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9 October 2020

Elizabeth Irwin
Department of Planning, Industry and Environment
Green and Resilient Places Division
Locked Bag 5022
Parramatta NSW 2124

Dear Elizabeth,

SUBMISSION ON DRAFT CUMBERLAND PLAIN CONSERVATION PLAN MIRVAC – MULTIPLE LAND HOLDINGS

This letter has been prepared on behalf of Mirvac in response to the public exhibition of the draft Cumberland Plain Conservation Plan 2020-56 (**the draft CPCP**). This submission is made in respect to the three [REDACTED] land holdings located across the Western Sydney region. This includes land holdings at Menangle, Mulgoa and Milperra.

Due to the complex relationship between the draft CPCP and the three different sites, it is requested that this letter be submitted as a formal, interim submission to the draft CPCP. An update with the detailed site assessment and comments and recommendations will be submitted prior to COB Wednesday, 14 October 2020.

Yours sincerely,

[REDACTED]

Bruce Colman
Director

[REDACTED]
[REDACTED]

Sarah Ng

From: [REDACTED]
Sent: Friday, 9 October 2020 11:42 AM
To: Elizabeth Irwin
Cc: Laura Torrible; Steve Hartley; DPE PS Biodiversity Mailbox
Subject: RE: CPCP - Mirvac Menangle Park - submission extension
Attachments: 20201009 Draft CPCP Submission - Mirvac.pdf

Hi Elizabeth,

Please find attached Mirvac's holding submission, which has also been uploaded on the DPIE website.

Mirvac will submit their full submission by Wednesday 14th October. The delay is due to the complexity of the three major sites they are dealing with.

Regards
Bruce

From: Elizabeth Irwin <[REDACTED]>
Sent: Wednesday, 7 October 2020 8:47 AM
To: Bruce Colman <[REDACTED]>
Cc: Laura Torrible <[REDACTED]>
Subject: RE: CPCP - Mirvac Menangle Park - submission extension

Dear Mr Colman

Thank you for your email, Steve is on leave this week so I am responding on his behalf.

We request that you please provide what you are able to by Friday 9 October so that it is recorded in the system as a submission and send through an update (if needed) on Wednesday 14 October at the latest, directly to biodiversity@planning.nsw.gov.au (ccd).

Kind regards

Elizabeth Irwin
Director Conservation & Sustainability
Green & Resilient Places Division
T 02 9995 5126
4 Parramatta Square, 12 Darcy St Parramatta, NSW, 2150
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**Planning,
Industry &
Environment**

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

Have your say



on the Cumberland Plain Conservation Plan.

Submissions close 9 October.

From: Bruce Colman [REDACTED]
Sent: Tuesday, 6 October 2020 9:44 PM
To: Steve Hartley [REDACTED]
Cc: Elizabeth Irwin [REDACTED] Laura Torrible [REDACTED]
Subject: CPCP - Mirvac Menangle Park - submission extension

Hi Steve,

Urbis and Biosis are preparing a submission for the Mirvac land at Menangle Park. This is identified employment land to the west of Greater Macarthur Growth Area.

This land is heavily impacted by strategic conservation land.

Mirvac is seeking a one week extension on their CPCP submission.

Could you confirm this is OK?

Thank you

Regards
Bruce

BRUCE COLMAN
DIRECTOR

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URBIS

SUBMISSION ON DRAFT CUMBERLAND PLAIN CONSERVATION PLAN

Prepared for



14 October 2020

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Bruce Colman
Assistant Planner	Andrew Lee
Project Code	P0028017
Report Number	Final

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1. INTRODUCTION

This report has been prepared on behalf of Mirvac Homes (NSW) Pty Ltd (██████) in response to the public exhibition of the draft Cumberland Plain Conservation Plan 2020-56 (the **draft CPCP**).

This submission is made in respect to three land holdings owned or controlled by Mirvac in the suburbs of Menangle, Milperra and Mulgoa. These sites are identified as the 'Mulgoa Landholding', 'Menangle Landholding' and 'Riverlands Landholding'.

We understand that the draft CPCP seeks to offset the biodiversity impacts of future urban development within the Cumberland subregion by identifying strategically important biodiversity areas to secure new ecological reserves. We understand that the intent of the draft CPCP is to inform the zoning for certified – urban capable land and non-certified land, land that is either avoided land for biodiversity or other environmental purposes. We agree that the objective of the draft CPCP, to ensure a vibrant and liveable city, is strategically important and desirable.

However, it is noted that the draft CPCP has not taken proper consideration of the existing and anticipated land uses across these sites. It is understood that ground truthing undertaken at the sites did not inform the draft CPCP and consequently, the existing ecological and planning context of the sites have not been appropriately considered. The draft CPCP mapping does not properly represent the biodiversity values of these Mirvac sites.

The following sections and Appendices provide a detailed overview of the ecological circumstance of the Mirvac sites as well as their planning context. This submission offers recommendations which will allow the final CPCP to establish its biodiversity protection objectives more accurately and effectively.

1.1. OVERVIEW

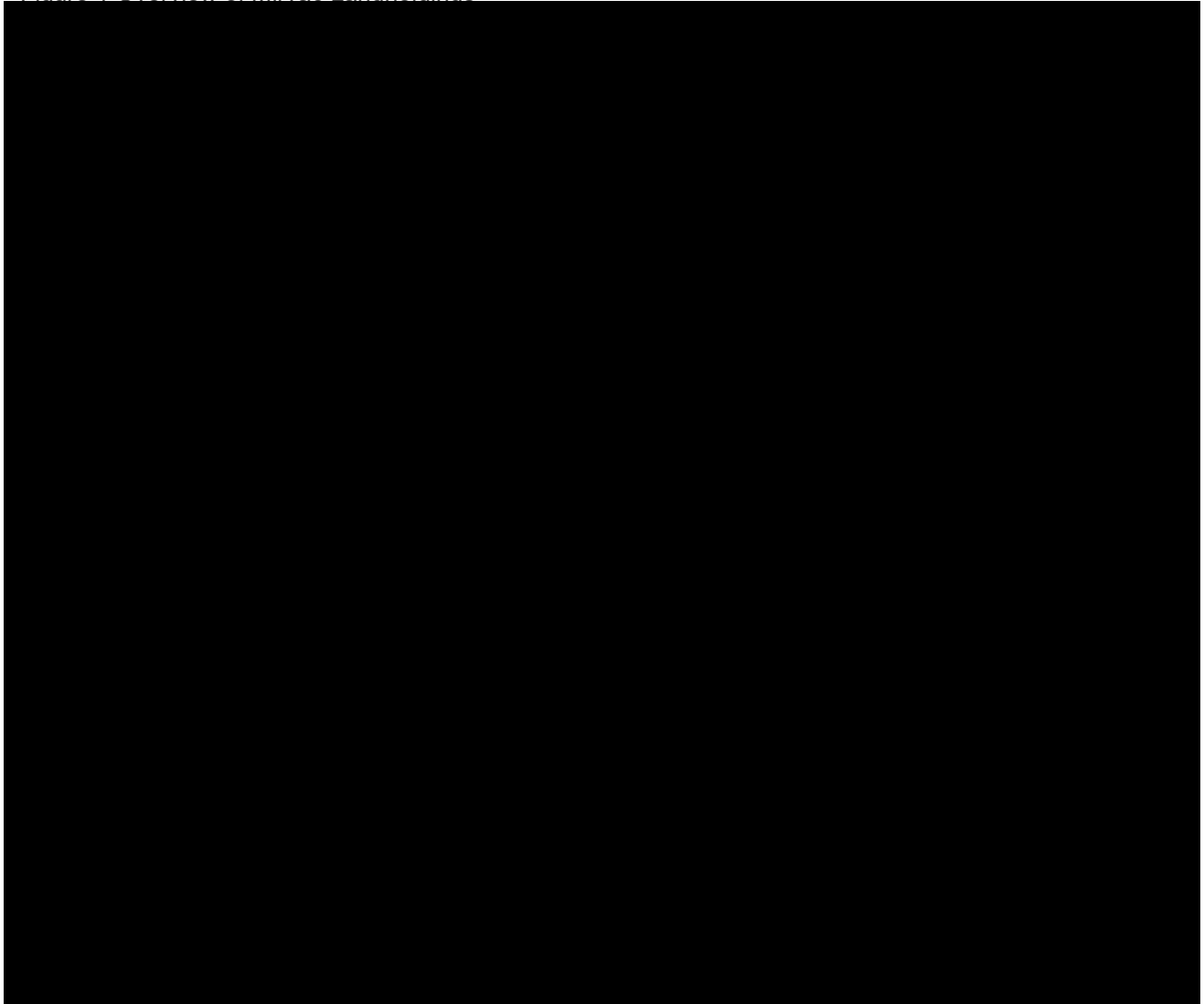
- All three sites are either wholly or in part at the late planning stages for urban redevelopment. Planning proposals for the purposes of urban development have been approved at the Menangle (in part) and Riverlands sites for the purposes of urban development. Development applications have been subsequently submitted / approved at these sites. A planning proposal for the purposes of a Glenmore Park Stage 3 Extension has received gateway approval at the Mulgoa Site.
- The planning context of the three sites, including the zoning in certain areas, have not been considered and represented in the Strategic Conservation Area (SCA) mapping in the draft CPCP.
- All three sites have undergone various levels of ecological and biodiversity assessments from initial investigations to detailed assessments at the time of the planning proposals and/or development application stages. The intended redevelopment of these sites have the appropriate biodiversity and ecological considerations as detailed in these assessments. The draft CPCP does not consider these prior ecological / biodiversity assessments.
- It is unreasonable to prescribe additional environmental constraints on these sites considering that they are either in the late planning stage of their respective developments or identified for future urban development.
- While there are watercourses and patches of ecologically valuable vegetation across all three sites, the draft SCA and related mapping are not representative of the ecological context at all three sites.
- All three sites have large expanses of cleared land and / or disturbed land. The draft SCA mapping does not reflect this.
- The draft SCA mapping includes many areas that do not contain high ecological value, are unsuitable for new biodiversity plantings and will not lead to a desirable outcome.

As such, the following actions are recommended:

- Reduce the mapped Strategic Conservation Area (SCA) across the Menangle Site in accordance with the Ecological Value Map and the Station Street rezoning. The SCA mapping should only include the areas mapped as 'High Ecological Constraint' and wholly exclude the areas zoned as R2 low density residential and B1 neighbourhood centre and areas identified as heavily disturbed exotic vegetation.

- Align the extent of those areas mapped as non-certified / proposed environmental conservation across the Mulgoa Site in accordance with the zoning of the Glenmore Park Stage 3 Planning Proposal.
- Deletion of all the mapped SCA across the Riverlands site.
- Consideration to be given to the approved / submitted planning proposals and development applications across all three Mirvac sites. Consider the respective biodiversity and ecological assessments undertaken as part of these planning processes.

