

JOINT REGIONAL PLANNING PANEL
(Sydney West Region)

JRPP No	2015SYW092
DA Number	1397/2015/JP
Local Government Area	THE HILLS SHIRE COUNCIL
Proposed Development	MASTERPLAN - BOX HILL NORTH.
Street Address	33 PROPERTIES GENERALLY BOUND BY CATARACT ROAD, OLD Pitt TOWN ROAD, RED GABLES ROAD, JANPIETER ROAD, MAGUIRES ROAD & TERRY ROAD, BOX HILL – LOT 1 DP 11126, LOT 1 DP 207750, LOT 1 329953, LOT 1 DP 564211, LOT 1 DP 567785, LOTS 9 & 10 DP 593517, LOTS 15-18, 21, 22, 23, 25, 26, 27, 29, 30, 31, 40, 41, 43, 44, 45, 46, 47 DP 255616, LOTS 2 & 3 DP 11126, LOTS 2 & 4 DP 253552, LOT 4 DP 135301, LOT 5 DP 658286
Applicant	CELESTINO (FORMERLY EJC PTY LTD)
Number of Submissions	NIL
Regional Development Criteria (Schedule 4A of the Act)	GENERAL DEVELOPMENT WITH A CIV OF OVER \$20 MILLION
List of All Relevant s79C(1)(a) Matters	<p>List all of the relevant environmental planning instruments: s79C(1)(a)(i)</p> <ul style="list-style-type: none"> • State Environmental Planning Policy (State and Regional Development) 2011 • State Environmental Planning Policy Infrastructure 2008 • State Environmental Planning Policy No 19 – Bushland in urban areas • State Environmental Planning Policy No 55 – Remediation of Land • State Environmental Planning Growth Centres 2006 • The Hills Local Environmental Plan 2012 <p>List any proposed instrument that is or has been the subject of public consultation under the Act and that has been notified to the consent authority: s79C(1)(a)(ii)</p> <ul style="list-style-type: none"> • Nil <p>List any relevant development control plan: s79C(1)(a)(iii)</p> <ul style="list-style-type: none"> • The Hills Development Control Plan 2012 <p>List any relevant planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F: s79C(1)(a)(iv)</p> <ul style="list-style-type: none"> • Nil <p>List any coastal zone management plan: s79C(1)(a)(v)</p> <ul style="list-style-type: none"> • Nil

	List any relevant regulations: s79C(1)(a)(iv) eg. Regs 92, 93, 94, 94A, 288 <ul style="list-style-type: none"> • Environmental Planning and Assessment Regulation 2000
List all documents submitted with this report for the panel's consideration	Nil
Recommendation	Status Report - Deferral
Report by	Development Assessment Co-ordinator Robert Buckham

EXECUTIVE SUMMARY

The land subject to this application includes 33 sites generally bound by Boundary Road, Cataract Road, Old Pitt Town Road, Red Gables Road, Janpieter Road, Maguires Road and Terry Road, Box Hill.

On 8 October 2015 the land within the precinct was rezoned from RU2 to R1, R2, R3, R4, B2, E4 and RE1. A precinct specific Development Control Plan came into force at the same time. This application is required by a provision of the Voluntary Planning Agreement applying to the majority of the site. The masterplan is intended to guide future subdivisions and built form development applications.

The application seeks approval for specific strategies for the precinct including Flooding, Ecology, Contamination, Aboriginal Heritage, Landscaping and Open Space. The application also seeks approval for some built form controls not specifically provided within the precinct Development Control Plan.

The Masterplan seeks approval for the removal of approximately 9.8 ha of Cumberland Plain Woodland and 6.2 ha of Shale Sandstone Transition Forest. Without amelioration, this vegetation clearance would have a significant impact. However, when weighed against the conservation benefits that will be derived from on-site retention, on-site replanting and off site retiring of BioBanking credits and preserving a larger contiguous stand of CPW and SSTF in perpetuity, the long term impacts are sustainable.

Given the impacts of the development of the precinct, the application was considered to be **"Threatened Species Development"** under **Section 79B of the Environmental Planning and Assessment Act 1979**. Accordingly, concurrence from the Office of Environment and Heritage is required under the Threatened Species Conservation Act 1995.

Concurrence has not been provided to date from the Office of Environment and Heritage. It is recommended that determination of the application be deferred until concurrence is provided by the Office of Environment and Heritage. With the exception of any requirements of the OEH, conditions have been recommended in this report to enable the JRPP to determine the matter if concurrence is obtained from the OEH prior to the JRPP panel meeting.

The application was notified and advertised to adjoining property owners and no submissions were received.

In absence of the JRPP process, this matter would be determined under Delegated Authority.

BACKGROUND	MANDATORY REQUIREMENTS		
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Owner:	Numerous	1.	Section 79C (EP&A Act) - Satisfactory
Zoning:	RU6 Transition, R1 General Residential, R2 Low Density Residential, R3 Medium Density Residential, R4 High Density Residential, B2 Local Centre, E4 Environmental Living, RE1 Public Recreation	2.	<u>The Hills LEP 2012</u> - Satisfactory
Area:	335 Hectares	3.	<u>SEPP Growth Centres 2006</u> - Satisfactory
Existing Development:	Agricultural uses and Rural Residential development.	4.	<u>State Environmental Planning Policy No 19 — Bushland in urban areas</u> - Satisfactory
		5.	<u>State Environmental Planning Policy No 55 — Remediation of Land</u> - Satisfactory
		6.	<u>State Environmental Planning Policy Infrastructure 2008</u> - Satisfactory
		7.	<u>SREP No. 20 - Hawkesbury Nepean River</u> - Satisfactory
		8.	<u>The Hills DCP 2012</u> - Complies
		9.	Capital Investment Value: \$350,000,000

SUBMISSIONS	REASONS FOR REFERRAL TO JRPP		
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1. Exhibition:	Yes, 31 days	1.	Capital Investment Value (CIV) exceeds \$20 million.
2. Notice Adj Owners:	Yes, 31 days		
3. Number Advised:	120		
4. Submissions Received:	Nil		

HISTORY

12/05/2015	Subject Development Application lodged.
02/06/2015	Amended Masterplan and Boundary Treatment Plan submitted.
25/06/2015	Briefing of Joint Regional Planning Panel.
07/08/2015	Correspondence sent to applicant in relation to ecological matters.
18/08/2015	Correspondence sent to applicant in relation to plan anomalies and road layouts.
21/08/2015	Correspondence sent to applicant in relation to flood report and water management.

24/08/2015	Meeting with applicant to discuss ecological matters.
07/09/2015	Preliminary response provided by applicant in response to ecological matters raised with the applicant.
09/09/2015	Response provided to requested flood and water management information request.
10/09/2015	Further meeting with applicant in relation to ecological matters.
21/10/2015	Response provided to Council's letter dated 18 August 2015.
29/10/2015	Further meeting with applicant in relation to ecological matters.
18/11/2015	Amended Species Impact Statement lodged. The application was formally referred to the Office of Environment and Heritage for concurrence.

PROPOSAL

The land subject to this application includes 33 sites generally bound by Boundary Road, Cataract Road, Old Pitt Town Road, Red Gables Road, Janpieter Road, Maguires Road and Terry Road, Box Hill (See Attachment No. 7 - Ownership Plan). The land included in this masterplan includes the land rezoned with the exception of seven sites not in the control of the applicant and also includes two sites outside the precinct that are associated with the main road concepts into the precinct.

The application is required by a provision of the Voluntary Planning Agreement applying to the majority of the site. The masterplan is intended to guide future subdivisions and built form development applications.

The application seeks approval for specific strategies for the precinct including Flooding, Ecology, Contamination, Aboriginal Heritage, Landscaping and Open Space. The application also seeks approval for some built form controls not addressed within the precinct Development Control Plan. No construction works are proposed as part of this Development Application. All future buildings and roadworks will be subject to a further Development Applications.

ISSUES FOR CONSIDERATION

1. Zoning, Development Control Plan and Voluntary Planning Agreement

On 13 May 2014, Council considered a report on the public exhibition of the planning proposal and resolved in part that the planning proposal to facilitate the development of Box Hill North precinct for urban purposes.

On the 8 October 2014, the draft LEP amendment for Box Hill North was gazetted and the DCP Part D Section 17 Box Hill North came into force.

On 29 April 2015, Council and the applicant entered into a Voluntary Planning Agreement for the delivery of infrastructure, services and utilities that are required to meet the future demands of Box Hill North.

Voluntary Planning Agreement

The Masterplan application has primarily been lodged to meet the requirements of the Voluntary Planning Agreement. The relevant clause reads:

5. Operation of this Agreement

5.1 This agreement operates when:

- a) the Land is rezoned in order to allow for the Proposed Development to be carried out and the amending Local Environmental Plan is published on the NSW Legislation website; and*
- b) the Concept Development Consent is granted and implemented by way of and Detailed Development Consent and a Notice of Commencement pursuant to section 81A of the Act for that Detailed Development Consent has been submitted to Council notifying that a Principal Certifying Authority has been appointed and the work is to commence.*

The draft Voluntary Planning Agreement provides for the delivery of the local infrastructure (and dedication of associated land) needed to facilitate the release of the Box Hill North Precinct for urban development. It will deliver the following infrastructure and facilities to meet the needs of an expected 13,500 persons to Council's standard's and but at no cost to Council:

- Open space facilities including local active and passive open space (playing fields, playgrounds and pedestrian and cycle paths);
- Community facilities (a multi-purpose community facility);
- Transport and traffic facilities (new roads, intersection upgrades and public transport facilities); and
- Water cycle management facilities as a result of the extra stormwater runoff generated by impervious surfaces associated with urban development.

As addressed in this report, the applicant has also sought to address precinct-wide issues primarily related to flood management and flora and fauna impacts.

2. Design Guidelines

The purpose of the development controls set out in Attachment 12 are to establish further guidelines to achieve the desired future character, built form and streetscape character of Box Hill North and to provide built form controls for development not addressed within the precinct Development Control Plan Part D Section 17 Box Hill North. The proposed controls **are not dissimilar to the controls found within Council's development control plans for Kellyville or Rouse Hill**. Those areas have similar zoning and lot size requirements. The new controls do not provide opportunities for further densities, as these are capped via dwelling numbers in the voluntary planning agreement.

The controls specifically relate to small lot or integrated housing developments, 450m² lots and provide further clarification of controls relating to large lots (2,000m²) and secondary dwelling controls.

The controls have been reviewed and considered to be reasonable and generally consistent with Council's adopted planning controls for other similar localities within the Shire. This application provides for the formal endorsement of those controls.

3. Ecology

The proposed development of Box Hill North will remove approximately 9.8 ha of Cumberland Plain Woodland and 6.2 ha of Shale Sandstone Transition Forest. Without amelioration, this vegetation clearance would have a significant impact. However, when weighed against the conservation benefits that will be derived from onsite retention, on site replanting and off site retiring of BioBanking credits and preserving a larger contiguous stand of CPW and SSTF in perpetuity, the long term impacts are sustainable.

