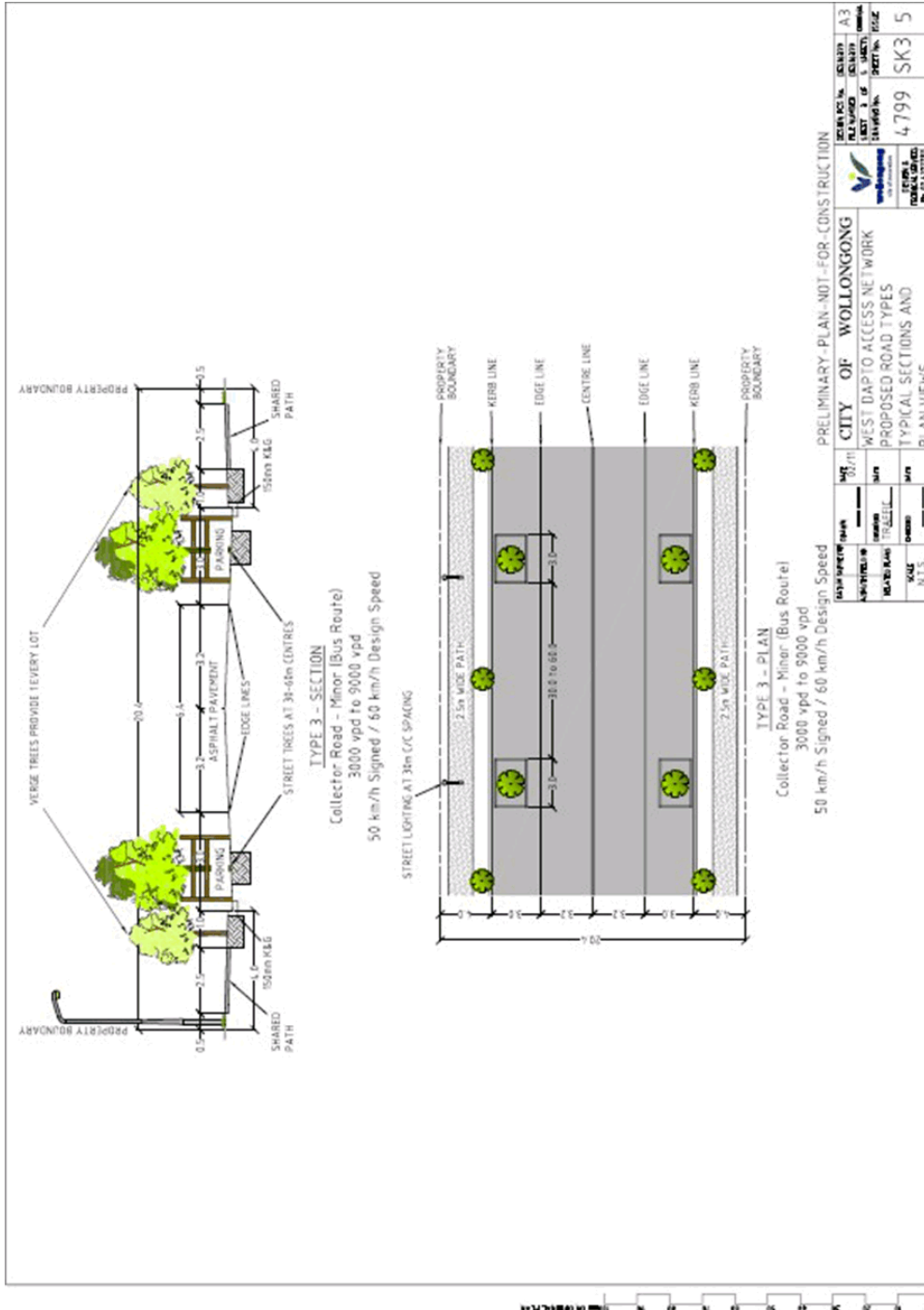


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