Figure 1 Overview of Mirvac Landholdings



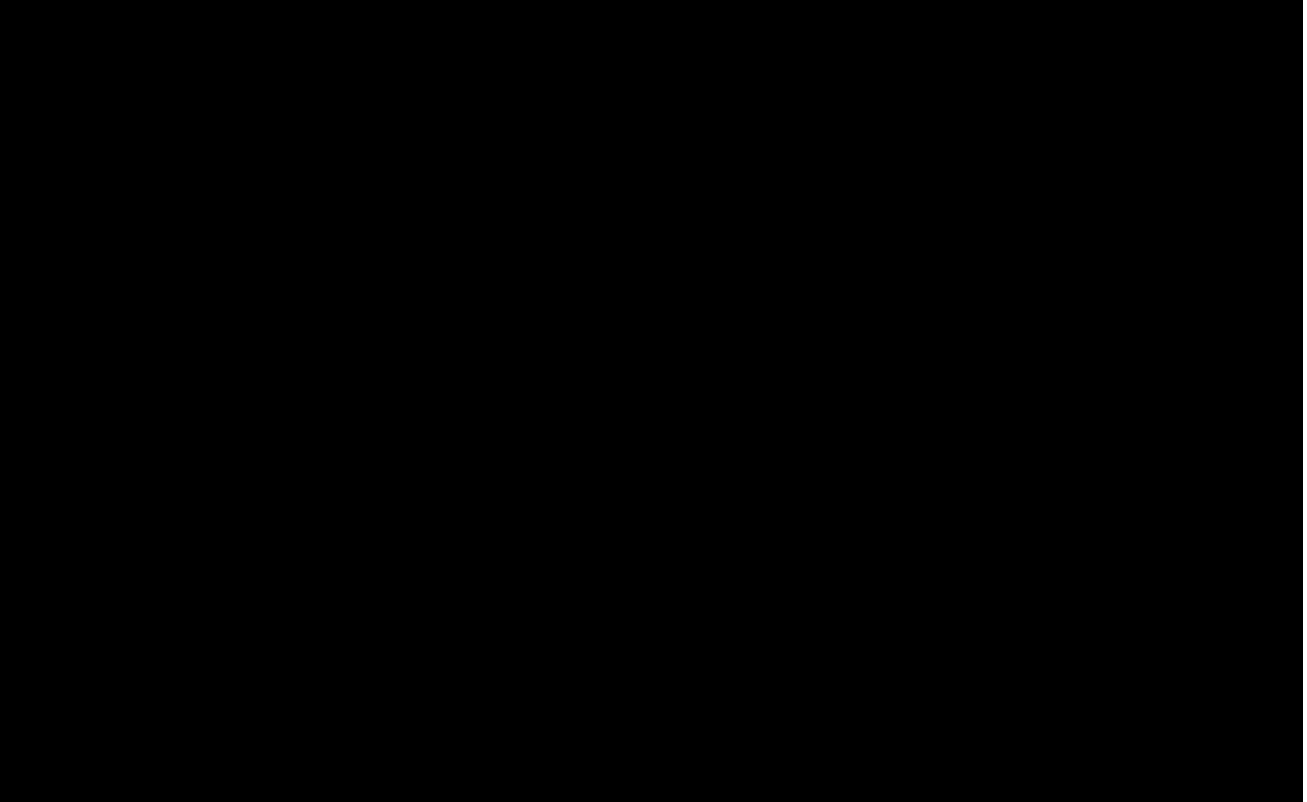
2. MENANGLE SITE

2.1. THE SITE

The Menangle landholding is comprised of 16 neighbouring lots distributed around the Hume Highway and bound by the Nepean River to the north and the east (see Figure 3 below). The site is located in Menangle, within the Wollondilly Local Government Area (LGA). The major land holding comprises approx. 577.7ha of predominantly agricultural land and neighbours the Menangle village. The site is close to the Camden, Picton and Campbelltown town centres.

An aerial photograph of the site is provided in Figure 2 below.

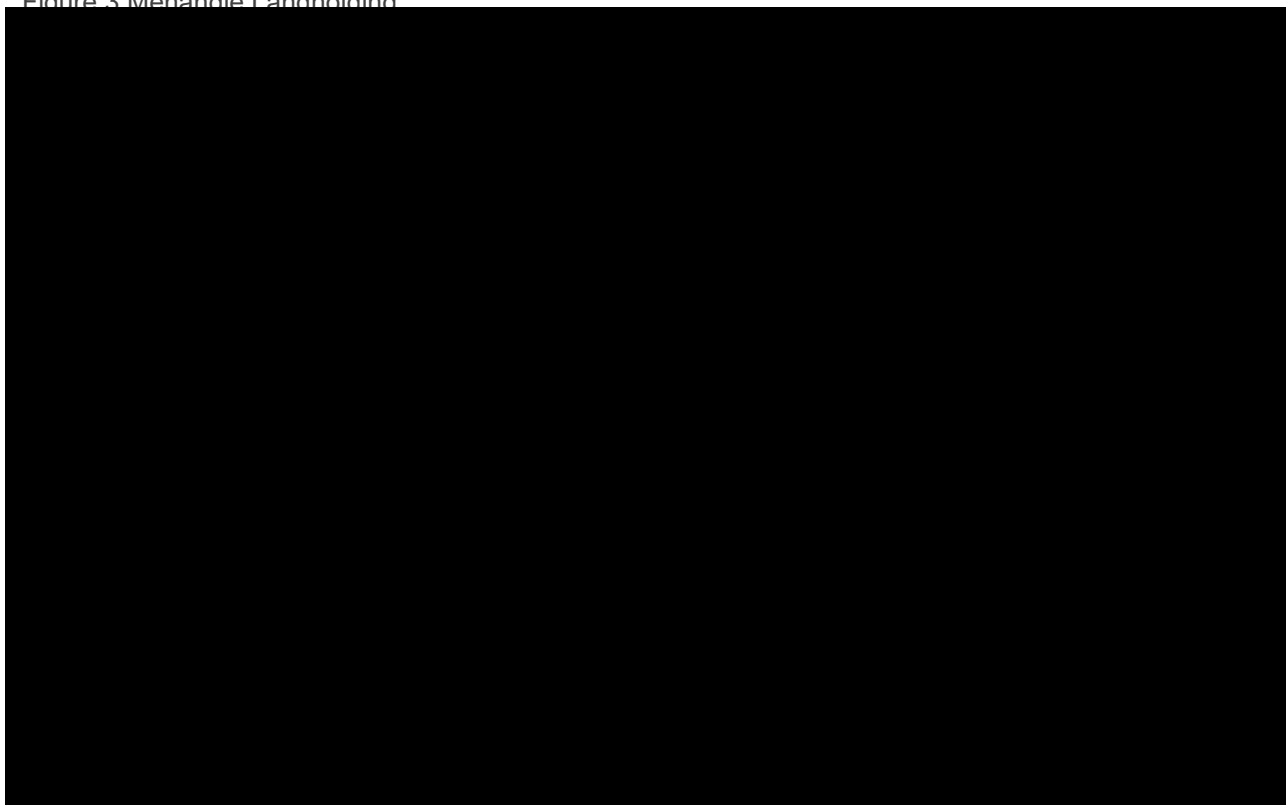
Figure 2 Aerial Image of Site



Source: Six Maps

The site has been historically cleared for agricultural purposes and supports native vegetation predominantly around the existing riparian corridors. The Nepean River borders the north and eastern extents of the landholding. Seven first and second order streams are distributed across the landholding. Considering the existing distribution of natural features across the site, the majority of the site has potential for future employment and/or residential development.

Figure 3 Menangle Landholding



Source: Intramaps

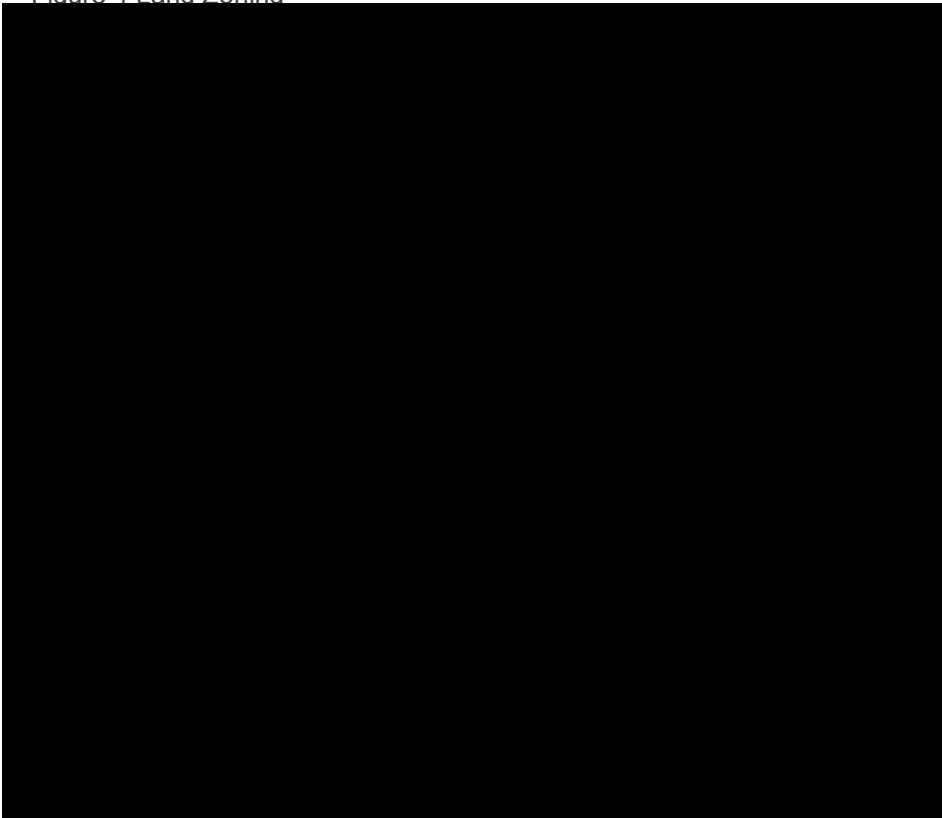
2.2. PLANNING CONTEXT

The majority of the Menangle land is currently zoned as RU2 Rural Landscape or RU1 Primary Production under the Wollondilly LEP 2011. A planning proposal was submitted (Station Street – Menangle Planning Proposal) and subsequently approved in December 2018, rezoning approx. 40Ha of the land immediately north and east of the Menangle village to accommodate new residential and mixed use developments . Consequently, the site includes some B1 neighbourhood centre, RE1 Public Recreation and R2 Low Density Residential areas surrounding the Menangle Village. Some portions of the land adjoining the Nepean River are zoned as E2 Environmental Conservation. The zoning across the land is demonstrated in Figure 4 below.

Following the approval of the Station Street planning proposal, multiple development applications have been submitted primarily for residential and employment land uses. This includes the subdivision of the land north and north east of the Menangle village to facilitate future residential subdivisions [REDACTED] and a 117 lot subdivision [REDACTED] or residential allotments. Subsequently, a commercial precinct is proposed to be developed north of the village, accommodating food and drink, markets and hotel accommodation [REDACTED]

As such, multiple lots across this landholding are anticipated to undergo substantial urban development and the overall character of this landholding is expected to transform in the near future.

Figure 4 Land Zoning



2.2.1. Further Development Potential

In addition to the approved rezoning and submitted development applications the Menangle land has substantial development potential as well as strategic merit.

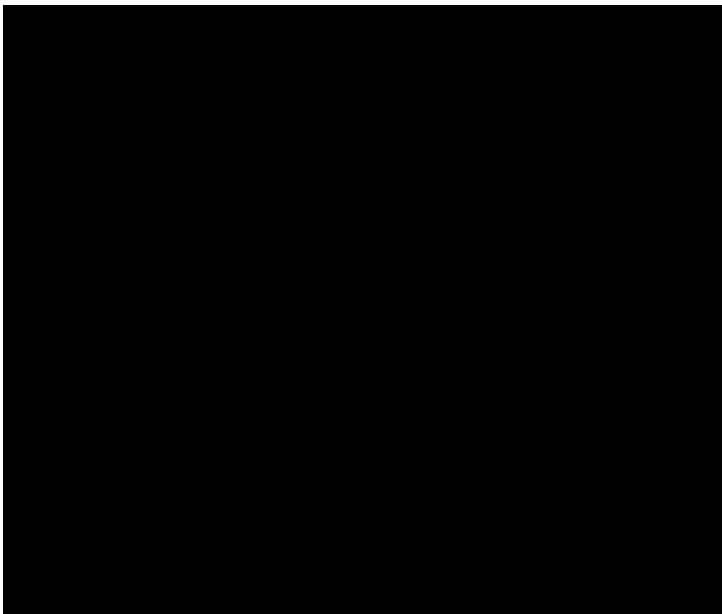
The unique combination of the land's self-containment, its level of access and connectivity via planned infrastructure, and its proximity to planned residential precincts makes it ideal for strategic employment uses.