Given the impacts of the development of the precinct, the application was considered to be **"Threatened Species Development"** under **Section 79B of the Environmental Planning and Assessment Act 1979**. Accordingly, concurrence from the Office of Environment and Heritage is required under the Threatened Species Conservation Act 1995.

The application is currently awaiting concurrence.

Council's Ecology Assessment

Council staff reviewed the originally lodged Species Impact Statement and the Vegetation Management Plan by Cumberland Ecology both dated May 2015. Council staff raised a number of issues with the application. These are summarised below.

- Updated Green and Golden Bell Frog surveys and further information on survey conditions.
- Updated Microchiropteran Bat surveys required.
- Small stands of vegetation still likely to be considered CPW by Council officers and must be included in the BioBanking credit calculations (paragraph 4 of the final determination).
- All E4 and RE1 zones where vegetation is present are required to be offset. Alternatively, rezoning and provision of secured funding in perpetuity can be provided for these areas (such as via BioBanking).
- Updated Assessments of Significance for Threatened Ecological Communities given they currently rely on the retention of vegetation that has not been secured for conservation purposes in perpetuity.
- Additional documentation is required as suggested within the SIS.
- Land along Maguires Road adjacent to the *Dillwynia tenuifolia* patch is to be dedicated to a road realignment.
- White-bellied Sea Eagle buffer required.
- An assessment of fire management requirements to be provided in the SIS.

The applicant has subsequently amended the Species Impact Statement and Council staff are generally satisfied with the outcomes, specifically the offsets provided. Conditions of consent have been formulated to provide for the staged retirement of credits as development occurs.

4. Flooding

Three water courses enter the site along the western boundary. Two of these water courses merge within the site with the third draining through the north-west corner of the site. The combined water course flows in a northerly direction and forms a tributary to Cataract Creek. Another water course enters the site at the eastern boundary, toward the northern extents of the precinct. This water course joins the main water course at the **site's northern boundary. A small portion of the site drains to the eastern boundary** and forms a tributary to Cattai Creek.

The site also includes a number of farm dams, associated diversion embankments and channels, both online and offline to the main water courses. Several of these online dams are significant in area (up to approximately 15 hectares), resulting in a significant change to the hydrology and flooding that would have occurred prior to any development of the catchment.

A Water Cycle and Flood Management Strategy dated July 2013 was prepared by J. Wyndham Prince. An additional Flood Impact Assessment report dated April 2015 was prepared using an alternative hydrologic and flood modelling technique as agreed to with Council staff.

The modelling has demonstrated an appropriate approach for flood mitigation and management in the precinct. Future bulk earthworks applications and subdivisions will be required to demonstrate consistency with the adopted principles.

5. Contamination

A Detailed Site Investigation has been prepared by JBS Environmental. The report identified heavy metal, hydrocarbon and asbestos impacts to the soils at the site. Additionally, aesthetic impacts associated with asbestos and building rubble were identified at the site. Concentrations of contaminants of potential concern (COPCs) were not reported within the groundwater samples collected and analysed at the site. A Remediation Action Plan (RAP) has been developed to address the identified impacts at the site to render the site suitable for the proposed land uses.

Council's Environmental Health Section have reviewed the submitted documentation and have recommended a condition to guide future developments.

6. Aboriginal Heritage

The subject application identified a number of Aboriginal sites within the precinct and identified a general program of mitigation of impacts through salvage where the site were identified to be of moderate value. There are seven known sites within the precinct. All but one of the sites will be impacted during development. Four of the sites are of moderate value and will be salvaged. The remaining two are considered to be of low significance and will be destroyed.

The applicant applied for a Aboriginal Heritage Impact Permit separate to this Development Application which has been granted on 13 July 2015 (Permit No. C0001213). The permit relates to the entire precinct, and as such this issue has been resolved.

7. Landscaping and Open Space

The masterplan identifies key principles relating to open space and public domain functions, materials selections and planting schedules.

The principles identified within the masterplan are generally supported however will need to be embellished to a standard that will provide suitable recreation activities consistent with Council's general public domain embellishment standards across the Shire. Concern is raised with the potential long term maintenance burden of some of the proposed embellishment works. This has been conveyed to the applicant. Council's Infrastructure staff will be provided an opportunity to comment on final designs to ensure that Council will have the resources to maintain the landscape.

8. Government Authority Comments

The proposal was referred to the following Government Authorities for review: Office of Environment and Heritage, Office of Water, Sydney Water, Castle Hill Police, Transgrid, Transport NSW, Office of Water, Department of Primary Industries (Fisheries), Transport for NSW, Roads and Maritime Services, and Rural Fire Service.

The following comments were received. The Office of Environment and Heritage is yet to provide concurrence to the application.

a. Office of Water Comments

The Office of Water has previously recommended as part of comments to the planning proposal that the riparian corridors at the site are zoned E2 instead of RE1. The Office of Water repeats that its preference is for riparian corridors to be zoned E2 and recommends:

- the open space areas surrounding the riparian corridors are zoned RE1.
- encroachments into the riparian corridors are zoned RE1 to distinguish between the riparian areas that are to be protected and those areas that are to be used for a recreational facility
- any riparian offset areas are zoned E2.

Zoning of Areas adjacent to Riparian Corridors

There are various figures within the document where there is a lack of consistency in treatment of a parcel of land in the north-western corner of the site. Figure 17 (pg. 44) Proposed Concept Plan, shows this area as Environmental Conservation and it abuts a riparian corridor. Figure 18 (pg. 46) Location of Open Space, describes it as Bushland, while Figure 19 (pg. 47) Master Plan Concept has it marked as CPW Conservation Area and Environmental Living. Figure 32 (pg. 70) Proposed Management Zones, has this area marked as Vegetation management zones 1 & 2 which are to be restored or revegetated. This area in Figure 33 (pg. 75) Extract of Zoning Map distinctly shows it as E4 – Environmental Living. This seems to be at odds with previous information within the document. The proponent needs to demonstrate that the operation of the 10/50 Clearing Code of Practice will not affect the establishment and long term protection of fully vegetated riparian corridors along the creek in the north-west portion of the precinct, or the tributary of Cataract Creek in the north east portion of the site, in accordance with the Office of Water Guidelines for Controlled Activities on Waterfront Land (2012). The proponent must show that asset protection zones and building setbacks are not maintained on the adjoining private properties to ensure that there will be no impacts to the vegetated riparian corridors.

Online basins

The SEE indicates six online basins are proposed (pg. 63). It is the Office of Water's understanding and this was noted in responses back to EJC following a meeting with EJC that detention basin 1 was to be the only on line wet basin, with appropriate work approvals and access licences to account for the volume of water held.

The Office of Water encourages that all other basins are built as per the Office of Water's Controlled Activity Guidelines (2012) for Riparian Corridors on Waterfront land. These guidelines permit detention basins on 1st and 2nd order creeks but the guidelines outline that the online basins must:

"be dry and vegetated, be for temporary flood detention only with no permanent water holding, have an equivalent VRZ for the corresponding watercourse order, not be used for water quality treatment purposes"

However if the basins are to be maintained as wet basins, EJC will be required to apply for the appropriate approvals and hold sufficient entitlement in Water Access Licences to account for the volume of water held in these basins.

Comment: The Office of Water's comments in relation to zoning have been addressed as part of the rezoning. All future applications required to be referred to The Office of Water in accordance with legislative requirements.

b. Rural Fire Service Comments

The Rural Fire Service advised as follows:

The service is not in a position to properly assess the application. A revised bush fire assessment report with consideration to the potential bush fire threat of riparian corridor(s) is to be submitted. The report is to then clearly demonstrate compliance with the minimum requirements of 'Planning for Bush Fire Protection 2006' accordingly.

Comment: The application is not a Special Fire Protection Purpose and therefore does not require concurrence from the RFS. All future applications required to be referred to The Rural Fire Service will be referred in accordance with legislative requirements.

c. Roads and Maritime Services Comments

Roads and Maritime Services (RMS) advised as follows:

Traffic Impacts and Proposed Mitigation Measures:

Roads and Maritime has reviewed the traffic study submitted in support of the Masterplan DA. And provides the following comments:

1. The Traffic Study for the Masterplan DA suggests that the RMS Guide to Traffic Generating Development Updated Traffic Surveys (TOT2013104a) has been used to estimate residential traffic generation for the development. Trip containment and mode shift have already been accounted for in Roads and Maritime's traffic generation rates. These rates were derived from external boundary surveys (only external trips undertaken by private motor vehicles). Applying 20% trip containment is likely to underestimate traffic generation of the future development.

Applicant's Response:

The traffic generation rates used in the Master Plan DA traffic assessment were based on the traffic generation rates used in the Planning Proposal (rezoning) Transport Assessment. The traffic generation rates used in the Planning Proposal assessment were developed in consultation with and approved by Transport NSW and RMS. This included the allowance for trip containment but no allowance for a mode shift which will occur. The rates were updated from the assessments used for Box Hill and Box Hill Industrial Precincts to accommodate updated survey data in TDT2013/04a. In summary the traffic generation used in the DA Master Plan assessment are consistent with the agreed rates used for the approved Planning Proposal.

2. Council is advised that Roads and Maritime recently provided comment on the proposed traffic signals at the intersection of Terry Road and Old Pitt Town Road under separate correspondence in relation to a separate DA (Council Ref 1147/2015/ZA). A copy of the latest Roads and Maritime correspondence on this matter is attached.

Applicant's Response:

It is noted that the RMS has provided Council with comments on the separate development application for the proposed signalisation of the Old Pitt Town Road / Terry Road intersection.

As requested by RMS, GTA prepared an assessment of the warrants for the future signalisation of the Old Pitt Town Road / Terry Road intersection. The assessment determined that in the ultimate development scenario signalisation was warranted, however, the timing of signalisation would be dependent on traffic generation associated with a number of non Box Hill North developments. As such the timing of the warrants being met is currently uncertain.

Notwithstanding the above, it was proposed (and agreed to) that the Old Pitt Town Road / Terry Road intersection would be constructed with an appropriate geometric layout such that signalisation could be easily implemented in the future when warrants would be met. This approach to assessing the future warrants and signal implementation would be implemented for other intersections identified in the Master Plan DA as ultimately requiring signalisation.

3. Roads and Maritime notes that a number of alternate ultimate intersection layouts on the local road network have been identified in the Masterplan Traffic Study. A number of these intersection treatments propose signalisation (ie Boundary Road/Old Pitt Town Road). As Council would be aware, traffic control signals on any road requires the consent

of Roads and Maritime in accordance with Section 87 of the Roads Act, 1993. The approval and installation of traffic signals is largely dependent on general warrants in accordance with Roads and Maritime requirements for Traffic Signal Design - Section 2 Warrants.