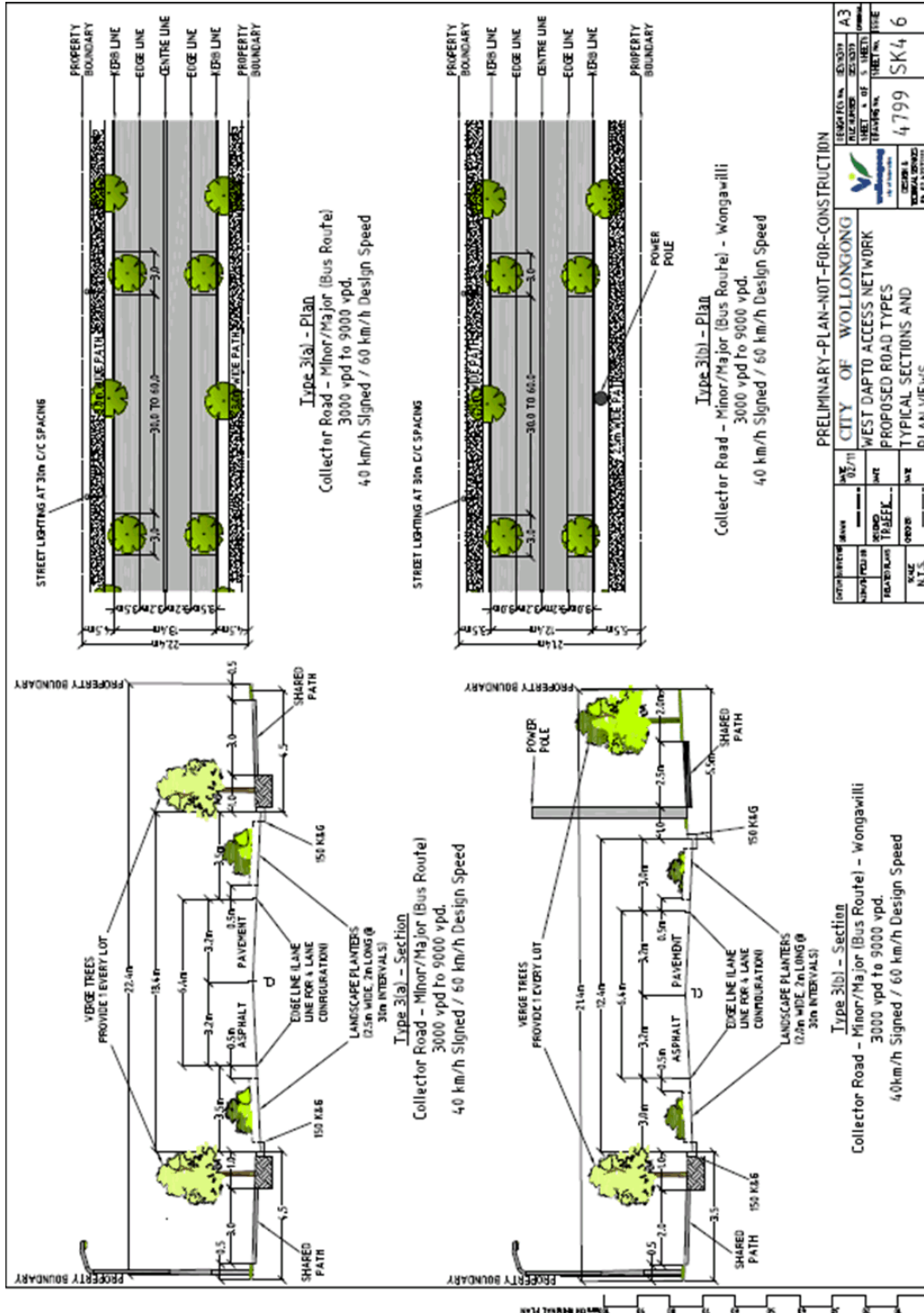