The following is a summary of the key attributes the land contains:

- The Macarthur South Investigation Area (MSIA) clearly supported the development of this land for both employment generating and residential development as the site was included within the MSIA.
- The site has been identified in the Greater Macarthur 2040 Interim Plan as 'land with future employment potential subject to investigation'.
- The proposed OSO interchanges with the Hume highway at the southern end of the site
- Proposed east-west roads through the site in the draft SIC plan for GM connecting Appin Rd and Menangle Rd with interchanges to the Hume Hwy. I.e. providing connections to the Greater Macarthur Priority Growth Area.
- Access to the Hume Highway will be improved with the completion of the Spring Farm Parkway to the north of the site within Menangle Park.
- Potential for a new railway station within the site along the southern rail line which adjoins the western boundary of the site.
- The sites scale provides opportunities for employment uses, residential, education, passive and active open spaces, retained veg/ riparian corridors, and infrastructure.
- The site contains absolute frontage to the Nepean River enabling the foreshore of the river to be activated and enhanced.
- Heritage, servicing and coal mining have been assessed with no impediment to urban development identified.

- The land is a large land holding controlled by one entity which will positively facilitate the timing and delivery of new employment lands in line with the GM 2040 Interim Plan.
- The site has secured interest of a major REIT (Mirvac) which ensures the development's certainty. Mirvac undertake design, development, and construction in-house and have the financial capital to drive socially responsible and sustainable urban outcomes.

As stated above, the Greater Macarthur Structure Plan identifies the south-eastern portion of the landholding as 'Future Employment Potential Subject To Investigation' (see Figure 5). The landholding is of substantial strategic importance and accordingly, it is poised for further urban development in the near future. This map is included in all DPIE documentation and public material on Greater Macarthur 2040 and clearly shows the strategic intent for the site. This is for future employment lands which supports the self-containment of Greater Macarthur. It contributes towards the Greater Sydney Commission's objective of a 30 minute city and responds to the need for employment lands within the Wollondilly Shire, where Wollondilly Shire Council reports in their LSPS that more than 70% of the working population leave the shire for Work



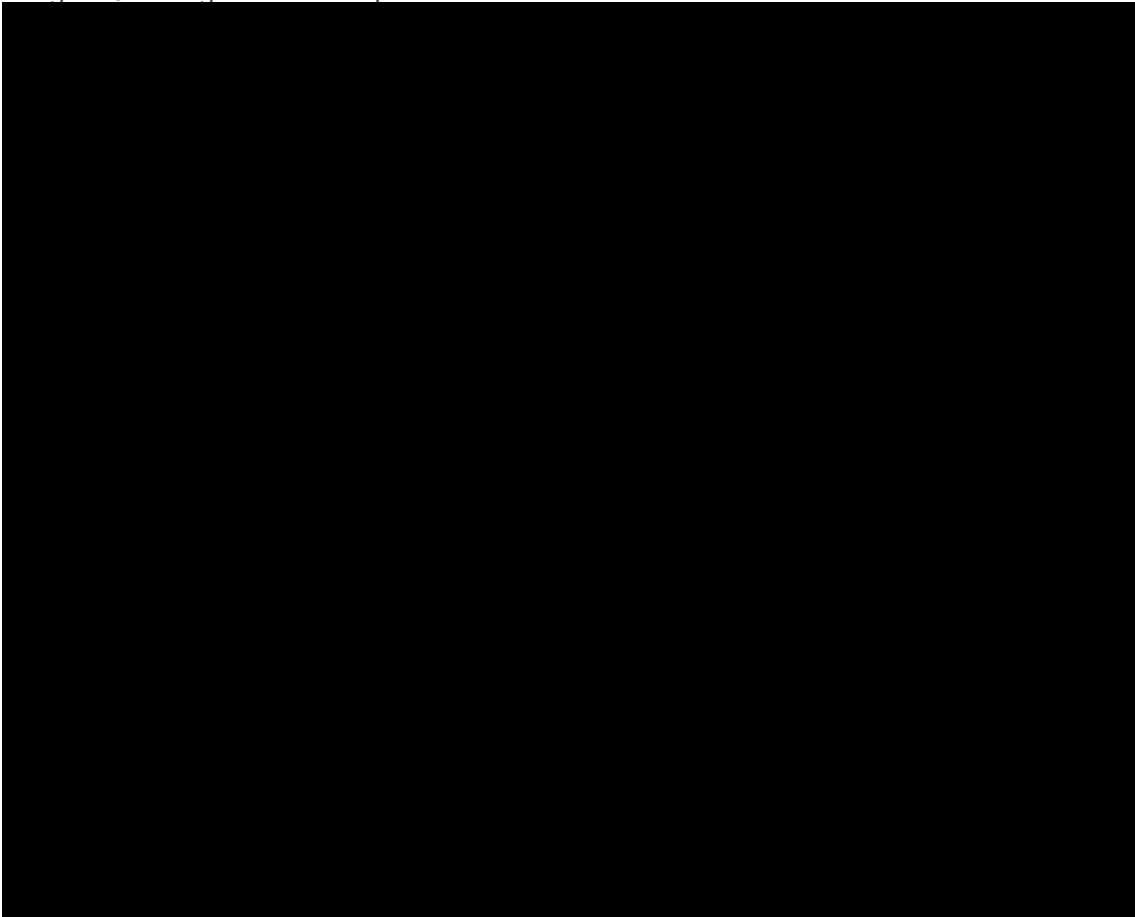
2.3. EXISTING ECOLOGICAL CONDITION

As identified in section 2.1 of this report, the bulk of the site has been cleared for agricultural land uses containing open grassland, comprising mostly exotic species and pasture grass. The site contains some areas of high ecological value as well as riparian corridors as detailed in the following section and **Appendix A**.

The Nepean River borders the north and eastern extents of the site, with a Strahler order greater than 4. The land adjoining this river is appropriately zoned E2 Environmental Conservation, with the majority of these E2 zoned lands being east of the Nepean River, outside the landholding (refer to Figure 4). Across the remainder of the site, seven Strahler Order 1 and Strahler Order 2 streams are distributed across different lots.

A high level rapid ecological assessment conducted by Biosis identifies four remnant native threatened ecological communities across the landholding as well as 79 hollow bearing trees. This includes a number of ecological communities such as the River-flat Eucalypt Forest and the Western Sydney Dry Rainforest and Moist Woodland on Shale, both of which are identified as 'High' value communities. In accordance with Biosis' analysis of the site's ecological features, approx. 161.98ha of the site accommodates features with high ecological value. Biosis prepared a map, demonstrating the areas of high ecological value as seen in Figure 6 below. For further details on the ecological communities identified within the site, refer to the Ecological Study at **Appendix A**.

Figure 6 Ecological Value Map

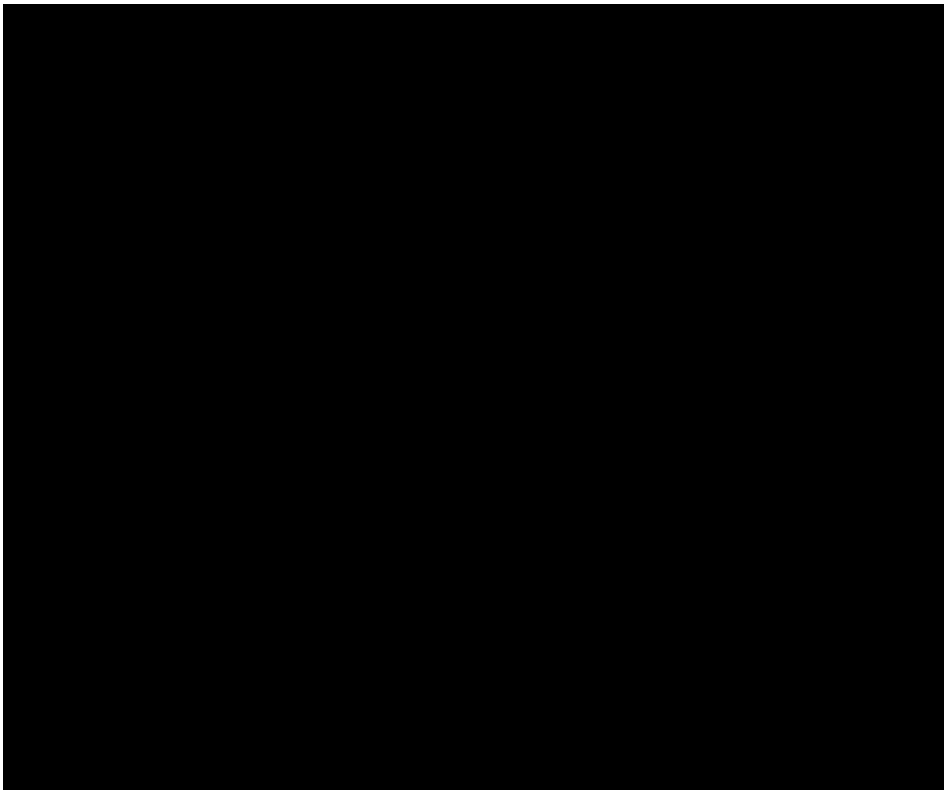


Source: Biosis

It is noted that the draft CPCP identifies the bulk of the landholding as Strategic Conservation Area (SCA) (refer to **Figure 7**). The draft CPCP notes that SCAs are areas that include large remnants of native vegetation, provide important connectivity and/or have ecological restoration potential. Accordingly, these SCAs are identified as suitable for offsetting biodiversity impacts by either securing new conservation reserves or by establishing a biodiversity stewardship site. While the intent of these SCAs are agreed upon, there is concern that the mapped SCAs have not appropriately accounted for the site's strategic intent and low value exotic grasslands across the bulk of the site and consequently, the mapped SCA is not suitable conservation land. The CPCP team have confirmed that ground truthing was not undertaken across the site in preparing the draft CPCP.

The ecological assessment found that the species of high ecological value predominantly border the Nepean River and first/second order streams. The bulk of the site has been cleared and heavily disturbed with small, scattered patches of remnant native vegetation and hollow bearing trees. Consequently, the majority of the landholding does not contain any vegetation of high ecological value nor is it suited for ecological connectivity as suggested by the draft SCA mapping. The SCA mapping is not representative of the ecological context of the site.

Similarly, SCA mapping have also included the areas zoned for urban development, including areas zone R2 Low Density Residential, and B1 neighbourhood centre. These parts of the site have been assessed and found to be suited for urban development in accordance with their respective planning proposals and development applications. Additionally, the bulk of the landholding has been found to be appropriate for further urban development considering its lack of ecological features and strategic location.



2.4. PROPOSED MAPPING / BIODIVERSITY OFFSET

It is agreed that SCAs should be mapped across the site to establish ecological reserves and offset the future urban development across this site and across the Cumberland Plain region. However, the mapping is to be updated to properly reflect the ecological and planning context of the site. Given the context of the site, being in a strategically optimal location and highly capable of delivering further employment and residential development, the additional restrictions generated by the SCA mapping is considered unreasonable. Additionally, the proposed SCA mapping will compromise the developments that have been approved or are currently in the planning pipeline. We note that the DCPCP states that the SCA will be monitored over the life of the plan and regularly refined as constraints and opportunities change however the plan must have a level of accuracy at the outset.