It must be emphasised that the warrants in the abovementioned publication are a guide only. If the site satisfies the warrants, it does not necessarily mean that traffic signals are the best solution. All traffic data should be analysed and alternative treatments considered to determine the optimum solution.

4. To assist Roads and Maritime in providing an informed comment on the suitability of the proposed traffic signals, it is recommended that the warrant assessment identifies the development threshold/future year at which the warrant criteria will be met (with consideration to the development uptake of adjoining precincts), based on the four one hour periods of an average day. Following this, Roads and Maritime would also require electronic copies of the detailed intersection analysis to demonstrate how the signals would operate (geometric layout and phasing), and modelling of any alternative treatments considered for comparison. (Note: page 10 of the traffic study suggests an operational assessment of the intersection layout is provided in Section 3. It does not appear that any modelling has been provided in Section 3).

5. Although signals may not be installed until such time that the warrants are met, consideration should be given to ensure that the geometry of any concept layout of interim intersection treatments is in accordance with the relevant design guidelines to facilitate potential future upgrade to traffic signals. In this regard, Roads and Maritime is willing to assist the developer in ensuring that the geometric layout of the intersection/s is designed and constructed to accommodate traffic signals in the future. The developer is to submit civil and signal design plans of the proposed intersection works to Roads and Maritime for review and approval, prior to approval from the road authority and the commencement of the road works.

Applicant's Response:

The Master Plan DA traffic assessment has considered the road network and intersection upgrades required to accommodate the ultimate development scenario not only of Box Hill North but also Box Hill and Box Hill Industrial precinct and other developments in the locality.

The Master Plan DA which utilised the extensive traffic analysis presented in the rezoning traffic assessment¹ and supplemented with specific Master Plan DA arrangements. The Master Plan identified the need for significant intersection capacity improvements at the following intersections:

- Boundary Road / Old Pitt Town Road
- Old Pitt Town Road / Mt Carmel Road
- Old Pitt Town road / Terry Road

For each intersection, consideration was given to improving capacity with a roundabout or a traffic signal treatment. Separate signal warrant assessments have been prepared for the Old Pitt Town Road / Terry Road and Old Pitt Town Road / Mt Carmel Road intersections. These demonstrated that the warrants for signalisation would be met on the basis of "traffic demand". The "traffic demand" warrants would also be met for the Boundary Road / Old Pitt Town Road intersection which will carry higher traffic flows than the other Old Pitt Town Road intersections.

The Master Plan DA has recommended that traffic signals be implemented at each of three intersections to address the traffic demands of the ultimate development scenario. The implementation of traffic signals provides significant improvements over roundabout treatments, namely:

- Superior intersection performance and greater intersection capacity;
- Preferred treatment to facilitate bus movements;
- Superior pedestrian and cyclist movement and safety; and

- Ability to be accommodated within existing road reserves or within properties under the control of Box Hill North.

Importantly traffic signals were considered to be a preferred treatment due to the potential for unbalanced traffic flows which would not be able to be controlled with a roundabout treatment. It is noted however that the warrants for intersection signalisation will need to be met prior to the installation of traffic lights. Thus the timing of signalisation will be dependent on the traffic and pedestrians flows generated by Box Hill North, Box Hill and other developments in the locality. It is unknown as to the timing of the cumulative traffic for all of these developments. Hence the allocation of Box Hill North lot threshold triggers for signalisation is not particularly correlated to the warrants being met. To address the above, it is recommended that the warrants for signalisation be reviewed every 5 years to determine if signalisation is warranted. The review would include surveys of traffic and pedestrian flows at each of the intersections under consideration. The funding arrangements relative to timing of signalisation are discussed below.

As per the recent correspondence referred to by RMS for the signalisation of the Old Pitt Town Road and Terry Road Intersection, it is proposed that intersections identified for signalisation will be initially constructed with a design compatible with signalisation. However signals would not be installed until the warrants are met.

6. Roads and Maritime understands that the proposed signalised intersections were not accounted for in the Contributions Plan (5.94) or Planning Agreement for Box Hill North at the rezoning stage. In the absence of this, however, agreement with the proponent that a lot threshold/trigger point for the upgrade/s could be identified so that an appropriate condition for the provision of signals if/when the warrants are met can be placed on the Masterplan DA.

Applicant's Response:

The applicant and Council have entered into a Voluntary Planning Agreement (VPA) within which developer contributions have been included for intersection improvements along Council roads, namely for intersections along Boundary Road and Old Pitt Town Road. Thus arrangements are in place to fund intersection improvements. To provide RMS certainty regarding funding of intersection treatments, the applicant (Celestino) is seeking to lodge bank guarantees (one per intersection) as security. These guarantees would cover the total costs of signalisation less any works in kind undertaken in interim intersection works that were consistent with the ultimate intersection layout designs. Celestino is prepared to activate these guarantees immediately with subsequent release being subject to the warrants being met and ultimate intersection works being completed.

In the unlikely event that the last residential lot within Box Hill North is developed prior to warrants being met, the bank guarantees would be replaced with a cash contribution to RMS to complete the ultimate intersection works at a later date.

7. Council is advised that the future functional hierarchy of roads in the North West Growth Centre is currently under review by Transport for NSW and DP&E, which includes consideration to the future function of Boundary Road at the NW site frontage and in particular the intersection at Windsor Road.

8. Roads and Maritime's current access management practice is that direct access points to classified roads (or proposed/future higher order roads) are to be avoided wherever possible, and no new access points are to be permitted to any classified road/higher order road for individual developments where an alternative access is available via a local road. In this regard, given the current uncertainty of the future function of Boundary Road at the Precinct boundary, the subdivision design should ensure that access points for individual developments are provided via local streets (Le. lots should be oriented towards local streets).

9. Any proposed non-frangible landscaping along the Boundary Road site boundary should be located outside of the clear zone in accordance with Ausroads Guide to Road Design Part 6 and 6B requirements, and Roads and Maritime's supplements to the Guide.

10. Proposed streetscaping/landscaping and furnishings should not obstruct driver sightlines to other road users, regulatory signposting, traffic signals etc. Particular care should be taken to ensure appropriate selection and placement of landscaping/furnishings adjacent to intersections, driveways and pedestrian crossing facilities.

Applicant's Response:

It is acknowledged that RMS's current access management practice is that direct access points to classified roads (ie. private property driveways) are to be avoided. In this regard and with consideration of the future function of Boundary Road, direct property access for Box Hill North lots shall be via local roads. The Master Plan DA includes internal local roads to facilitate access from non-classified roads. This will be detailed in the separate Precinct DA's to be lodged with Council. Furthermore, landscaping and street scaping shall be designed so as not to obstruct driver sightlines.

11. It is advisable to refer the Masterplan DA to Transport for NSW (TfNSW) for consideration and comment on the potential impacts of the proposal on pedestrians, cyclists and public transport infrastructure and services.

Applicant's Response:

Considerable consultation with TfNSW has been undertaken through the rezoning process for Box Hill North. This consultation has guided the development of the internal road network layout and its access to the external road network in a manner which facilitates and benefits public transport access (bus routes) and pedestrian and cyclist linkages to, from and through the Box Hill North development area.

Comment: The applicant's response to the matters raised by Roads and Maritime Services is noted. Separate applications will be received for road works and where required will be referred to the RMS for comment. Council's Traffic Section have reviewed the subject application and raise no objection.

d. NSW Fisheries Comments

NSW Fisheries reviewed the proposal and identified that:

No key fish habitat is situated within this development site. That said, the Department is supportive of the proposed riparian buffer zones and Water Sensitive Urban Design treatment train for stormwater. These measures will alleviate flow on impacts to downstream key fish habitat. It is important that water sensitive urban design measures are maintained over time.

Comment: There are no further requirements to be imposed.

e. Sydney Water Comments

Sydney Water advised that:

Drinking water will be supplied to the precinct from the Parklea water supply system via a water pumping station, pressure main and associated lead-in mains.

Wastewater will be transferred from the precinct to the Riverstone system via a trunk carrier, wastewater pumping station, rising main, and associated lead-in mains. Sydney Water's preferred strategy does not include recycled water to this precinct and assumes BASIX requirements will be met by other options.

Sydney Water is working with the developer on detailed planning and they will be responsible for delivering the infrastructure required to service the site. There are no conditions to be imposed.

Comment: It should be noted that the applicant is undertaking investigations into a private waste water and water recycling plant that is currently before Council as part of a current planning proposal application. This plant is proposed to replace Sydney Waters waste water service.

f. NSW Police Service Comments

Castle Hill Police advised that they had no concerns with the proposal and indicated that future applications will be required to comply with the provisions of Safer by Design. There are no conditions to be imposed. It may be noted that future applications will be referred to NSW Police, where applicable, under the memorandum of understanding (MOU) between Police and Council.

g. Transgrid

Transgrid reviewed the subject application and advised:

TransGrid owns and operates the high voltage transmission line network in NSW, being State significant infrastructure. TransGrid's Vales Point - Sydney West 330kV Transmission Line (Feeder 25 & 26, Structures 238 - 245) traverses the subject land within an 85.35 metre wide easement. Attached is a TransGrid plan identifying our easement on the land.

Referring to the Box Hill North Precinct Boundary Plan, TransGrid advises that our transmission line easement only impacts Precinct 0 and Precinct I. It is recommended the developer consult with TransGrid as early in the design process as possible so that any prohibitive design or easement encroachment issues may be raised and resolved, therefore preventing the need for a redesign at a later stage, causing corresponding delays.

Comment: All future applications within the vicinity of Transgrid infrastructure will be referred for comments under the provisions of SEPP Infrastructure 2008.

IMPACTS

Financial

This matter has no direct financial impact upon Council's adopted budget or forward estimates.

The Hills Future Community Strategic Plan

The proposed development is consistent with the planning principles, vision and objectives outlined within the Hills 2026 - "Looking Towards the Future" as the social and environmental impacts have been considered satisfactory as detailed within the body of this report. The proposal is not considered to detrimentally impact upon the character of the locality or the shire as a whole.

CONCLUSION

Given the Office of Environment and Heritage are yet to grant concurrence, the application is recommended for deferral but is otherwise satisfactory.

With the exception of the Office of Environment and Heritage requirements, the following conditions would be recommended once concurrence is granted.

GENERAL MATTERS

1. Development in Accordance with Submitted Plans

The development being carried out in accordance with the following approved plans and details, stamped and returned with this consent except where amended by other conditions of consent.

REFERENCED PLANS AND DOCUMENTS

DESCRIPTION	Dated
Box Hill Master Plan (9 Pages)	23 September 2015
Box Hill North Design Guidelines (7 pages)	Submitted 4 November 2015

No work (including excavation, land fill or earth reshaping) shall be undertaken prior to the issue of the Construction Certificate, where a Construction Certificate is required.