DATE PREPARED	DATE REVIEWED	DATE APPROVED	DATE REVISED	DATE APPROVED
SCALE	DATE	SCALE	DATE	SCALE
N.T.S.		N.T.S.		N.T.S.
CITY OF WOLLONGONG WEST DAPTO ACCESS NETWORK PROPOSED ROAD TYPES TYPICAL SECTIONS AND PLAN VIEWS				
PRELIMINARY-PLAN-NOT-FOR-CONSTRUCTION			DRAWING NO. 4799	SHEET NO. SK2
LOCAL STREET MINOR (NON BUS ROUTE) 300 vpd TO 1000 vpd 40 km/h SIGNED / 50 km/h DESIGN SPEED			PROJECT NO. A3	SHEET NO. 5

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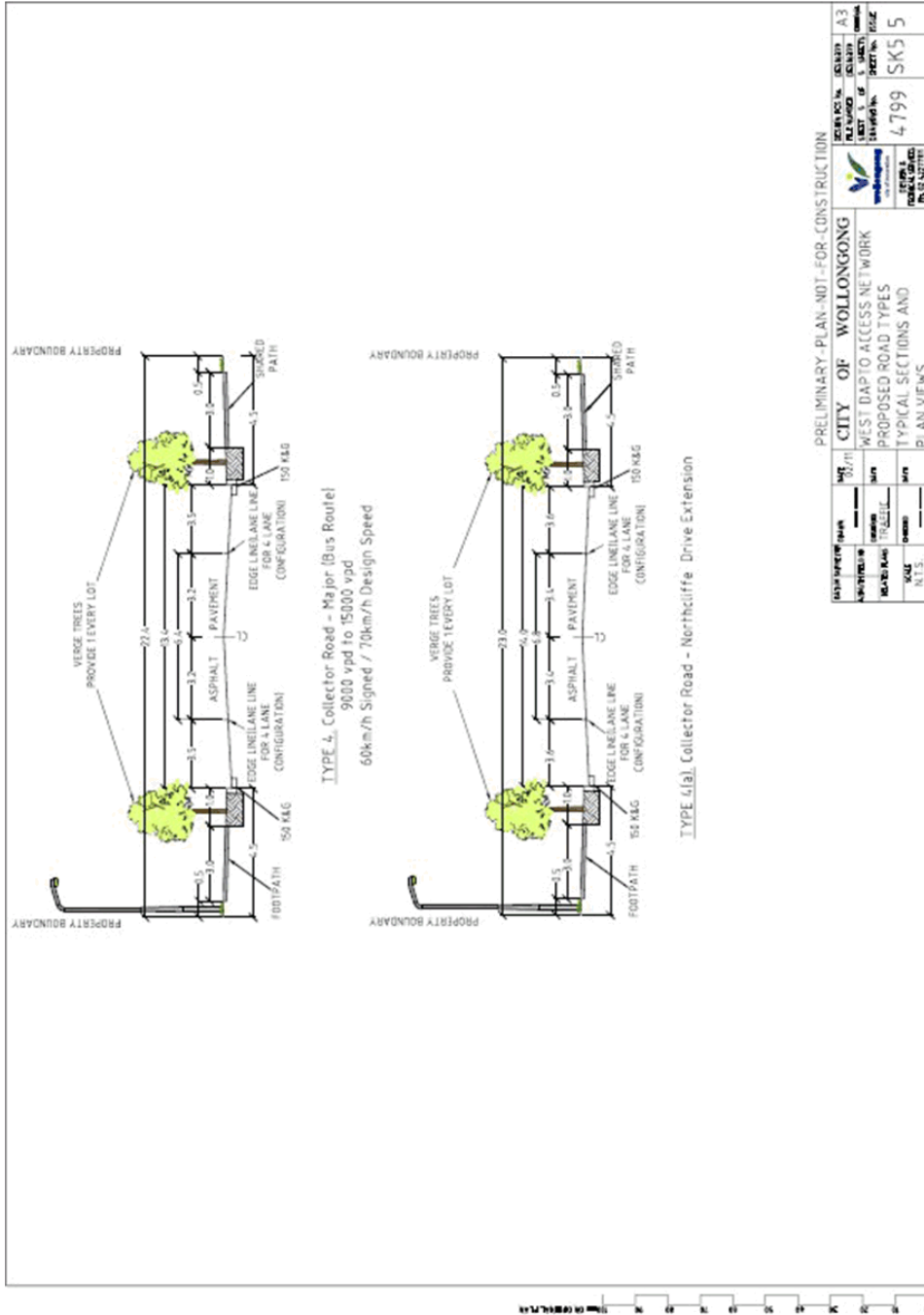