As such, it is essential that the proposed SCA mapping be amended as follows:

1. Deletion of all SCA mapping on the lots that have been rezoned as R2 Low Density Residential and B1 Neighbourhood Centre
2. Reduction of the SCA mapping across the landholding so that it only includes areas mapped as 'High Ecological Constraint' as mapped in Figure 6 (except for the areas rezoned as per item 1) and excludes all areas identified as heavily disturbed exotic vegetation

Given the ecological context of the site, the reduced SCA mapping will still conserve a large portion of vegetation across the landholding. Any vegetation lost as a result of the reduced SCA mapping and any future offsetting for urban development will have negligible biodiversity impacts and will have minimal affect onto the offset target of 5,475 hectares identified in the draft CPCP.

3. MULGOA SITE

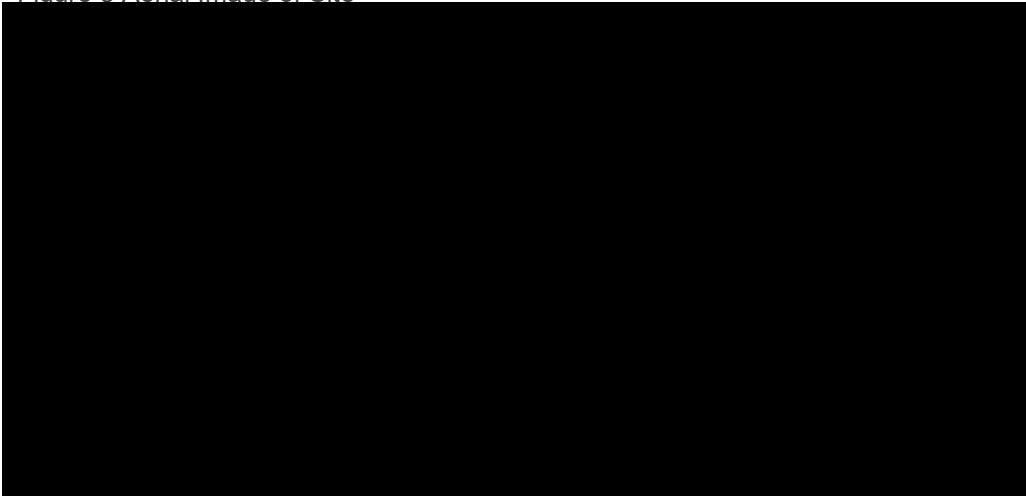
3.1. THE SITE

The Mulgoa Landholding is comprised of 21 properties immediately adjoining The Northern Road (eastern boundary). This landholding is commonly known as Glenmore Park Stage 3. The site is located in Mulgoa, in the Penrith Local Government Area (LGA) and is made up of approximately 206ha of mostly undeveloped land predominantly used for rural residential purposes.

The site adjoins the existing Glenmore Park precinct to the north. Glenmore Park is currently comprised of low density residential developments and supporting outdoor recreation spaces, commercial uses and community infrastructure. The subject site is a logical extension to Glenmore Park and is has the support of both Council and the Department of Planning, Industry and Environment (DPIE) to undergo the relevant rezoning and greenfield development.

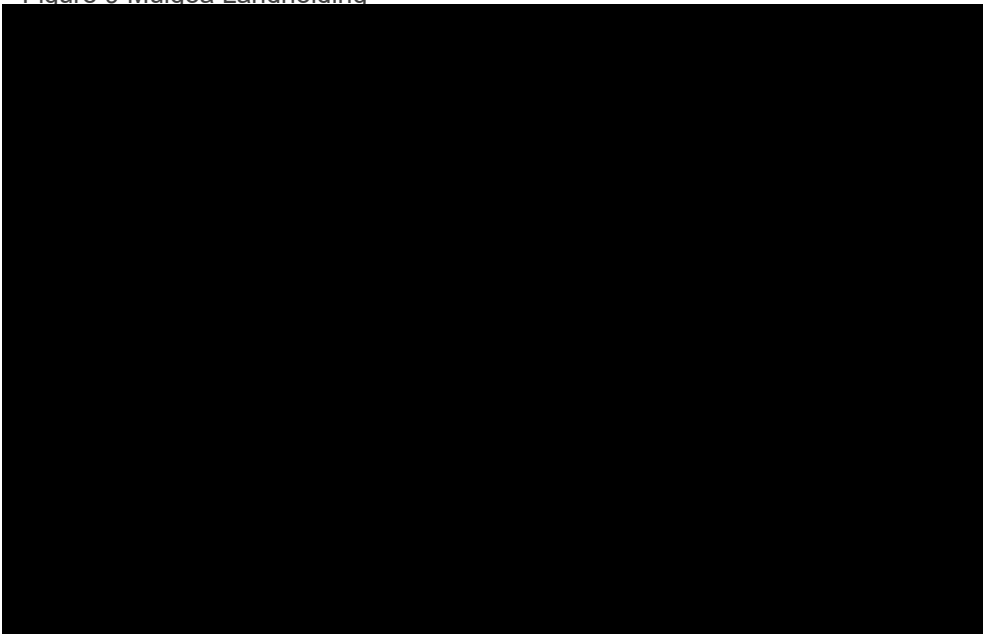
An aerial photograph of the site is provided in Figure 8 below.

Figure 8 Aerial Image of Site



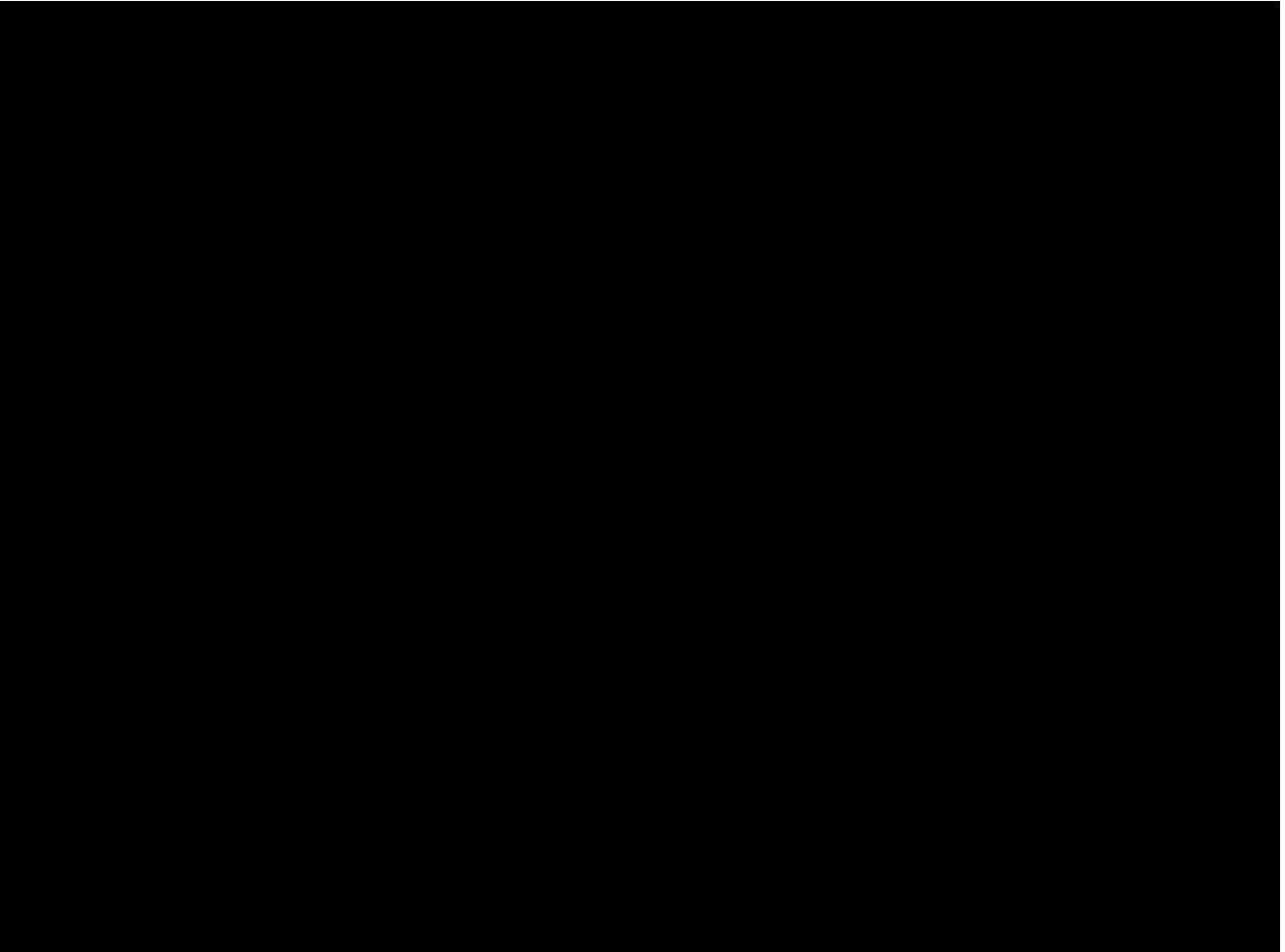
The site has been historically cleared for agricultural purposes and supports little native vegetation across the bulk of the site. Figure 9 below shows the first and second order streams distributed across the landholding.

Figure 9 Mulgoa Landholding



3.2. PLANNING CONTEXT

The majority of the landholding is currently zoned as RU2 Rural Landscape or E3 Environmental Management under the Penrith LEP 2010. The current zoning across the land holding is demonstrated in Figure 10 below:



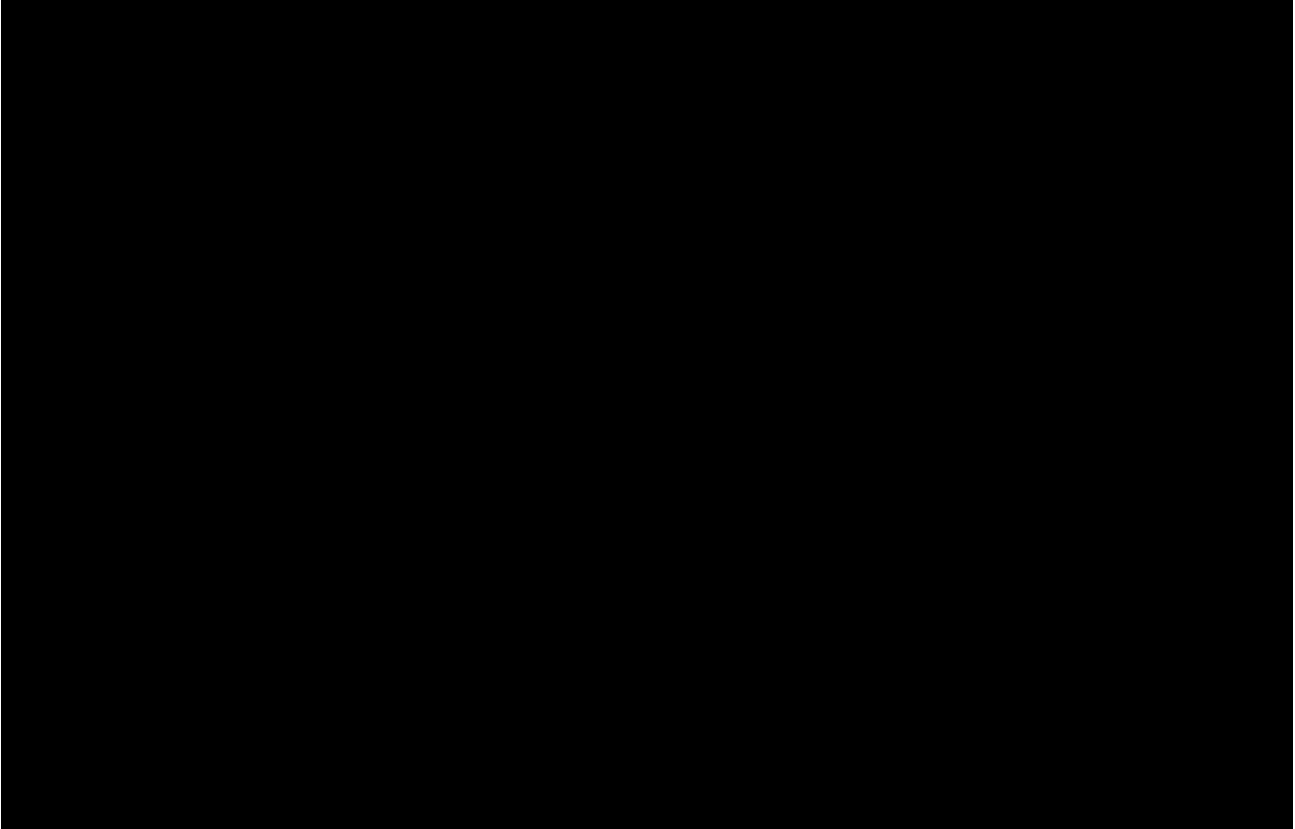
The redevelopment of the site as an extension of Glenmore Park has been led by Mirvac and considered and assessed by Penrith City Council and the Department of Planning, Industry and the Environment for several years. A rezoning planning proposal was submitted by Mirvac in May 2018 and has since, received Council endorsement and received gateway approval with conditions on 23 September 2020.