2. Compliance with Masterplan

Approval is granted for the proposed Masterplan in accordance with the plans and details provided with the application to provide guidance for future development of the site. All Stages of works the subject of the Masterplan will require the submission and approval by the relevant authority of an application as required by the relevant legislation including all external authorities with the exception of the Office of Environment and Heritage in relation to flora and fauna impacts which have been assessed as part of this application.

3. Planning Agreement

Payment of any Monetary Contributions shall be payable in accordance with the Box Hill North Planning Agreement dated January 2015.

4. Design Guidelines

The Design Guidelines attached to the consent marked as Appendix A are endorsed.

5. Office of Environment and Heritage Requirements

Compliance with the requirements of the NSW Office of Environment and Heritage attached as Appendix B to this consent and dated X

6. Ecology Requirements

i. Biodiversity Offsetting Requirements

To offset the loss of biodiversity from the site, including the removal of Cumberland Plain Woodland (CPW) and Shale Sandstone Transition Forest (SSTF), the development must purchase and retire the appropriate number of credits for each precinct as set out in the table below.

Prior to issue of a Construction Certificate for each precinct a retirement certificate from the NSW BioBanking Office to demonstrate compliance with this condition is to be provided to The Hills Shire Council's Manager – Environment and Health.

Precinct	Credits Required	
	CPW (HN528)	SSTF (HN556)
A	0	0
B	0	0
C	0	0
D	0	0
E	5	53
F	0	3
G	1	420
H	0	0
I	579	1
Total	585	477

Note: Changes to development proposal may have additional offsetting requirements.

ii. Vegetation Management Plan

Prior to issue of a Construction Certificate for each precinct a Vegetation Management Plan **is be submitted to the satisfaction of The Hills Shire Council's Manager – Environment and Health.**

The Vegetation Management Plan must contain details for vegetation rehabilitation and management relevant to each precinct. The plan must be prepared strictly in accordance with **Council's Vegetation Management Plan Guideline (available on Council's website www.thehills.nsw.gov.au)**. The Plan must be prepared by a suitably qualified bush regenerator or restoration ecologist with a minimum Certificate IV in Conservation Land Management.

The Vegetation Management Plan is to include restoration planting as outlined in table 4.2 of the Species Impact Statement – Response to Hills Shire Council prepared by Cumberland Ecology dated November 2015.

iii. Dam Decommissioning Plan (ecological requirements)

Prior to issue of a Construction Certificate for each precinct a Dam Dewatering Report is to **be submitted to the satisfaction of The Hills Shire Council's Manager – Environment and Health.**

The Dam Dewatering Report must provide details required for the rescue and relocation of native fauna and the destruction of exotic pest species residing within farm dams. The **plan must be prepared strictly in accordance with Council's Guidelines for Dewatering Farm Dams (available on Council's website www.thehills.nsw.gov.au)**. This report must be prepared by a suitable qualified ecologist with expertise in aquatic ecology and amphibians.

iv. Fauna Action Plan

Prior to issue of a Construction Certificate for each precinct a Fauna Action Plan is **be submitted to be to the satisfaction of The Hills Shire Council's Manager – Environment & Health.**

The fauna action plan must contain relevant details for preclearance surveys and fauna protection, rescue and relocation relevant to each precinct. In addition, the Fauna Action Plan is to include actions for the protection of the White-bellied Sea-eagle nest during the construction period. The plan must be prepared by a suitably qualified and experienced ecological consult with relevant experience in flora and fauna survey and rescue.

v. Maguire's Road Realignment

The partial width reconstruction of Maguires Road fronting Precinct G, including the creek crossing here, must include the realignment of this road/ formation further south into the development site to protect the endangered *Dillwynia tenuifolia* population located along the northern verge of Maguires Road. A plan must be provided with any development **application relating to this portion of the site/ precinct to the satisfaction of Council's Manager – Subdivision and Development Certification and Manager – Environment and Health.** The plan must provide a sufficient buffer between the endangered population and Maguires Road (accounting for the eventual/ possible full width reconstruction) to ensure long-term protection and survival of the population.

7. Landscape Masterplan

The principles identified within the masterplan are generally supported however all public areas will need to be embellished to a standard that will provide suitable recreation **activities consistent with Council's general public domain embellishment hierarchy** standards across the Shire. Detailed plans are required to accompany all Development Applications.

The Street Tree Masterplan is generally supported with the following amendments:

- Street tree substitutes:
 - *Fraxinus griffithi* – suggested replacement: *Fraxinus excelsior 'Aurea'* or alternative approved species
 - *Quercus rubra* – suggested replacement: *Magnolia grandiflora 'Little Gem'* or alternative approved species
- Minimum width of tree pit in verge 1.3m. To be noted on Typical Street Tree Planting Detail.

8. Riparian Corridor Plan – Precinct H

With respect to the Riparian Corridor Plan, the open space link/ watercourse within Precinct H needs to be designed and constructed to the same standard/ riparian corridor width as the other first order watercourses within the precinct, without being formally labelled as such, as this would otherwise increase the categorisation of the downstream receiving first order watercourse to a second order watercourse.

9. Road Hierarchy/ Formation

Roads are to be provided as per the Road Network Plan and Voluntary Planning Agreement, contrary to the Development Control Plan, and the following additional requirements:

- a) With respect to collector roads, the 3.5m wide footpath verge on both sides, including adjacent to open space/ creek corridors, required by the Development Control Plan must be provided.
- b) Old Pitt Town Road and Maguires Road, fronting the development site/ release area, need to be reconstructed (partial width) in line with the following/ ultimate configuration:

Road Name:	Formation: (Footpath/ Carriageway/ Footpath) (m)
Old Pitt Town Road/ Maguires Road	Road Type: 3.5m/ 13m/ 3.5 (20m) Pavement Design: Sub-arterial/ Enhanced Collector (Design Guidelines 3.12)

- c) With the development of each precinct, consideration should be given to providing “local roads with parking on both sides” in areas with higher density residential development.

10. Waterways Requirements

All future development applications are to generally comply with the following, along with any other requirements of Council at the time:

- Flood Impact Assessment prepared by J. Wyndham Prince dated April 2015
- Water Cycle and Flood Management Strategy Report prepared by J. Wyndham Prince dated July 2013, as amended by the following:
 - Updated MUSIC Water Quality Assessment prepared by J. Wyndham Prince dated 14 September 2015
 - Water Cycle and Flood Management Strategy Report (update) prepared by J. Wyndham Prince dated 28 November 2014

The following design requirements also apply:

- a) Waterway design to be in accordance with the requirements of Section 2.11 Stormwater Management, sub-clauses (x), (xi) and (xii) of Council’s Development Control Plan Part D Section 17, Box Hill North.
- b) In summary, these sections require the creation of a naturally functioning, geomorphically stable channel and floodplain form which replicates the characteristics of the naturally occurring waterways in the catchment.

- c) Creation of a trapezoidal channel form is to be avoided.
- d) A stable, meandering low-flow channel is to be designed to convey up to a 5 year ARI design flood. The 5 year ARI design flood is considered to be at the upper end of the naturally occurring channel forming flows.
- e) River engineering principles, supported by geomorphic understanding is to be the principal driver for all design and construction methodologies.
- f) Hydraulic modelling to determine threshold velocities is to be undertaken to predict erosive forces requiring hard engineering intervention.
- g) Upper floodplain benches are encouraged to reduce edge depths, sustaining safety principles and maximising passive usage of the waterway corridor.
- h) Vegetative techniques for bed and bank stabilisation in the upper floodplain benches are to utilise deep rooted species of local provenance.
- i) Safe, regular all-weather vehicular maintenance accesses are to be designed for strategic locations throughout the waterway corridor.

Bridge and culvert design and construction are to have regard to the following too:

- j) Design to be substantially in accordance with the principles set out in the publications "Australian Standard Bridge Design Part 1: Scope and General Principles" (AS 5100.1-2004 (Incorporating Amendment No.1)), and "AUSTROADS Guide to Bridge Technology Part 4: Design Procurement and Concept Design".
- k) Minimum freeboard to the underside of the bridge structure is to be in accordance with the requirements of the abovementioned publications, having regard for carriageway cross-falls.
- l) Bridge clear opening to be a minimum of 50% of the overall width of the riparian corridor, measured from toe of abutments, and allowing for bridge pier widths.
- m) Piers are to be designed to be streamlined in the direction of flow. Other than in unavoidable circumstances, no piers are to be constructed so as to obstruct the primary waterway area (between low banks).
- n) Bridges are to be low energy style structures, minimising afflux at the design flood (100 year ARI, post-development case).
- o) Allowance for blockage is to be in accordance with the requirements of the publication "Australian Rainfall and Runoff Revision Project 11: Blockage of Hydraulic Structures - Blockage Guidelines" (February 2015).
- p) Consideration may be made for the construction of "relief" culverts through each abutment to account for the allowance of blockage in the bridge design.
- q) Hydraulic modelling is to be undertaken to determine the two dimensional (2-D) flow behaviour for channel forming flows (consider the 2 year and 5 year ARI floods) and the design flood (100 year ARI) to enable the design of any bed, bank and abutment scour protection works.

11. Site Remediation and Validation

All works associated with future Subdivision applications are to be remediated in general accordance with the Remediation Action Plan (dated 15 April 2015, Report 43376/59205 (Rev 5)).

Any contaminated material that is proposed to be encapsulated and/or buried on site shall be subject to an Environmental Management Plan which identifies:

- the material;
- risks associated with the material;
- justification as to why the material cannot be removed/remediated;
- details for a long-term monitoring program;

- Safe Work Method Statement for working in the vicinity of the material.

Prior to the encapsulating and/or burying of any contaminated material on site, prior **approval of Council's Manager – Environment & Health** is to be obtained.

Validation report

A validation report shall be submitted to the Principal Certifying Authority for each subdivision. The report shall include:

- The degree of contamination originally present;
- Rationale and justification for the validation strategy, including the clean-up criteria and statistically based decision-making methodology;
- Validation sampling and analysis plan;
- Verification that remediation carried out renders the site suitable for the proposed uses.

12. Consistency with Aboriginal Heritage Impact Permit

All proposed works are to be consistent with Aboriginal Heritage Impact Permit (AHIP) C0001213.