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PRELIMINARY-PLAN-NOT-FOR-CONSTRUCTION		CITY OF WOLLONGONG	
DATE	BY	PROJECT	NO.
12/11/18	WJ	WEST DAPTO ACCESS NETWORK	4799
REVISION	DATE	DESCRIPTION	BY
1	12/11/18	PROPOSED ROAD TYPES	WJ
2	12/11/18	TYPICAL SECTIONS AND PLAN VIEWS	WJ
DRAWN BY		CHECKED BY	DATE
WJ		WJ	12/11/18
PROJECT NO.		PROJECT NAME	PROJECT TITLE
4799		WEST DAPTO ACCESS NETWORK	SK46
DRAWN BY		CHECKED BY	DATE
WJ		WJ	12/11/18
PROJECT NO.		PROJECT NAME	PROJECT TITLE
4799		WEST DAPTO ACCESS NETWORK	SK46

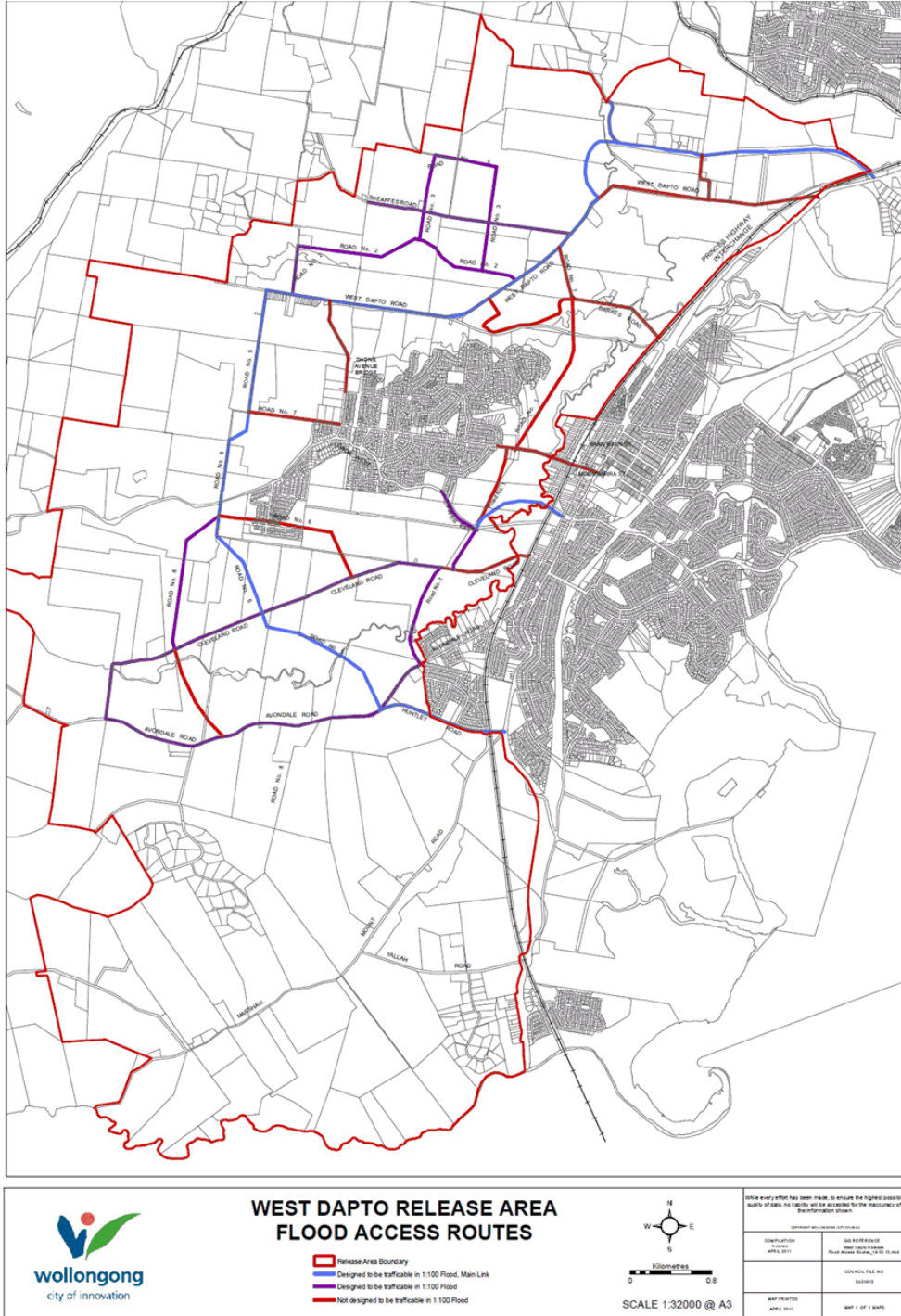
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PRELIMINARY PLAN - NOT FOR CONSTRUCTION		DEVELOPMENT NO.	A3
CITY OF WOLLONGONG		PROJECT NO.	15/199/0000
WEST DAPTO ACCESS NETWORK		DATE	26/07/18
PROPOSED ROAD TYPES		SCALE	1:1000
TYPICAL SECTIONS AND PLAN VIEWS		DATE	26/07/18
		NO. OF SHEETS	4799
		SHEET NO.	SK5 5