This rezoning proposal identifies the landholding as the 'Glenmore Park Stage 3' and intends to deliver 2,558 dwellings across the site as well as a neighbourhood centre, school site and areas of public open space for both recreational and conservation purposes. This planning proposal has thoroughly considered the areas with significant conservation value and has also identified those areas appropriate for landscaping to create separation of the future residential release areas from the bordering, major arterial road.

While the gateway conditions require further technical analysis and consultation, the DPIE is generally supportive of the planning proposal and has not required any further ecological assessment, except for an open space strategy which is to demonstrate how existing mature trees can be incorporated into the public domain wherever possible. The planning proposal was found to have substantial strategic merit.

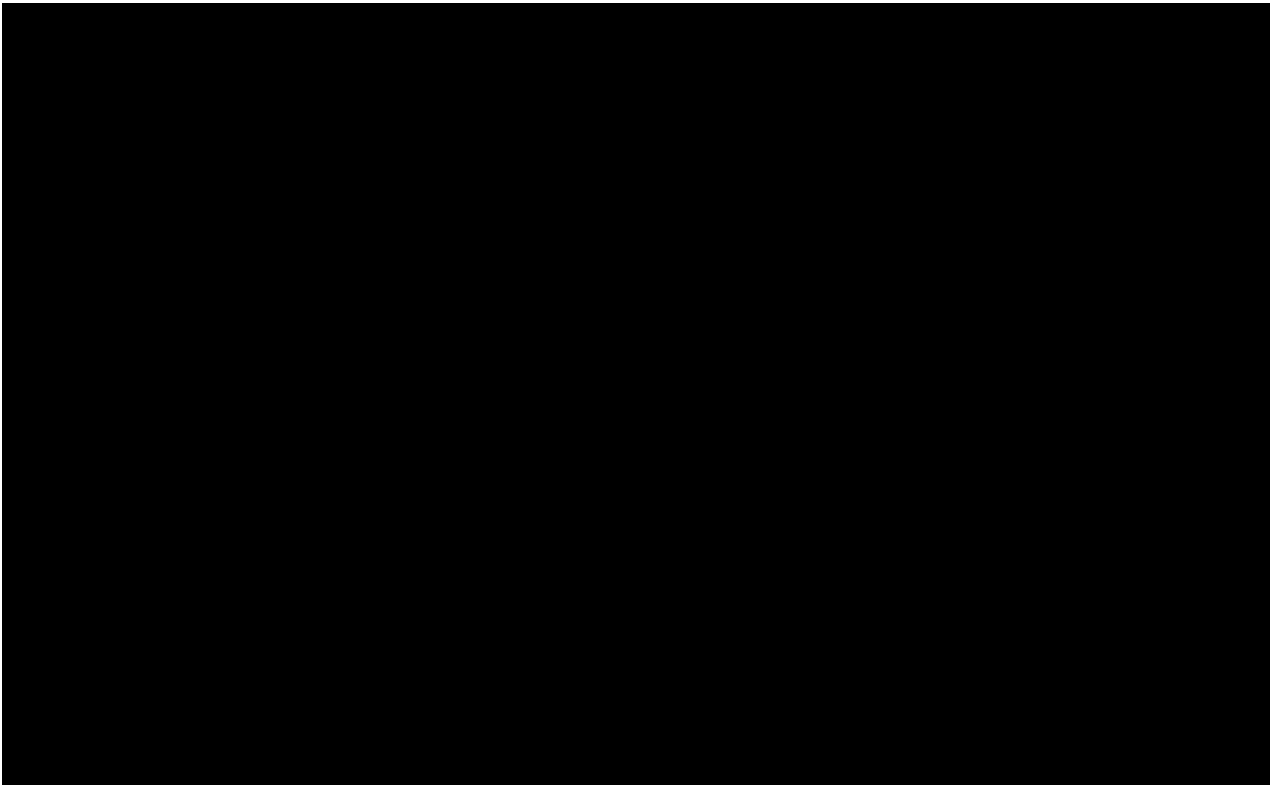
The proposed zoning and master plan is provided in Figure 11 below.

Figure 11 Glenmore Park Stage 3 Planning Proposal



Picture 1 Glenmore Park Extension Master Plan

Source: Mirvac



Picture 2 Proposed Rezoning

Source: Mirvac

3.3. EXISTING ECOLOGICAL CONDITIONS

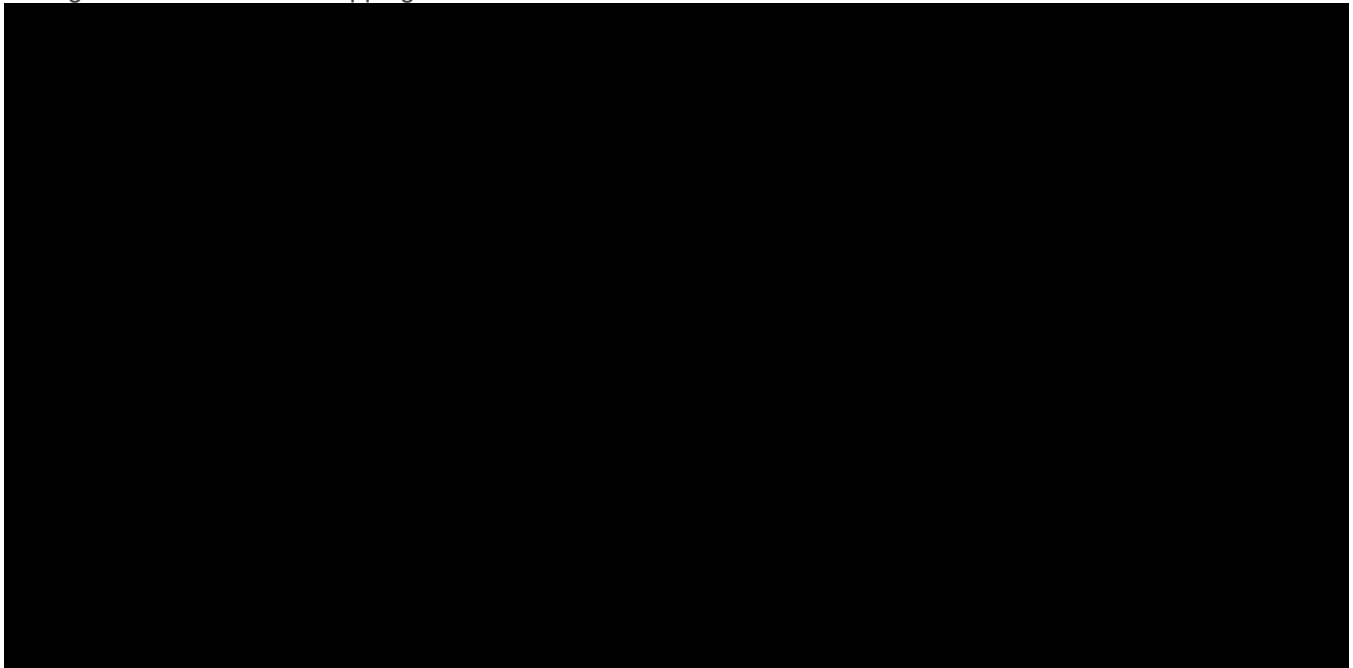
During the preparation and assessment of the Glenmore Park Stage 3 planning proposal, an Ecological and Riparian issues and Assessment report was prepared by Gunninah and an Ecology Review was conducted by Abel Ecology on behalf of Penrith City Council. Of note, the report prepared by Gunninah was informed by dedicated ground-truthing at the site in 2018. These reports provide a detailed assessment of the ecological condition of the site. Additionally, a further submission has been prepared by Gunninah (**Appendix B**).

The ecological assessments concluded that the site contains 4 areas of native vegetation and Threatened Ecological Communities. This includes communities of *Cumberland Plain Woodland* and the *River-flat Eucalypt Forest*. The site also contains Strahler order 4 and Strahler order 2 watercourses across the site. With consideration of these significant areas, the Glenmore Park Stage 3 planning proposal was carefully master planned so that there would not be any significant ecological or riparian impacts.

The Abel Ecology report prepared for Penrith City Council found that the site “*has a long history of clearing, grazing and cropping. The ecological values of the site are poor and vegetation is discontinuous.*” This report concluded that the planning proposal was capable of appropriately preserving and regenerating native vegetation while supporting the water quality targets.

It is noted that the draft CPCP identifies significant proportions of the landholding as non-certified – other (refer to **Figure 12**). The intent of this mapping is for these areas to be zoned as E2 – Environmental Conservation as to prohibit urban development and protect existing biodiversity. While the objective of this mapping is agreed, it has been applied inaccurately and does not properly represent the ecological context of the site. The E2 – Environmental Conservation zoning will be applied to many areas that are identified as having no ecological value. Of note, many of the mapped non-certified areas in the draft CPCP correlate with Strahler 1st order watercourses some of which have been found to have minimal ecological value and in some instances the land is used as farm dams.

Figure 12 Draft CPCP mapping



The non-certified mapping under the draft CPCP is in conflict with the zoning of the Glenmore Park Stage 3 planning proposal. As identified in the sections above, the planning proposal and proposed zoning were informed by an in-depth analysis of the ecological values of the site. The CPCP team have confirmed that ground truthing was not undertaken across the Mulgoa Landholding in preparing the draft CPCP.

3.4. PROPOSED MAPPING / BIODIVERSITY OFFSET

The objectives of the non-certified / E2 mapping is recognised. However, the proposed mapping will severely compromise the planning proposal which has and is currently undergoing inter-related analysis and research. Considering the advanced planning stage of Glenmore Park Stage 3, the general support the planning proposal has from the local council and the DPIE as well the substantial analysis and technical justification provided, the proposed mapping is unreasonable. The non-certified mapping and subsequent E2 zoning will inhibit any urban development within lands that do not have any ecological value.

As such, it is essential that the proposed non-certified / E2 mapping be amended as follows:

1. The proposed non-certified mapping and E2 Environmental Conservation zoning needs to be consistent with the zoning as mapped in the Glenmore Park Stage 3 Planning Proposal (see Figure 11, Picture 2).