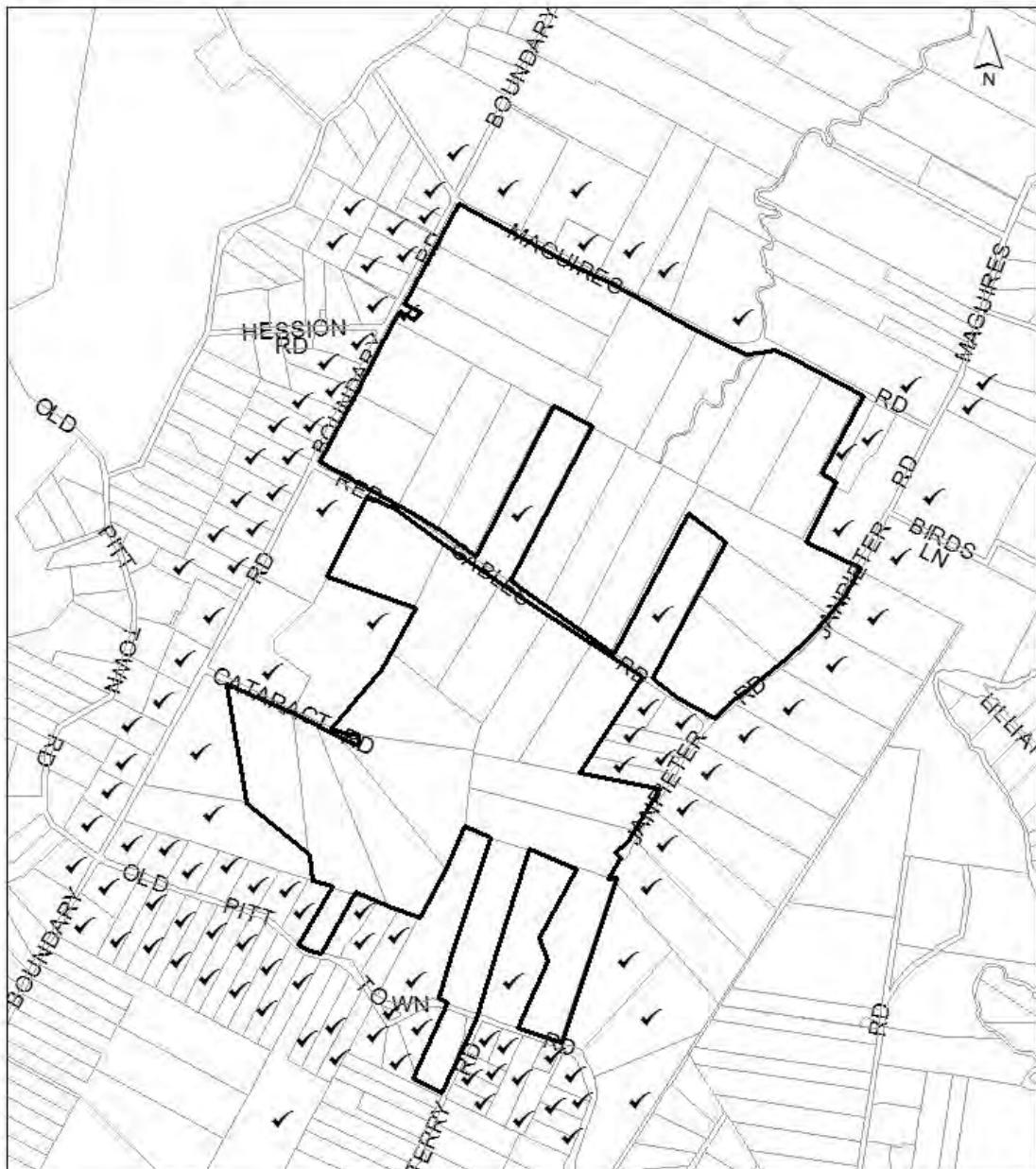
RECOMENDATION

The application be deferred until concurrence is provided by the Office of Environment and Heritage. At this time a further report will be provided to the Joint Regional Planning Panel.

ATTACHMENTS

1. Locality Plan
2. Aerial Photograph
3. Zoning Map
4. Lot Size Map
5. Vegetation Maps
6. General Masterplan
7. Ownership Plan
8. Precinct Plan
9. Road Layout Plan
10. Open Space Plan
11. Boundary Treatment Plan
12. Design Guidelines