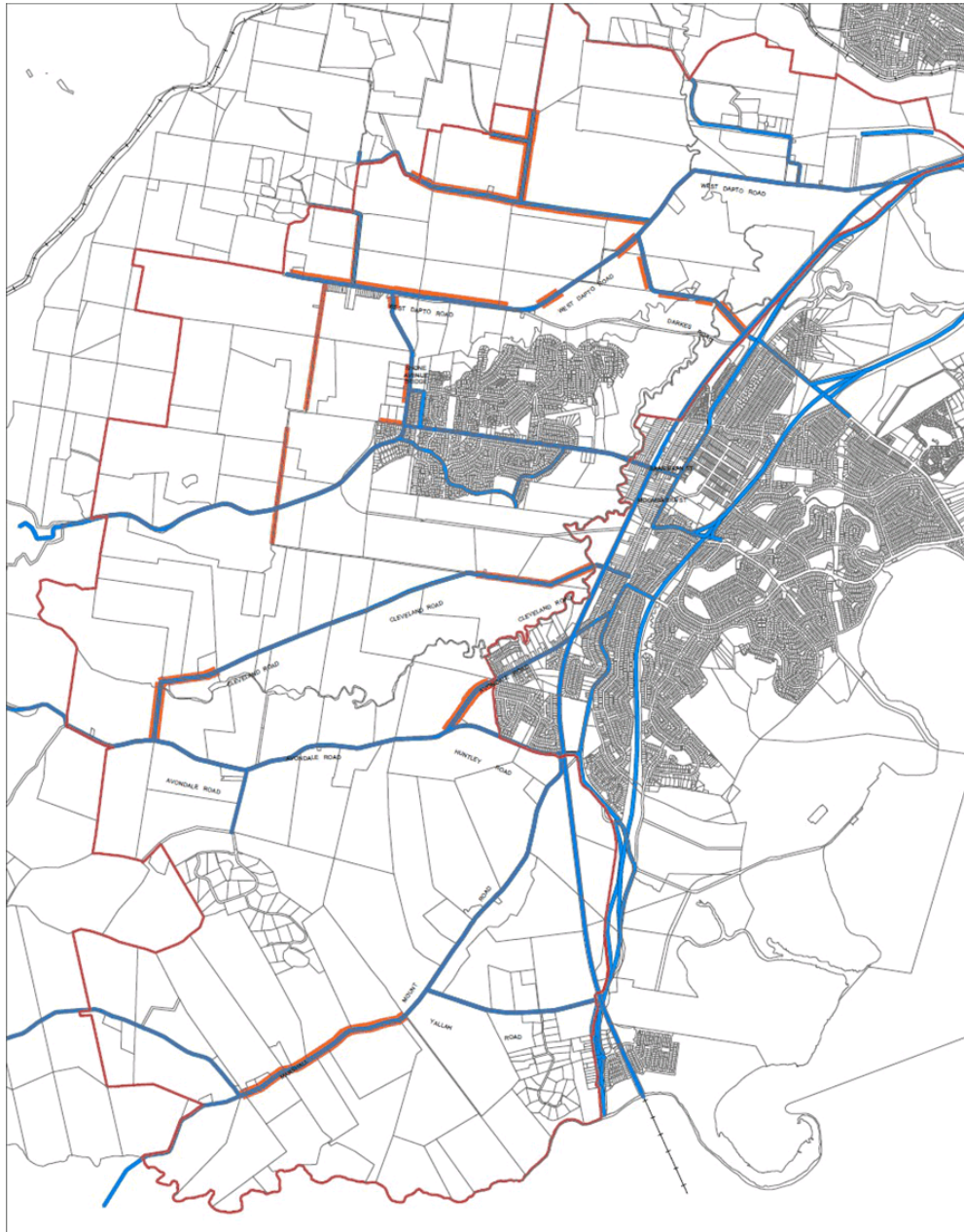
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Figure 7.12 Proposed Flood Access Network