This will ensure accurate and thorough consideration of the site's ecological values whilst avoiding unnecessary complication and conflict with the planning proposal and its future development. This will accommodate the appropriate housing, employment, and service development of the Mulgoa Landholding. This will also allow for a more effective biodiversity outcome, consistent with the objectives of the planning proposal as supported by the DPIE.

4. RIVERLANDS SITE

4.1. THE SITE

The Riverlands landholding is comprised of multiple neighbouring lots distributed immediately west of Georges River, bound by the low density residential developments located to the east as well as the M5 Southwest Motorway and multiple green open spaces to the east and north (see Figure 14 below). The site is located in Milperra, within the Canterbury-Bankstown Local Government Area (LGA). The site is a former golf course and currently contains some lands for cattle grazing. The site is located immediately west, outside the CPCP Plan Area. An aerial photograph of the site is provided in Figure 13 below.

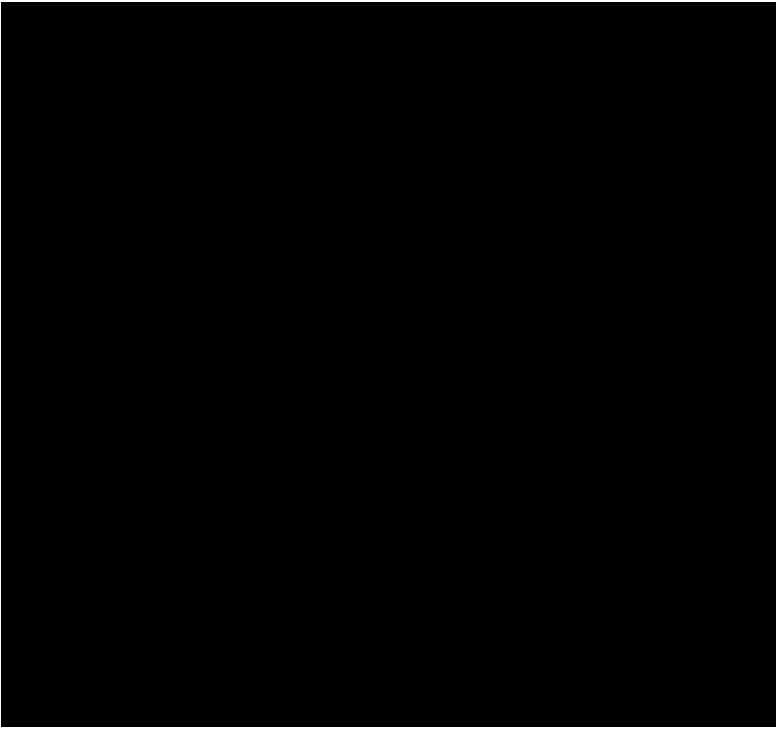
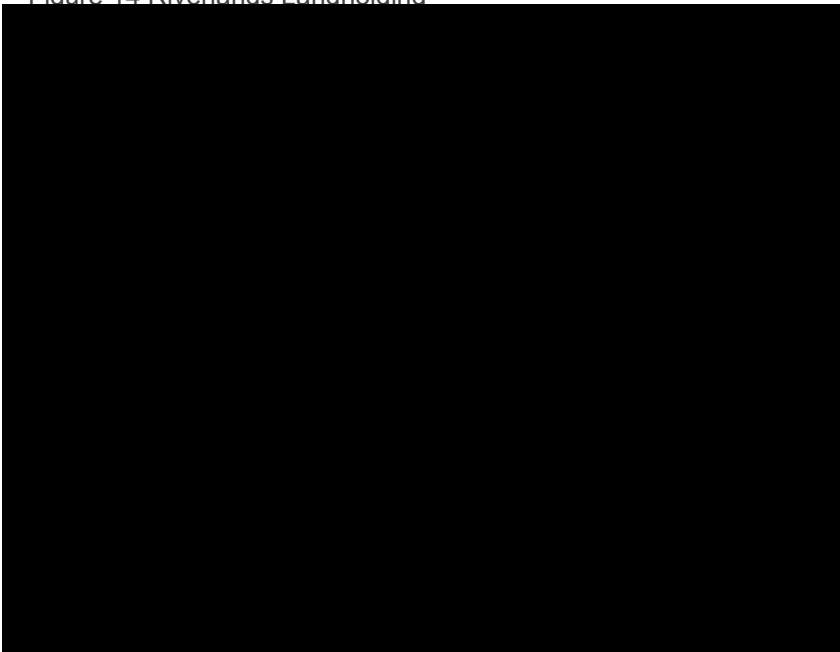


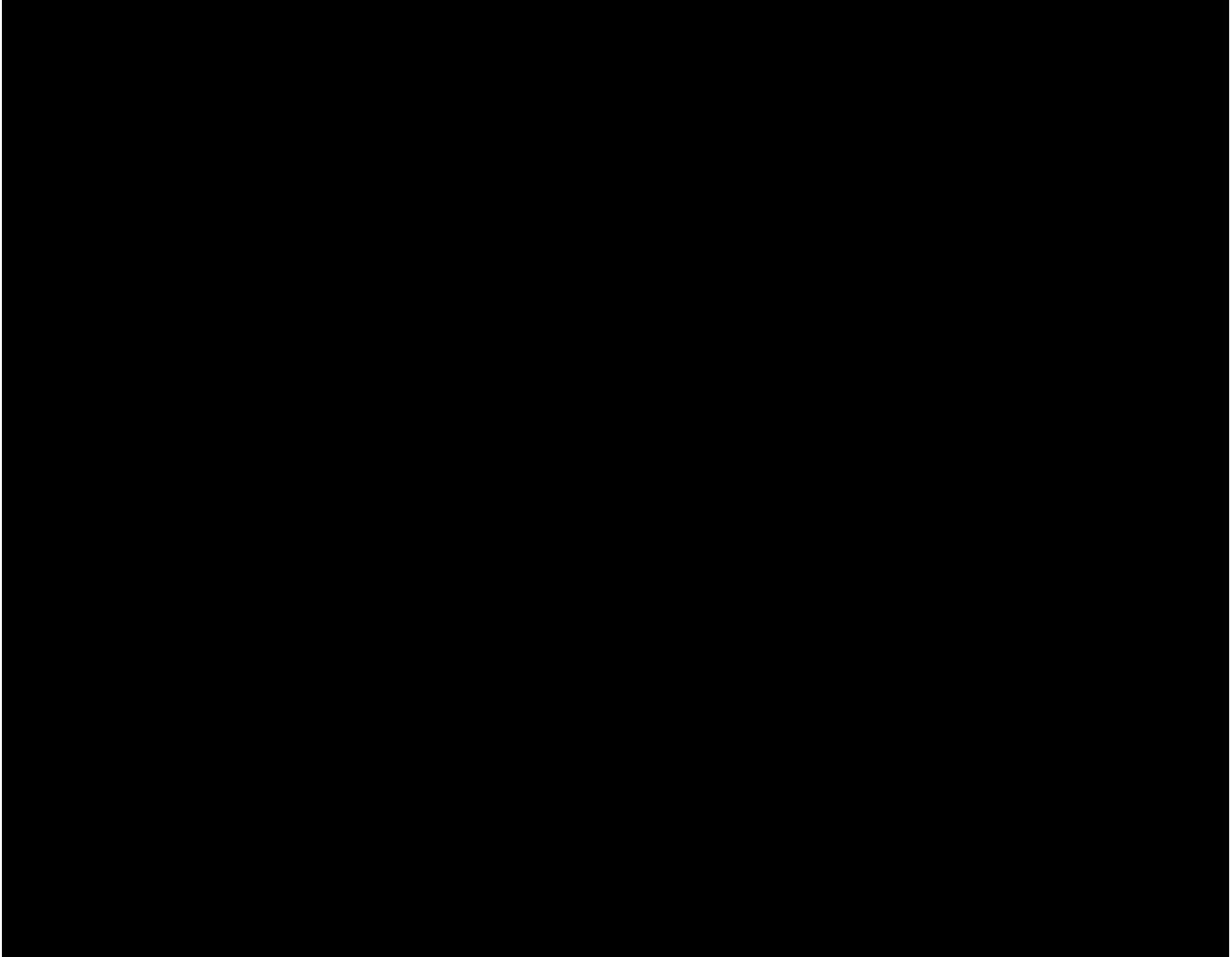
Figure 14 Riverlands Landholding



4.2. PLANNING CONTEXT

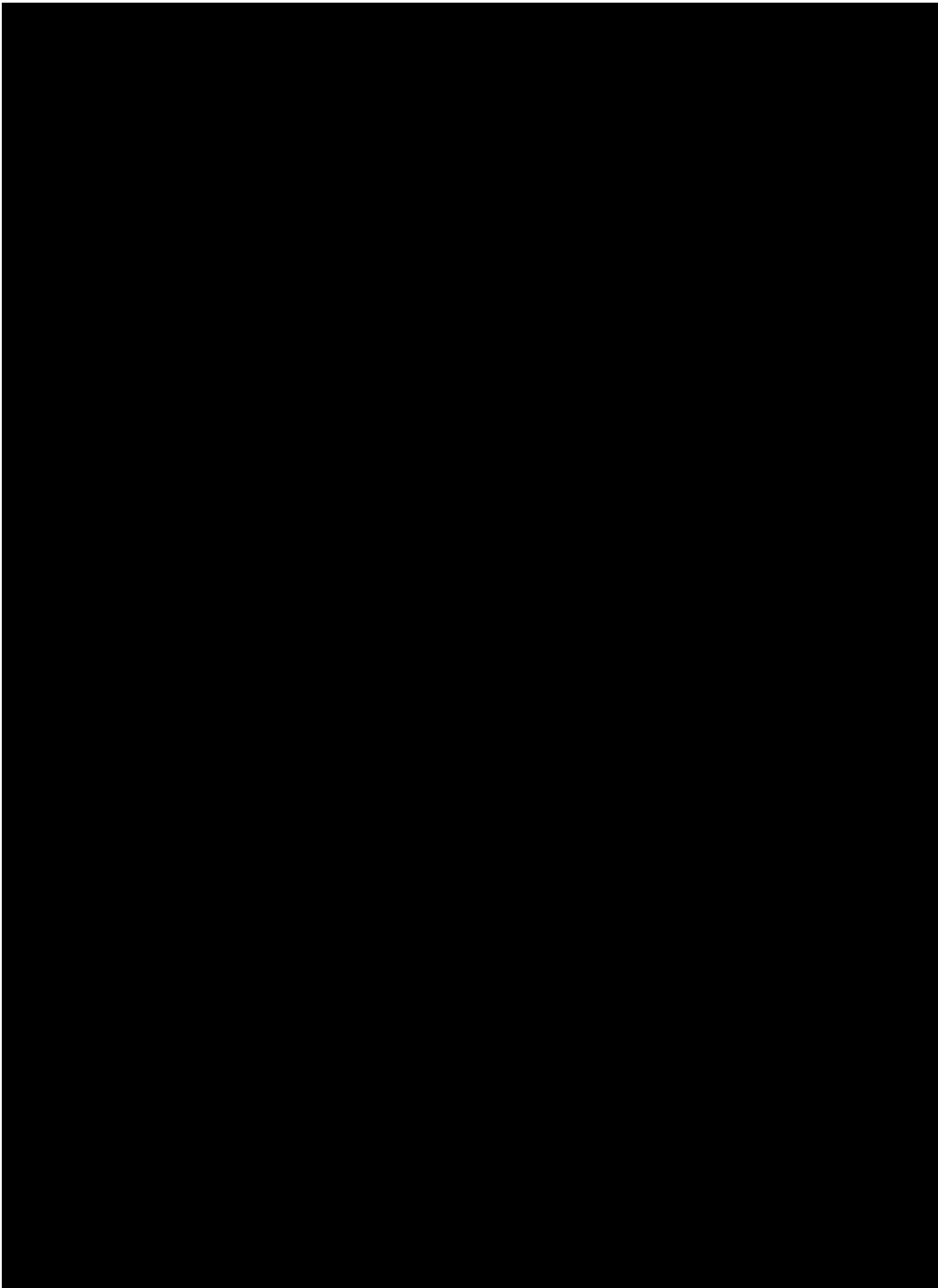
The majority of the western portion of the landholding is currently zoned as RE2 Private Recreation under the Bankstown LEP 2015. The land immediately bordering the Georges River catchment is zoned as RE1 Public Recreation. The large lot to the south-east of the site is currently zoned as R2 Low Density Residential. The zoning of this landholding was mapped in accordance with a planning proposal that was submitted (Riverlands Golf Course Planning Proposal) and subsequently approved on 07.10.2016. The intent of this planning proposal is to redevelop the site as a golf course with the associated club building in addition to the south-eastern portion of the site accommodating low density residential developments. It is noted that this residential area can accommodate up to approximately 350 to 490 dwellings.