ATTACHMENT 1 – LOCALITY PLAN

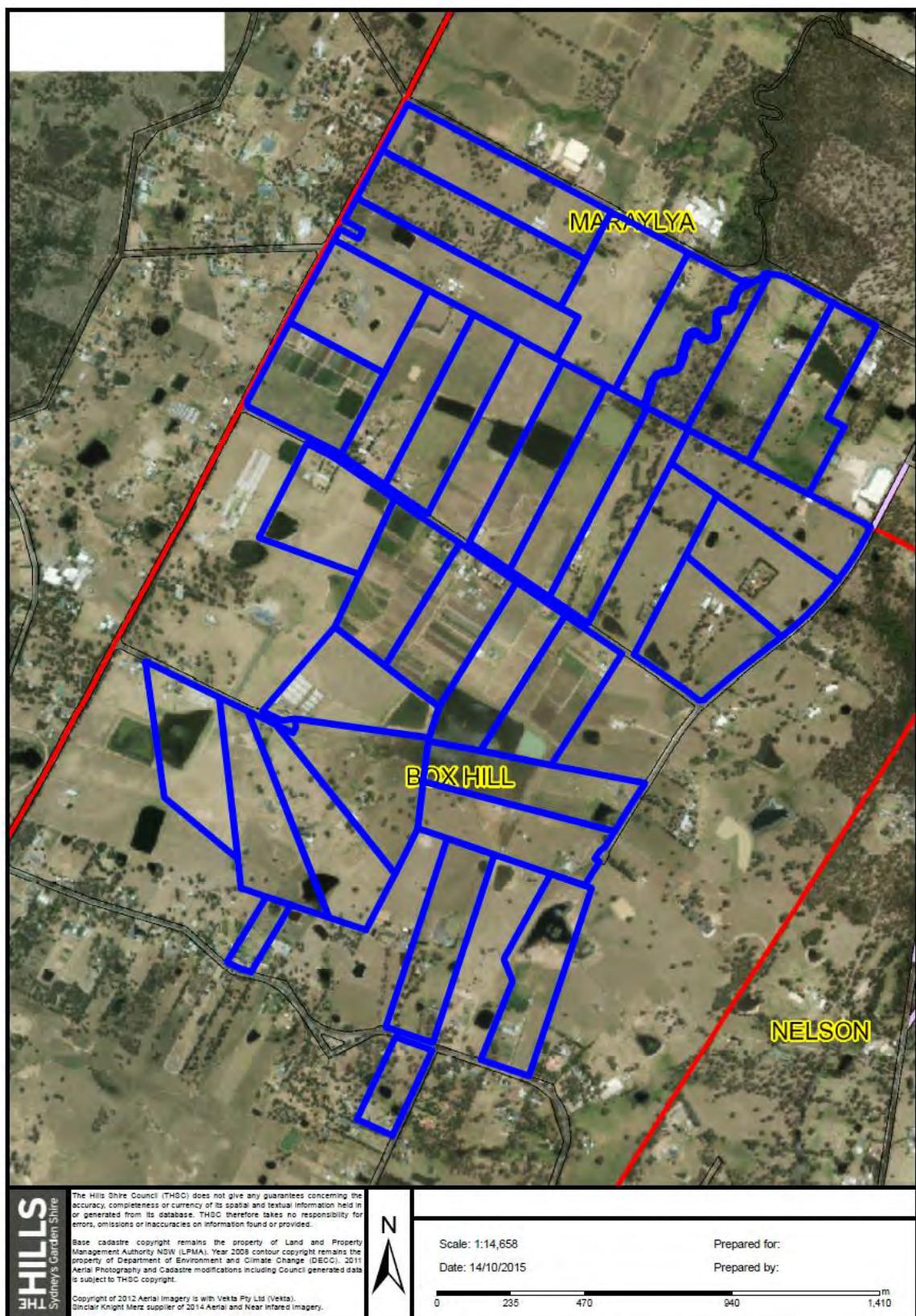


SUBJECT SITE

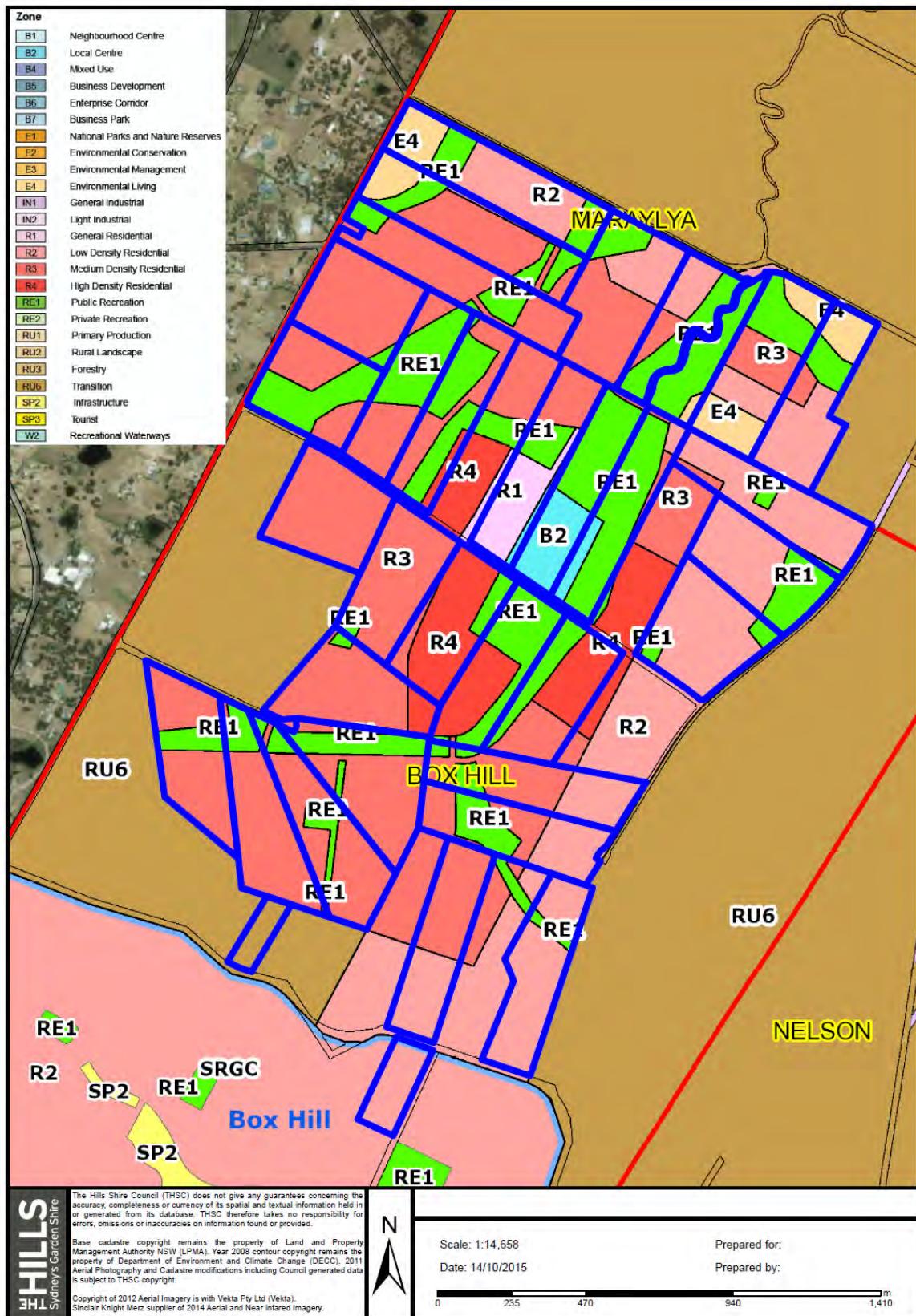
PROPERTIES NOTIFIED

NOTE: HAWKESBURY CITY COUNCIL ALSO NOTIFIED

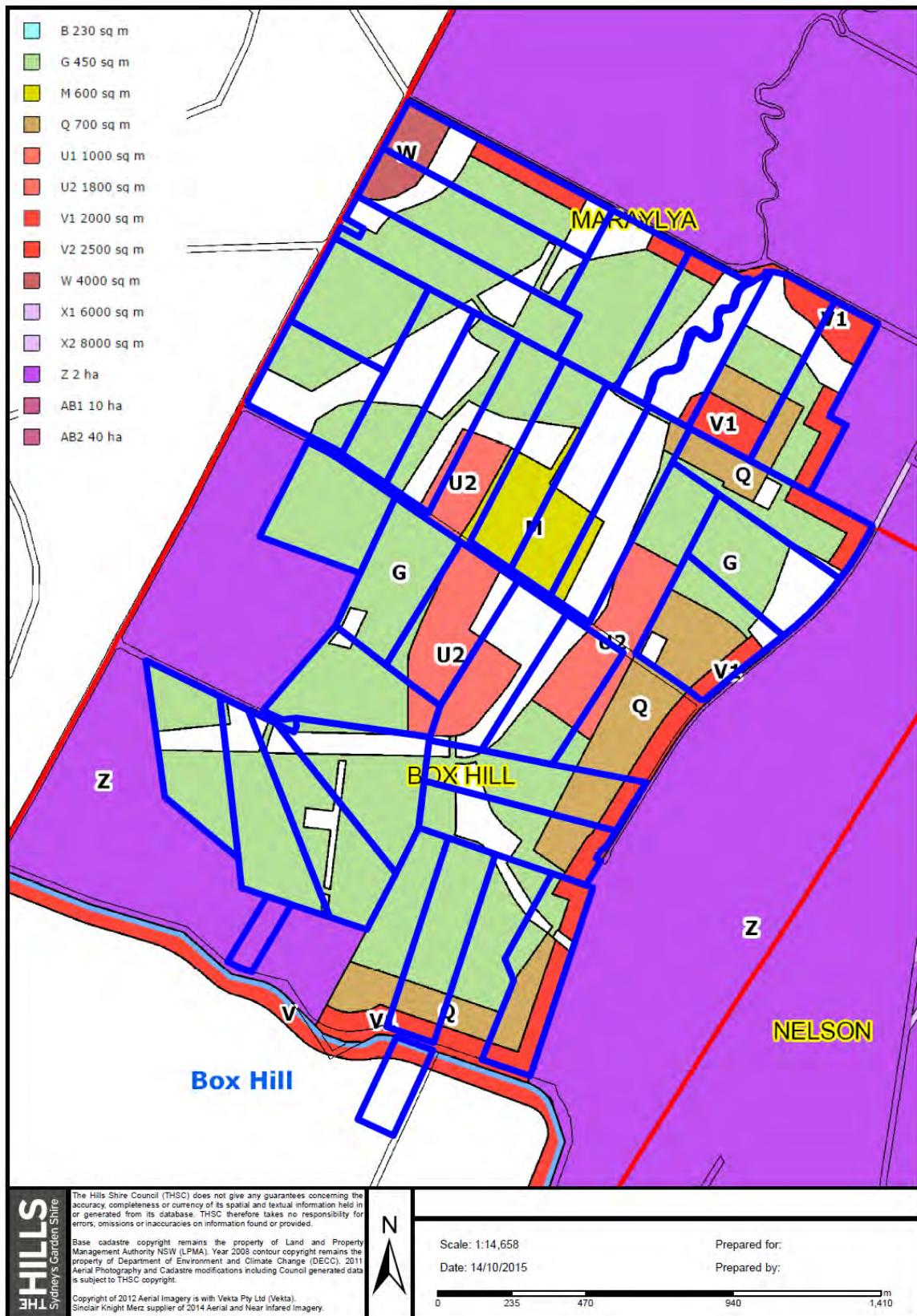
ATTACHMENT 2 – AERIAL PHOTOGRAPH



ATTACHMENT 3 – ZONING MAP



ATTACHMENT 4 – LOT SIZE MAP



ATTACHMENT 5 – VEGETATION MAPPING



Figure B.3. Native Vegetation at the Subject Site

ATTACHMENT 6 – MASTERPLAN

BOX HILL NORTH PRECINCT Indicative Layout Plan

Key

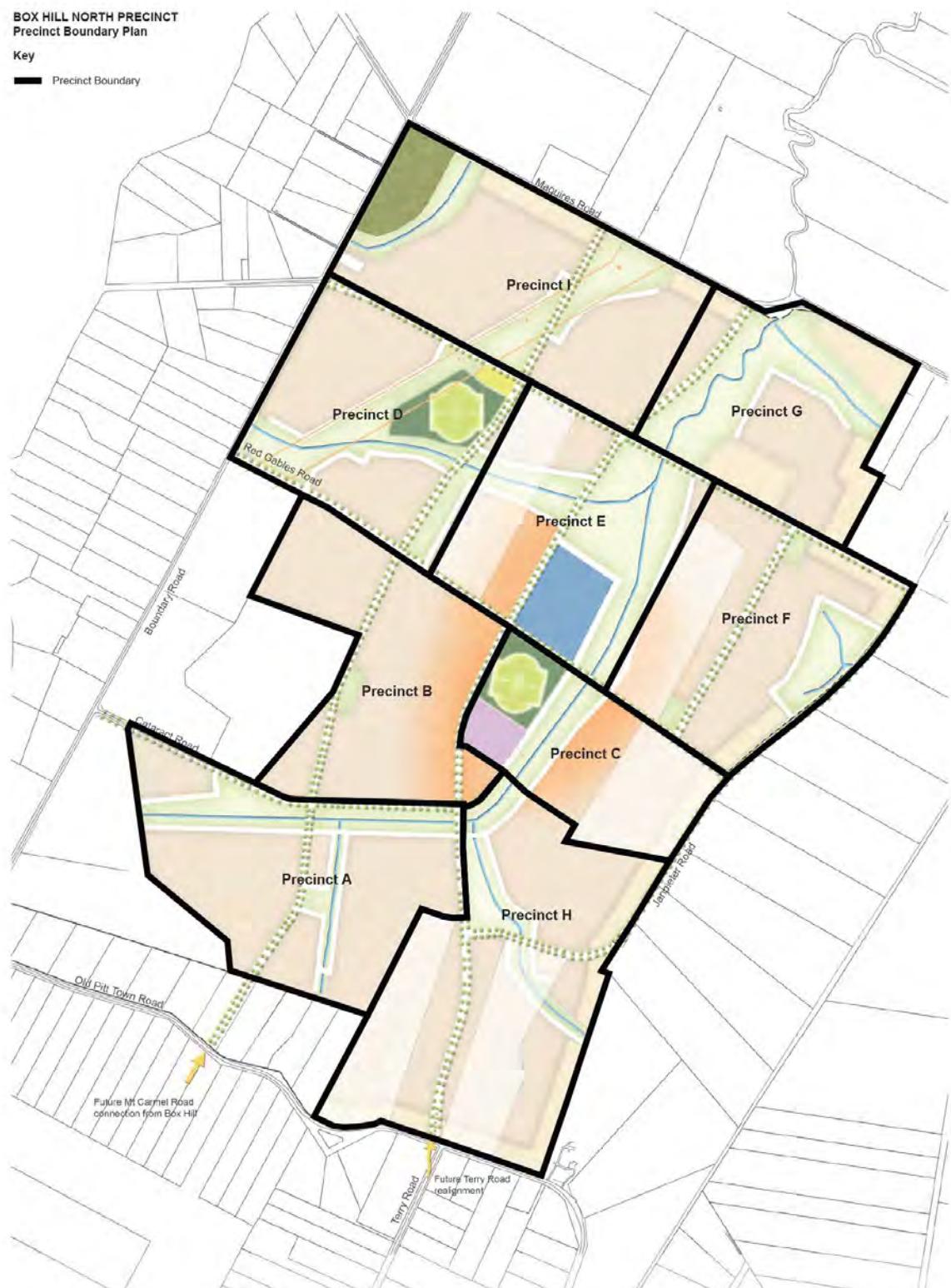
- Project Boundary
- Retail / Mixed Use
- School
- Community Facilities
- Large Lot Residential
- Low/Medium Density Residential
- High Density Residential
- Environmental Conservation
- Open Space
- Sports Fields
- Creeks / Drainage
- Transmission Easement
- Future Link Roads
- Associated Works to Project