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Figure 7.13 Proposed Road Widening





**WEST DAPTO RELEASE AREA
PROPOSED ROAD WIDENING**

- WDBDY without Dapto
- Existing Road Network
- Proposed Road Widening



Kilometres
0 0.36

SCALE 1:32000 @ A3

While every effort has been made to ensure the highest possible quality of data, no liability will be accepted for the accuracy of the information shown.

<small>COMPILED BY C. JONES OCTOBER 2010</small>	<small>DATA SOURCE COUNCIL RECORDS ROAD WIDENING 1/10/2010 AND</small>
<small>APPROVED BY COUNCIL OCTOBER 2010</small>	<small>COUNCIL FILE NO. 821915</small>
<small>MAP PRINTED OCTOBER 2010</small>	<small>MAP 1 OF 1 MAPS</small>

7.3.11 Areas under Easement

Objectives:

- (a) To use land under electrical easement for positive urban purposes.

Controls:

1. A Development Application shall include the proposed use of all land under easement.
2. Water management can be carried out in electrical easements
3. Landscape planting (low rise) can be established in electrical easements while allowing for necessary service access.
4. More significant planting can happen on the edge of electrical easements to create a visual buffer to electrical infrastructure
5. Recreational uses and open space can be established within easements.
6. Easements can be used for roads, pedestrian and cycle routes subject to approval by the easement authority.
7. Consultation with TransGrid is required to ensure that buffers, road levels and access are adequate.

7.3.12 Schools and Community Facilities

Community Facilities

Community facilities such as childcare, halls youth/aged centres and recreation facilities will be co-located with schools in or near centres. These will be provided in efficient floor plan buildings which may be mixed use and be two or three storeys high, with ground level community use. The aim is to create these as 'foreground' buildings which are symbols of community aspirations. Flexible floor plans will enable these facilities to evolve over time and hence respond to the needs of the community as it grows.