Figure 15 Land Zoning



Following the approval of the Riverlands Golf Course Planning Proposal, multiple development applications have been submitted within the landholding site. These development applications have been lodged primarily for residential housing, road construction works as well as site preparation works for the Riverlands Golf Course. Of note, development applications are currently under assessment for the subdivision of existing lots into 197 residential allotments in addition to other infrastructure works [REDACTED]. The construction and extension of the Keys Parade as a connector road is also under assessment under DA-108/2020. Bank stabilisation works along the Georges River foreshore at the western side of the site and remediation works for the Riverlands Golf Course are also under assessment under [REDACTED]. It is intended that a shared pathway will run along the Georges River foreshore. The extent of the development across the landholding is demonstrated in Figure 16 below.

Of note, the Planning Proposal and the subsequent development applications have provided in depth consultant assessments of the environmental and biodiversity context of the site. Overall, the re-development of this site has seen substantial progress and is in the late stages of the planning process.



4.3. EXISTING ECOLOGICAL CONDITION

In accordance with Canterbury-Bankstown Council's ecological assessment of the landholding site (in preparation for the Bankstown LEP 2015 rezoning), it is noted that the former golf course areas have lower biodiversity value. The former golf course land use resulted in the landholding being comprised of large expanses of grasslands, with substantial filling works having been undertaken across the site. Parts of the former golf course area are currently used for cattle grazing. Sand extraction activities have also taken place at the site.

Cumberland Ecology have conducted surveys of the site, assessing the existing vegetation, habitats and threatened species for the purposes of the development applications detailed in section 4.2 of this report as well as for the purposes of this submission. There are some remnant and regrowth communities of

threatened ecological communities in the former golf course area such as *Forest Red Gum Rough-barked Apple* and *Swamp Oak floodplain swamp forest*. For details of these communities, refer to the submission prepared by Cumberland Ecology at **Appendix C**. The native vegetation within the landholding has limited functionality as habitat space for fauna and the existing hollow-bearing trees have been found to be largely occupied by common, urban-adapted species. Of note, the submitted development applications all have the appropriate protection measures for any fauna within the Riverlands site. The site also contains a 1st Strahler order stream at the southern end of the site and a 2nd Strahler order stream is located at the northern end of the site.

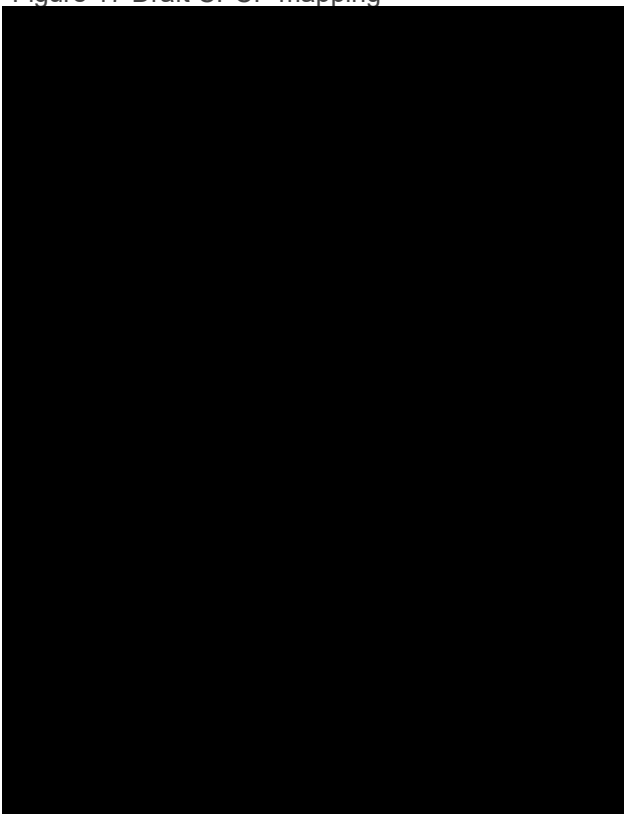
It is noted that the draft CPCP identifies the bulk of the landholding at the southern end of the site as Strategic Conservation Area (SCA), including the areas zoned for residential development (refer to **Figure 17**). Our understanding of the SCA functionality and objectives is provided at Section 2.3 of this report. It is understood that the provision of potential reserves and offset spaces includes areas outside the CPCP plan area to ensure that the 5,475ha offset target is met.

While the intent of these SCAs are agreed upon, there is concern that the mapped SCAs have not appropriately accounted for the site context and consequently, the mapped SCA is not suitable conservation land. The CPCP team have confirmed that ground truthing was not undertaken across the site in preparing the draft CPCP. The vast majority of the areas mapped as SCA are not appropriate as they are able to accommodate the high-quality native and ecologically valuable species due to the modified nature of the land.

As identified in Section 4.2 of this report, the land at the south-eastern end of the site is zoned as R2 Low Density Residential, as approved by DPIE and Council. These lands are anticipated to accommodate residential development and the appropriate development application is currently under assessment. These applications as well as the initial Riverlands Golf Course Planning Proposal have undergone the relevant biodiversity assessment. Similarly, the refurbishment of the golf course portions of the landholding will be subject to the relevant biodiversity assessment under the Biodiversity Conservation Act 2015 and the Bankstown LEP 2015 and DCP 2015.

The proposed SCA mapping of this area is not required and does not reflect the balanced ecological outcomes for the site.

Figure 17 Draft CPCP mapping



Source: Cumberland Ecology

4.4. PROPOSED MAPPING / BIODIVERSITY OFFSET

The draft SCA mapping of the site has not considered the current planning context of the site nor has it accounted for the historical land uses that have reduced the biodiversity value of the site and highly modified the nature of the landscape. While there are some remnant and regrowth communities within the landholding, the proposed SCA mapping across the bulk of the southern end of the site is inappropriate.

Considering the safeguards and provisions for biodiversity protection within existing policies and plans, the proposed SCA is redundant and prescribes unnecessarily complexity constraints to development. Given the context of the site, being at a late planning stage with the approved planning proposal and submitted development applications for substantial housing provisions, the additional constraints generated by the SCA mapping is considered unreasonable.

As such, it is essential that the proposed SCA mapping be amended as follows:

1. Deletion of all SCA mapping across the entire Riverlands Landholding Site

Given the ecological context of the site, the existing biodiversity controls will conserve the bulk of vegetation and ecological value across the landholding. The reduced SCA mapping will have negligible biodiversity impacts and will have minimal affect onto the offset target of 5,475 hectares identified in the draft CPCP.

5. CONCLUSION AND RECOMMENDATIONS ON THE DRAFT CPCP

For the reasons outlined in the previous sections and the attached responses from Biosis, Gunninah and Cumberland Ecology's response to the draft CPCP, we provide the following recommendations to the draft CPCP:

- In lieu of awaiting the review process identified in the DCPCP, update the mapping within the plan now to as set out within this submission to ensure it is more accurate at the outset
- Reduce the mapped Strategic Conservation Area (SCA) across the Menangle Site in accordance with the Ecological Value Map and the Station Street rezoning. The SCA mapping should only include the areas mapped as 'High Ecological Constraint' and wholly exclude the areas zoned as R2 low density residential and B1 neighbourhood centre and areas identified as heavily disturbed exotic vegetation. We do note that Biosis field assessment at the Menangle site was undertaken using rapid assessment methodology with purpose to provide high level, conservative ecological mapping for the site. Detailed accurate field data collection and ground truthing is needed to accurately map the extent of vegetation identified as high or moderate ecological value.
- Align the extent of those areas mapped as non-certified / proposed environmental conservation across the Mulgoa Landholding in accordance with the zoning of the Glenmore Park Stage 3 Planning Proposal.
- Deletion of all the mapped SCA across the Riverlands site.
- Consideration to be given to the approved / submitted planning proposals and development applications across all three Mirvac sites. Consider the respective biodiversity and ecological assessments undertaken as part of these planning processes.

We acknowledge the effort of the DPIE to prepare such an extensive conservation plan and thank the Department of Planning, Industry and Environment for the opportunity to respond in anticipation of delivering a collaborative plan.

However, considering the advanced planning stages in which these sites are being redeveloped, and/ or the identified strategic intent the proposed development constraints are inappropriate, unacceptable and/or unnecessary. The planning proposals and development applications across all three sites have been under consideration by the DPIE and their respective councils for multiple years. In the case of Menangle, the DPIE has clearly identified the strategic intent for the site. It is therefore both unfair and unreasonable that the strategic conservation areas and non-certified / E2 zone mapping be inappropriately included across the parts of the sites as identified in this submission.

A logical and acceptable offsetting and E2 mapping can be prescribed across the three sites that accounts for the fragmented and isolated ecological land. We respectfully request that the proposed SCA and non-certified / E2 rezoning be amended at the Menangle and Mulgoa sites in accordance with the submitted/approved planning proposals and ecological mapping. We respectfully request that the SCA mapping at the Riverlands site be completely removed.

Please do not hesitate to contact us with any queries on this submission. We would welcome the opportunity to meet with you to discuss this submission.

DISCLAIMER

This report is dated 14 October 2020 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Mirvac (**Instructing Party**) for the purpose of Submission (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A

DCPCP BIOSIS SUBMISSION

14 October 2020

Aaron Baker
Senior Development Manager
Mirvac Homes Pty Ltd
Level 28, 200 George Street
SYDNEY NSW 2000

Dear Aaron,

Re: Draft Cumberland Plain Conservation Plan: Supporting Ecological Assessment for submission for the Mirvac landholding at Menangle

Project no. 34037

Biosis Pty Ltd was commissioned by Mirvac Homes (NSW) Pty Ltd (Mircvac) to provide a summary of biodiversity values associated with the landholding at Menangle to support a submission to the NSW Department of Planning, Industry and Environment (DPIE), regarding the Draft Cumberland Plain Conservation Plan ("the CPCP"). The CPCP has implications for the site at Menangle due to the mapping of parts of the site as Strategic Conservation Areas. The Menangle site is located adjacent to the Hume Highway and Nepean River at Menangle [REDACTED]

[REDACTED]

[REDACTED]

Biosis previously prepared a biodiversity constraints assessment for the study area on behalf of Mirvac in May 2019 (Biosis 2019) to inform design and lot planning associated with a proposed subdivision of the land. The objective of this biodiversity assessment is to summarise the findings of the assessment (Biosis 2019) and identify the ecological values, in relation to the development opportunities and constraints within the study area, to inform Mirvac's response to submissions in relation to the Draft Cumberland Plain Conservation Plan.