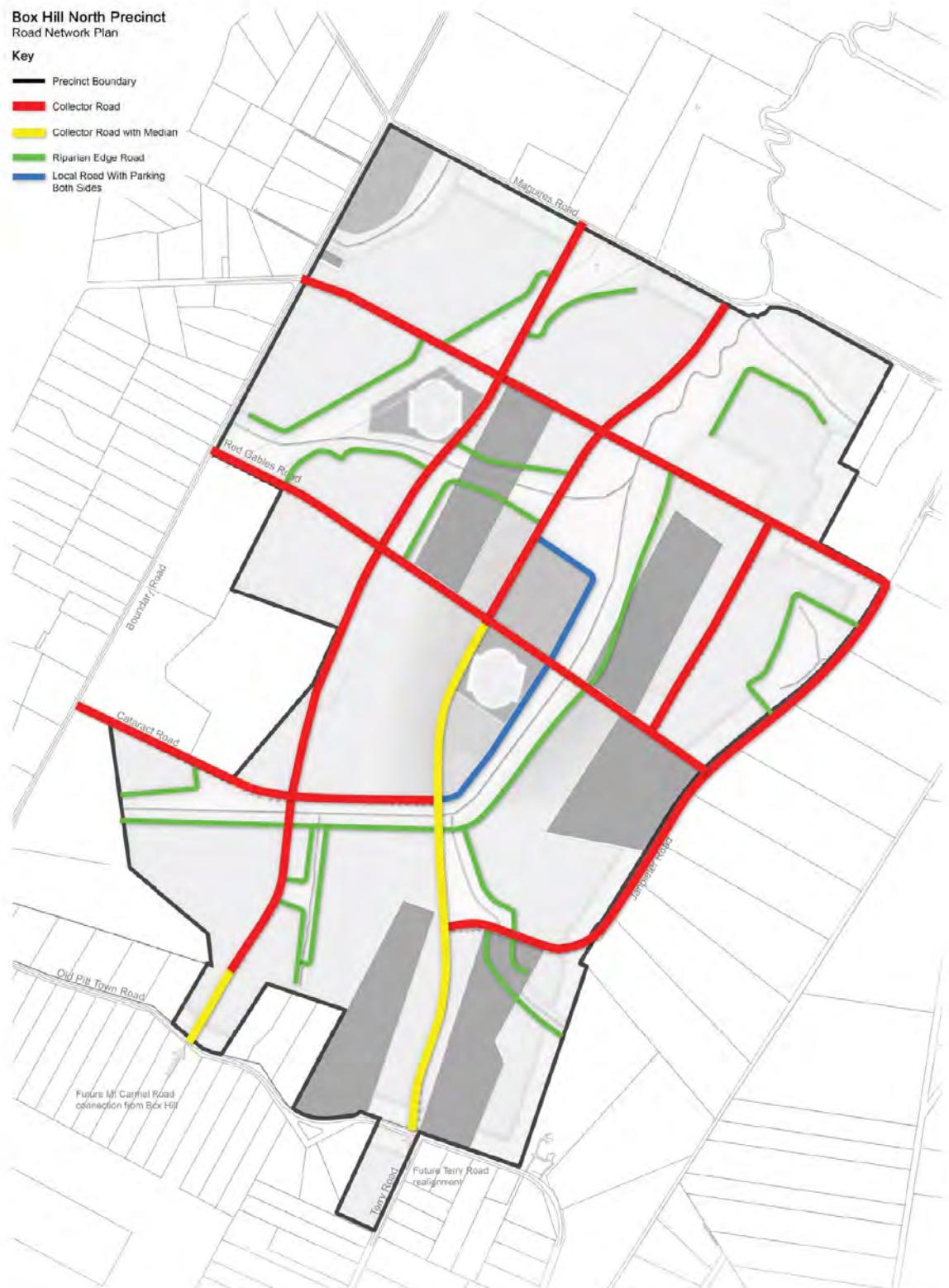
ATTACHMENT 7 – OWNERSHIP PLAN



ATTACHMENT 8 – PRECINCT BOUNDARY PLAN



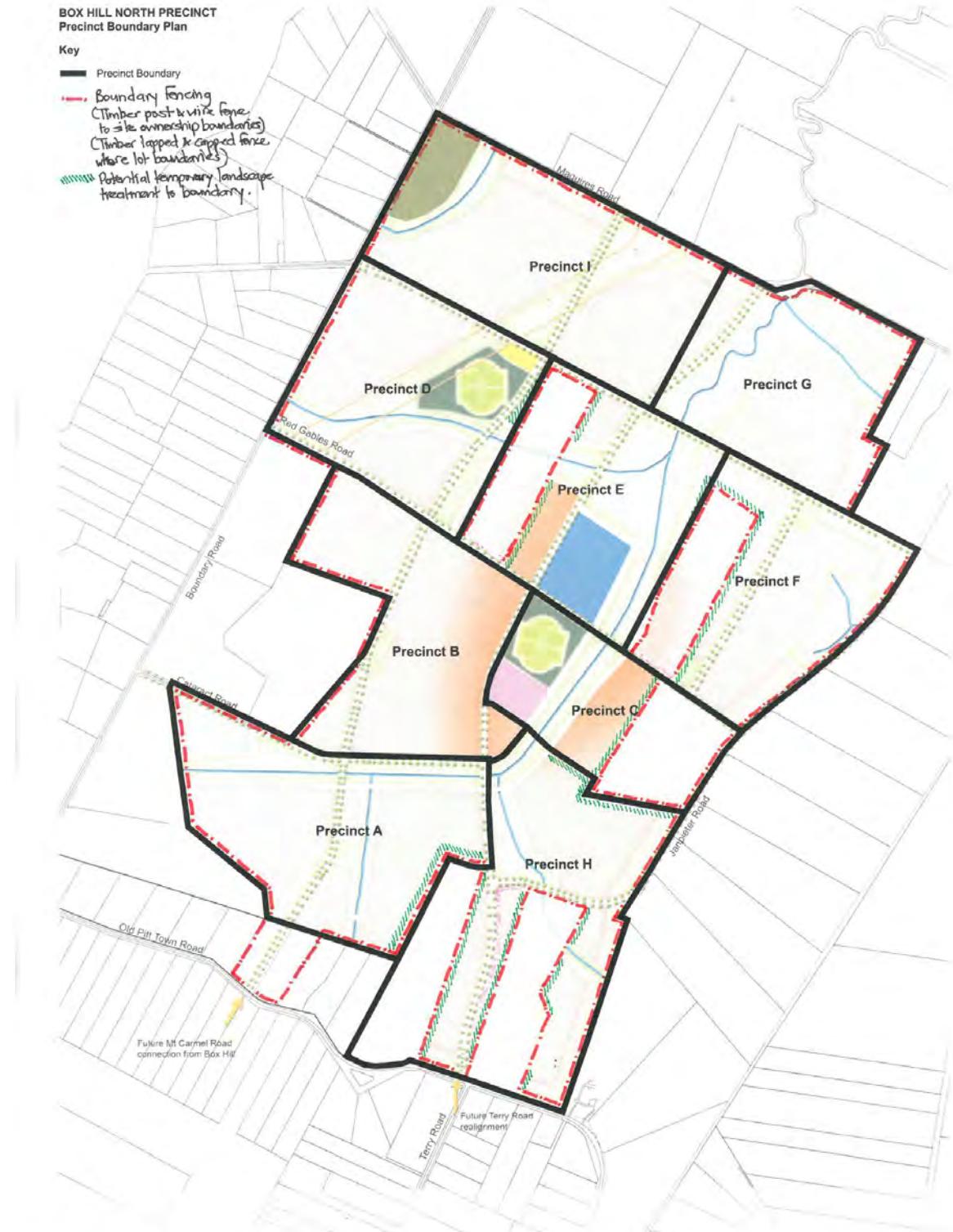
ATTACHMENT 9 – ROAD LAYOUT PLAN



ATTACHMENT 10 – OPEN SPACE PLAN



ATTACHEMNT 11 – BOUNDARY TREATMENT PLAN



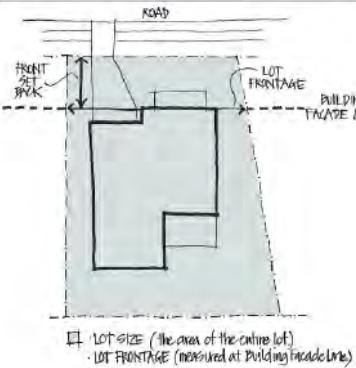
ATTACHMENT 12 – DESIGN GUIDELINES



Development Controls for Integrated Housing

Element	Control
Lot Width	$\geq 6m$ for rear accessed dwellings
Minimum Allotment Size	240m ²
Front setback (min)	4.5m to building facade line; 3.5m to building façade fronting open space 3.0m to articulation zone; 2.0m to articulation zone fronting open space.
Side setback (min)	Zero Lot, Attached or Abutting Boundary (benefited lot): <ul style="list-style-type: none"> • Ground floor: 0m • Upper floor: 0m Detached Boundary 0.9m. If lot burdened by zero lot boundary, side setback must be outside easement: 0.9m (single storey zero lot wall) 1.2m (double storey zero lot wall)
Maximum length of zero lot line on boundary	15m (excludes rear loaded garages)
Corner lots secondary street setback (min)	1.0m
Building height, massing and siting	2 storeys maximum. 3 storeys will be considered on dwelling's site characteristics and the architectural merit of the proposal.
Site Coverage	Upper limit no more than 70% of lot area.
Soft landscaped area	Minimum 15% lot area. The first 1m of the lot measured from the street boundary (excluding paths) is to be soft landscaped
Principal Private Open Space (PPOS)	Min 16m ² with minimum dimension of 3m. 10m ² per dwelling if provided as balcony or rooftop with a minimum dimension of 2.5m. Open space at the front of the dwelling can be defined as PPOS where this is the only means of achieving the solar access requirements.
Solar access	At least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) to at least 50% of the required PPOS of both the proposed development and the neighbouring properties that form part of the proposed development. Should the orientation of a lot not meet the requirements, then the front yard can be used to contribute to the solar access
Garages and car parking	Rear loaded garage or car space only for lots of this type. Carport and garage minimum internal dimensions: 2.4m x 5.5m. Maximum garage door width 3.0m (single) and 6.0m (double). 1-2 bedroom dwellings will provide at least 1 car space. 3 bedroom or more dwellings will provide at least 2 car spaces.

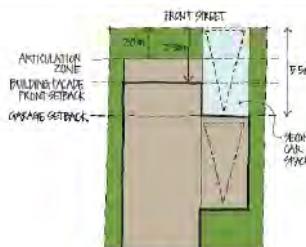
Figure 1: Lot Size





Element	Control	
Lot Width	$\geq 7m$ and $< 9m$ for front accessed dwellings	
Minimum Allotment Size	240m ²	
Front setback (min)	4.5m to building facade line; 3.5m to building façade fronting open space 3.0m to articulation zone; 2.0m to articulation zone fronting open space 5.5m to garage line and minimum 1m behind the building line	
Side setback (min)	Zero Lot, Attached or Abutting Boundary Ground floor: 0m Upper floor: 0m	Detached Boundary 0.9m. If lot burdened by zero lot boundary, side setback must be outside easement: 0.9m (single storey zero lot wall) 1.2m (double storey zero lot wall)
Maximum length of zero lot line on boundary	15m	
Rear setback (min)	4m (ground level) and 6m (upper levels)	
Corner lots secondary street setback (min)	1.0m	
Building height, massing and siting	2 storeys maximum. 3 storeys will be considered on dwelling's site characteristics and the architectural merit of the proposal.	
Site Coverage	Upper limit no more than 70% of lot area.	
Soft landscaped area	Minimum 15% lot area. The first 1m of the lot measured from the street boundary (excluding paths) is to be soft landscaping	
Principal Private Open Space (PPOS)	Min 16m ² with minimum dimension of 3m. 10m ² per dwelling if provided as balcony or rooftop with a minimum dimension of 2.5m. Open space at the front of the dwelling can be defined as POS where this is the only means of achieving the solar access requirements.	
Solar access	At least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) to at least 50% of the required PPOS of both the proposed development and the neighbouring properties.	
Garages and car parking	Single width garage or car space only. Carport and garage minimum internal dimensions: 2.4m x 5.5m. Maximum Garage Door width 3.0m (single) 1-2 bedroom dwellings will provide at least 1 car space. 3 bedroom or more dwellings will provide at least 2 car spaces. For single garages second car space can be provided in the garage setback.	
Layout	Driveway locations must be paired to preserve on-street parking spaces in front of lots. Total lot frontage of this lot type not to exceed 50% of the block length due to garage dominance and on-street parking impacts.	