Local facilities will be developed for individual neighbourhoods as development progresses.

Educational Facilities

The Department of Education and Training has indicated that West Dapto will require eight primary schools and two secondary schools. Primary Schools require three developable hectares, special needs schools require 2 developable hectares and secondary schools require six developable hectares.

The distribution pattern for the schools ideally would include a secondary school in proximity to Darkes Road Town Centre supported by three primary schools one being the current Dapto Public School plus two new schools in the vicinities of Darkes Road and Wongawilli.

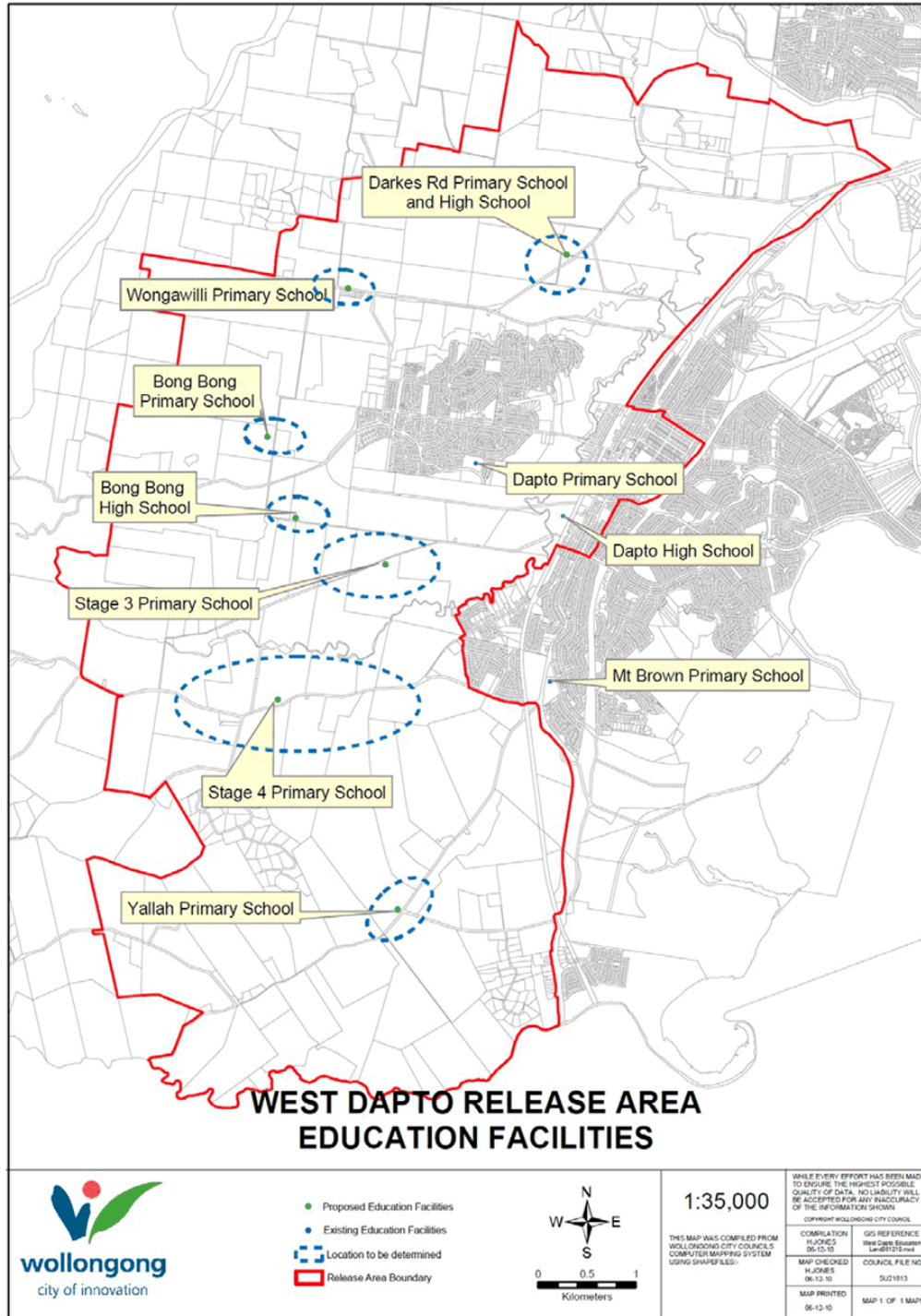
Subject to demand a new secondary school in proximity to Bong Bong Town Centre supported by three primary schools potentially Jersey Farm Robins Creeks, Bong Bong/Cleveland and Avondale/Moorland.

A third secondary school potentially located in Calderwood Urban Release Area (if approved) would service two primary schools in Calderwood and another in the Marshall Mount area.

A special needs school should be either co-located with or separate to a mainstream school.

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Figure 7.14 Proposed Schools



Objectives:

- (a) To locate important community facilities to reinforce the role of key places
- (b) To create built form 'foreground' buildings to contrast with residential backdrop.

Controls:

- 1. Primary school and community facility buildings are to be located in or adjacent to local centres
- 2. Built form to be urban in character with upper floors where possible and street aligned buildings with minimal setbacks
- 3. Minimise land take and site area of community / school uses
- 4. Dual use of school open space, school halls and other community facilities is encouraged where wider community benefit can be gained.

7.3.13 Employment Area

The creation of employment opportunities within and near to West Dapto is a key strategy in enabling people to work close to where they live and thereby reduce the overall traffic generated by the development.

The main employment areas are West Kembla Grange and a small expansion of the Yallah industrial area. In addition employment will be provided in the centres and within community and other services generated by the development.

The West Kembla Grange area will continue as a major industrial precinct. The availability of land within this area and its suitability for development is a key opportunity for West Dapto. West Kembla Grange is likely to benefit from infrastructure upgrading in the early stages of the urban development as it is located in close proximity to areas in the north which are likely to be released first.

An enterprise corridor has also been planned to the north and south of Dapto Regional Centre and between the railway and the F6 in the south adjacent to the Yallah Campus of the Illawarra Institute of TAFE, which will provide additional local employment opportunities.

- 1. All development within land zoned for employment purposes shall be in accordance with the principles contained within the Wollongong LGA Employment Lands Strategy (Hill PDA, 2006).
- 2. Sections 4.2, 4.3 and 4.4 of the Strategy contain specific controls in relation to land for general employment uses, land for heavy industrial uses and land for light industrial uses.
- 3. These principles include preserving large parcels and clusters of light and heavy industrial land and ensuring that business parks are not accommodated in light industrial zones.
- 4. Refer to Chapter B5 Industrial Development for controls relating to development on industrial lands.

7.3.14 Wongawilli Mine Spur Railline

It is anticipated that the Wongawilli Mine will continue to operate for the next 30 years, or longer. Coal is transported from the mine to Port Kembla via the rail network. Future urban development should be designed to recognise the continued use of the rail spur line and include measure to mitigate noise and other potential impacts. Division 15 of SEPP Infrastructure 2007, applies to development near the spur line.

Objectives:

- (a) To facilitate the transport of coal from Wongawilli Mine to Port Kembla by rail transport.
- (b) To minimise rail noise, vibration and other impacts on dwellings near the rail spur line.

Controls:

- 1. Development Applications for subdivision and dwelling houses within the rail buffer area (Refer to Figure 7.14), are to include sound attenuation measures that achieve a maximum of 35dBA within the dwelling.
- 2. Development Applications for subdivision and dwelling houses within the rail buffer area, are to include consider vibration impacts and include mitigation measures.

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1. The development applications must satisfy the requirements of SEPP Infrastructure Division 15.

Figure 7.15 Wongawilli rail noise area