Figure 2: Second Car Space





Element	Control	
Lot Width	$\geq 9m$ and $\leq 15m$ for front accessed dwellings	
Minimum Allotment Size	$240m^2$	
Front setback (min)	4.5m to building facade line; 3.5m to building façade fronting open space 3.0m to articulation zone; 2.0m to articulation zone fronting open space 5.5m to garage line and minimum 1m behind the building line	
Side setback (min)	Zero Lot, Attached or Abutting Boundary Ground floor: 0m Upper floor: 0m	Lots with zero lot boundary (side A) Ground Floor: 0m (side A), 0.9(side B) Upper Floor: 1.5m(side A), 0.9(side B)
Length of zero lot line on boundary	11m	
Rear setback (min)	4m (ground level) and 6m (upper levels)	
Corner lots secondary street setback (min)	2.0m	
Building height, massing and siting	2 storeys maximum. 3 storeys will be considered on dwelling's site characteristics and the architectural merit of the proposal.	
Site Coverage	Single storey dwellings: 65%. Lot $\leq 375sqm$, upper level no more than 40% of lot area. Lot $> 375sqm$, upper level no more than 35% of lot area.	
Landscaped area	Minimum 25% of allotment area.	
Principal Private Open Space (PPOS)	Minimum $20m^2$ with minimum dimension of 4.0m. 50% of the area of the required PPPOS (of both the proposed development and adjoining properties) should receive at least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June) Open space at the front of the dwelling can be defined as POS where this is the only means of achieving the solar access requirements.	
Garages and car parking	$\geq 9m$ and $<10m$: Where front accessed, single width garages only. Garage minimum internal dimensions: 2.4m x 5.5m. Rear lane or side street accessed double garages permitted. Max. carport and garage door width not to exceed 3m (single) or 6m (double)	$\geq 12.5m$ and $\leq 15m$: Double garages are permitted. Triple garages are not permitted.
	$\geq 10m$ and $<12.5m$: - Front accessed, double width garages: are permitted where the dwelling has a minimum of 3 of the following design features adopted: 1. Upper floor or roof element projected forward of the garage to cast a shadow and take prominence. 2. Colours and textures to ensure garage door subservience. 3. Verandah or pergola provided across the face of the garage. 4. Utilisation of vertical elements to mitigate the horizontal emphasis of the garage	1-2 bedroom dwellings will provide at least 1 car space. 3 bedroom or more dwellings will provide at least 2 car spaces. For lots $\geq 9m$ and $\leq 15m$, for single garages second car space can be provided within garage setback.



Development Controls for Standard Detached Dwellings

Element	Control
Lot Width	$\geq 8m$ for front accessed dwellings
Minimum Allotment Size	450m ²
Front setback (min)	4.5m to building facade line 3.5m to building façade fronting open space or drainage land 3.0m to articulation zone 2.0m to articulation zone fronting open space or drainage 5.5m to garage line and 1m behind the building line
Side setback (min)	Ground Floor: 0.9m (Side A), 0.9m (Side B)
Rear setback (min)	4m (ground level) and 6m (upper levels)
Corner lots secondary street setback (min)	2.0m
Building height, massing and siting	2 storeys maximum. 3 storeys will be considered on dwelling's site characteristics and the architectural merit of the proposal.
Site Coverage	Single storey dwellings: 65%
Soft landscaped area	Minimum 30% of the allotment area
Principal Private Open Space (PPOS)	Minimum 24m ² with minimum dimension 4m 50% of the area of the required principal private open space (of both the proposed development and adjoining properties) should receive at least 3 hours of sunlight between 9am and 3pm at the winter solstice (21 June).
Garages and car parking	Front or rear loaded double and tandem garages permitted Carport and garage minimum internal dimensions: 2.4m x 5.5m. Maximum garage door width 3m (Single) and 6m (Double) Triple garages are not permitted. 1-2 bedroom dwellings will provide at least 1 car space. Frontages of $\geq 20m$, triple garages permitted 3 bedroom or more dwellings will provide at least 2 car spaces. For lot frontages $\geq 8m$ and $\leq 15m$, for single garages second car space can be provided within garage setback.

Figure 3: Principal private open space and soft landscaped area

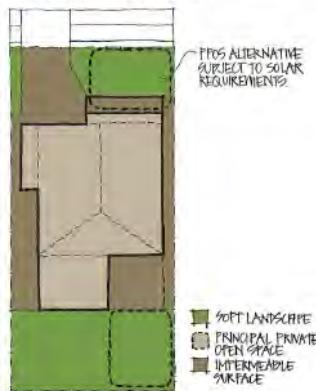




Figure 4: Minimum front setback distances

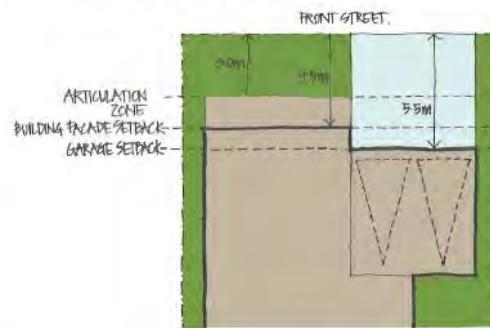


Figure 5: Minimum front setbacks for dwellings fronting open space or drainage land

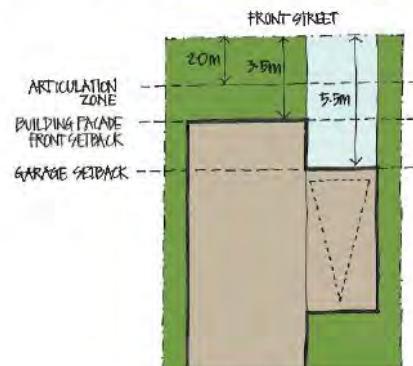
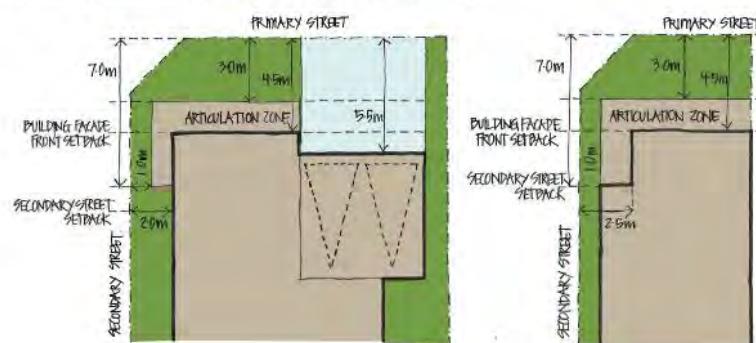


Figure 6: Minimum setbacks for corner lot dwellings

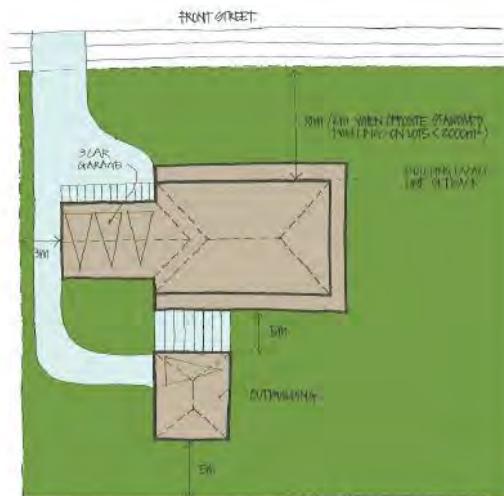




Development Controls for Large Lot Detached Dwellings

Element	Control
Minimum Allotment Size	2000m ²
Front setback (min)	10m to building facade line 6m to building façade line when opposite standard dwellings on <2,000m ² lots Garage line to be 1m behind the building line
Side setback (min)	3m
Rear setback (min)	5m (ground level) and 6m (upper levels)
Corner lots secondary street setback (min)	4.0m
Building height, massing and siting	2 storeys maximum. 3 storeys will be considered on dwelling's site characteristics and the architectural merit of the proposal.
Garages and car parking	Double and triple garages permitted. Architectural style, construction, materials, quality and finish to be consistent with that of the Principal dwelling.
Outbuildings	Architectural style, construction, materials, quality and finish to be consistent with that of the Principal dwelling. Minimum 1 storey. Setback from Principal dwelling: 5m Side and rear setbacks as per Principal dwelling. Fencing: If separated from principal dwelling, fencing to be complementary to quality of Principal dwelling.

Figure 7: Large detached dwelling with outbuilding and triple garage





Development Controls for Secondary Dwellings

Element	Secondary Dwelling
On-site car parking	No additional car parking space
Principal Private Open Space (PPOS)	No separate private open space required.
Subdivision	Subdivision from principal dwelling not permitted.
Access	Separate direct access to a street, laneway or shared driveway way not required.
Services and facilities	No separate services or facilities required.
	<ol style="list-style-type: none">1. The maximum site coverage control for upper floors may be exceeded by the combined upper floor coverage of the secondary dwelling and principal dwelling, providing that:<ul style="list-style-type: none">- The privacy of the principal dwelling and dwellings on adjoining land is not compromised; and- Solar access to the principal private open space of neighbouring lots is not significantly reduced.2. The finishes, materials and colours of the secondary dwelling are to complement the principal dwelling in its construction features.3. For secondary dwellings, windows and private open spaces must not overlook the private open space of any adjacent dwellings. Windows that potentially overlook adjacent lots must either have obscured glazing, be screened or have a minimum sill height of 1.5m above floor level.4. Secondary dwellings and associated garages may have a zero lot setback to one side boundary and may be attached to another garage/secondary dwelling on an adjoining lot, particularly where the secondary dwelling is associated with an attached or semi-detached dwelling.5. Where the secondary dwelling is built to a zero lot line on a side boundary, windows are not to be located on the zero lot wall unless that wall adjoins a laneway, public road, public open space or drainage land.6. Rear garages with secondary dwellings may have first level balconies facing the lane provided the balcony remains within the lot boundary. Where 2m deep, overhanging balconies are located along a lane, the application must demonstrate how garages setback underneath avoid creating an overly wide lane and ambiguous space opportunities for illegally parked cars, trailers, bins etc.7. Where a secondary dwelling is built over a rear garage and separated from the upper levels of the principal dwelling, there must be a minimum separation of 5m between the upper floor rear façade of the principal dwelling and the secondary dwelling.

Development Controls for Multi-Dwelling Housing

Where a typology not covered in Masterplan Controls, refer back to The Hills DCP.