Background

The site is located approximately 71 kilometres south west of the Sydney Central Business District (CBD) and is accessible primarily via Station Street and Moreton Park Road. (Figure 1) and is currently zoned as Primary Production or Rural Landscape under the *Wollondilly Local Environmental Plan 2011* (LEP).

The study area covers approximately 577.7 hectares of agricultural land located adjacent to the Hume Highway and Nepean River. The study area is proposed to be subject to planning proposals and subsequent development applications. This preliminary biodiversity assessment was undertaken in order to identify constraints and opportunities for primarily employment and residential uses within the study area to

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inform future masterplanning. The field assessment was undertaken using rapid assessment methodology with purpose to provide high level, conservative ecological mapping for the site.

Ecological values

The study area contains a majority cleared landscape with areas of treed vegetation and riparian corridors. Key ecological values include:

Four remnant native threatened ecological communities (TECs) consisting of:

- *River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions* (Endangered Ecological Community (EEC), BC Act).
- *Shale Sandstone Transition Forest in the Sydney Basin Bioregion* (Critically Endangered Ecological Community (CEEC) BC Act).
- *Western Sydney Dry Rainforest in the Sydney Basin Bioregion* (EEC, BC Act and CEEC, EPBC Act).
- *Cumberland Plain Woodland in the Sydney Basin Bioregion* (CEEC, BC Act).
- *Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest – Consisting of Cumberland Plain Woodland in the Sydney Basin Bioregion and Shale Sandstone Transition Forest in the Sydney Basin Bioregion* (CEEC, EPBC Act).

Riparian corridor associated with Nepean River (greater than Strahler order 4).

Seven Strahler Order 1 and two Strahler Order 2 streams.

79 hollow-bearing trees that provide habitat for threatened fauna species.

Table 1 below describes the ecological values and constraints identified in Figure 1, Figure 2 and listed above.

Table 1: Ecological values

Ecological feature	Value	Description
River-flat Eucalypt Forest (EEC, BC Act)	High	<ul style="list-style-type: none"> Study area contains approximately 33.71 ha of River-Flat Eucalypt forest in the form PCT835 Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion, located directly adjacent to Nepean River along the eastern boundary of the study area (Figure 1). Vegetation community is in poor to moderate condition due to past disturbances and periodic stock grazing which has allowed for opportunistic weed ingress. The community is considered to provide habitat for the following threatened fauna: Koala <i>Phascolarctos cinereus</i>, Large-eared Pied Bat <i>Chalinolobus dwyeri</i>, Dusky Woodswallow <i>Artamus cyanopterus cyanopterus</i>, Scarlet Robin <i>Petroica boodang</i>, Powerful Owl, Southern Myotis and Flame Robin <i>Petroica phoenicea</i>. The community is considered to provide habitat for the following threatened flora: Bynoe's Wattle <i>Acacia bynoeana</i>, Small Flowered Grevillea <i>Grevillea parviflora</i> subsp. <i>parviflora</i>, Deane's Paperbark <i>Melaleuca deanei</i>, Bargo Persoonia <i>Persoonia bargoensis</i>, Hairy Geebung <i>Persoonia hirsute</i> and Native Pear <i>Marsdenia viridiflora</i>.
Western Sydney Dry Rainforest and Moist	High	<ul style="list-style-type: none"> Study area contains approximately 6.96 ha of Grey Myrtle dry rainforest in the form PCT877 <i>Grey Myrtle dry rainforest of the Sydney</i>

Ecological feature	Value	Description
Woodland on Shale (CEEC, EPBC Act and EEC, BC Act)		<p><i>Basin Bioregion and South East Corner Bioregion</i>, located as two linear patches along tributaries of Nepean River (Figure 1).</p> <ul style="list-style-type: none"> Vegetation community occurred in two conditional types low/moderate condition and moderate/good condition. The community meets the condition threshold for listing under the EPBC Act in areas of moderate/good condition vegetation. The community is considered to provide habitat for the following threatened fauna: Cumberland Plain Land Snail <i>Meridolum corneovirens</i>, Flame Robin, Scarlet Robin and Southern Myotis. <p>The community is considered to provide habitat for the following threatened flora: White-flowered Wax-plant <i>Cynanchum elegans</i> and Native Pear.</p>
Cumberland Plain Woodland (CEEC, EPBC Act and BC Act)	High	<ul style="list-style-type: none"> Study area contains approximately 24.02 ha of Cumberland Plain Woodland in the form PCT849 <i>Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion</i>, as a few disjunct patches located in the northern and southern portions of the site (Figure 1). Vegetation community is in poor condition due to past disturbances and as a result of under-scrubbing and pasture improvement. The vegetation community occurred in areas as derived native grasslands that satisfied condition thresholds for listing under EPBC Act. The community is considered to provide habitat for the following threatened fauna: Cumberland Plain Land Snail, Eastern Freetail Bat, Southern Bentwing-bat, Varied Sittella <i>Daphoenositta chrysoptera</i> and Powerful Owl. The community is considered to provide habitat for the following threatened flora: Bynoe's Wattle, White-flowered Wax-plant, Camden White Gum <i>Eucalyptus benthamii</i>, Small Flowered Grevillea, Native Pear, Deane's Paperbark, Bargo Persoonia, Hairy Geebung, Spiked Rice Flower <i>Pimelea spicata</i> and Brown Pomaderris <i>Pomaderris brunnea</i>.
Shale-sandstone Transition Forest (EEC, BC Act and CEEC, EPBC Act)	High	<ul style="list-style-type: none"> Study area contains approximately 82.07 ha of Shale-sandstone Transition Forest in the form PCT 1395 <i>Narrow-leaved Ironbark - Broad-leaved Ironbark - Grey Gum open forest of the edges of the Cumberland Plain, Sydney Basin Bioregion</i>, located outside of the riparian corridor of the Nepean River and adjacent to a tributary of the Nepean River. This vegetation community is contiguous with the River-Flat Eucalypt community occurring along the western boundary of the study area. Vegetation community occurred in two conditional types low/moderate condition and moderate/good condition. The community meets the condition threshold for listing under the EPBC Act in areas of moderate/good condition vegetation. The community is considered to provide habitat for the following threatened fauna: Cumberland Plain Land Snail, Eastern Freetail Bat, Southern Bentwing-bat, Varied Sittella <i>Daphoenositta chrysoptera</i> and Powerful Owl. The community is considered to provide habitat for the following threatened flora: Bynoe's Wattle, White-flowered Wax-plant, Camden White Gum <i>Eucalyptus benthamii</i>, Small Flowered

Ecological feature	Value	Description
		Grevillea, Native Pear, Deane's Paperbark, Bargo Persoonia, Hairy Geebung, Spiked Rice Flower and Brown Pomaderris.
Koala habitat	High	The study area is mapped on the Koala Development Application Map, and does have an approved Koala plan of management. The study area supports Koala feed trees listed for the Central Coast Koala Management Area which includes the Wollondilly LGA, including Forest Red Gum <i>Eucalyptus tereticornis</i> listed as a primary feed tree, and Narrow-leaved Ironbark <i>Eucalyptus crebra</i> species listed as a supplementary feed tree, as defined in Schedule 1 of the NSW State Environmental Planning Policy (SEPP) Koala Habitat Protection 2019. Therefore the vegetation mapped as River-Flat Eucalypt Forest, Cumberland Plain Woodland and Shale-sandstone Transition Forest, within the study area is considered potential Koala habitat as defined under SEPP.
Strahler Class 4+, Strahler Class 2 and Strahler Class 1 watercourses (WM Act)	High (inner vegetated riparian zone) Medium (outer vegetated riparian zone)	<p>Core Riparian Zone for the mapped Strahler Class streams are as follows:</p> <ul style="list-style-type: none"> Strahler Class 4+ watercourse: <ul style="list-style-type: none"> Retention of a 40 m 'core riparian zone' (20 metres maintained as inner vegetated riparian zone (VRZ) and 20 m in outer VRZ). Strahler Class 2 watercourse: <ul style="list-style-type: none"> Retention of a 20 m 'core riparian zone' (10 m maintained as inner VRZ and 10 m as outer VRZ). Strahler Class 1 watercourse: <ul style="list-style-type: none"> Retention of 10 m 'core riparian zone' (5 m maintained as inner VRZ and 5 m maintained as outer VRZ). Native vegetation occurring within the riparian buffers provides landscape connectivity. Vegetation corridors provides habitat for microbats and bird species such as: Eastern Freetail Bat <i>Falsistrellus tasmaniensis</i>, Southern Myotis <i>Myotis macropus</i>, Southern Bentwing-bat <i>Miniopterus schreibersii</i>, and Powerful Owl <i>Ninox strenua</i>.
Hollow-bearing trees	Moderate	<ul style="list-style-type: none"> 79 hollow-bearing tree were recorded on site. The hollow-bearing trees provide potential habitat for hollow dependent species. The following threatened species have been assessed as having a moderate or high likelihood of utilising the hollow-bearing trees within the study area: <ul style="list-style-type: none"> Eastern False Pipistrelle Little Bentwing-bat Eastern Freetail-bat Yellow-bellied Sheath-tail-bat Greater Broad-nosed Bat Brown Treecreeper (eastern subspecies) Little Lorikeet Barking Owl Powerful Owl Masked Owl

Ecological feature	Value	Description
Exotic vegetation	Low	<ul style="list-style-type: none"> Study area contains approximately 373.05 ha of Exotic vegetation. Vegetation community is in poor condition due to past disturbances and as a result of large scale clearing and agricultural practices. The community does not form part of any native community and occurs predominately as exotic grassland. This community provide low quality habitat for threatened biota due to the lack of trees, ongoing disturbance and low resource availability.

Conclusion

A number of ecological values have been identified within the study area, including:

- 161.98 ha high constraint ecological values in the form of inner 50 % of riparian corridor, threatened biota occurrence and habitat that is considered high priority for retention or inclusion into conserved areas.
- 79 hollow bearing trees that are assessed as a moderate constraint value, and a potential high priority for retention and/or inclusion into conserved area, following further assessment under BC Act or EPBC Act.
- 15.16 ha medium constraint ecological values in the form of outer 50 % vegetated riparian corridors that would have moderate priority for retention, noting that Strahler Order 1 streams were not mapped within the CPCP.
- 373.05 ha of low constraint ecological value in the form of exotic vegetation which would be considered suitable for development.

The study area supports a range of ecological values located within a clearly defined contiguous corridor, primarily associated with the riparian corridor of the Nepean River and tributaries, which provides connectivity within the broader landscape to the north and west. The remainder of the study area consists of cleared and heavily disturbed areas with small scattered patches of remnant native vegetation and hollow-bearing trees.

It is recommended that the areas identified as high constraint, pertaining to the remnant native vegetation within the riparian corridor, is retained to maintain the connectivity within the landscape, and that detailed accurate field data collection is undertaken to accurately map the vegetation identified as high or moderate ecological value. It is also recommended that the hollow-bearing trees are further assessed to determine their priority for retention and/or inclusion into the conserved area, if feasible and safe to do so based on a consultant arborist's assessment. The remainder of the study area, identified as low ecological value, is considered suitable for development (Figure 2). Suitable offsets will be required, if areas of high constraint, or threatened species habitat (ie. hollow-bearing trees), are proposed for urban development.

Biosis support the areas identified as low ecological value being removed from the Strategic Conservation Area mapping within the CPCP as connectivity will be maintained throughout the broader landscape, through retention of the contiguous vegetation along the riparian corridors associated with the Nepean River.

I trust that this advice is of assistance to you however please contact me if you would like to discuss any elements further.

Yours sincerely



Averill Wilson

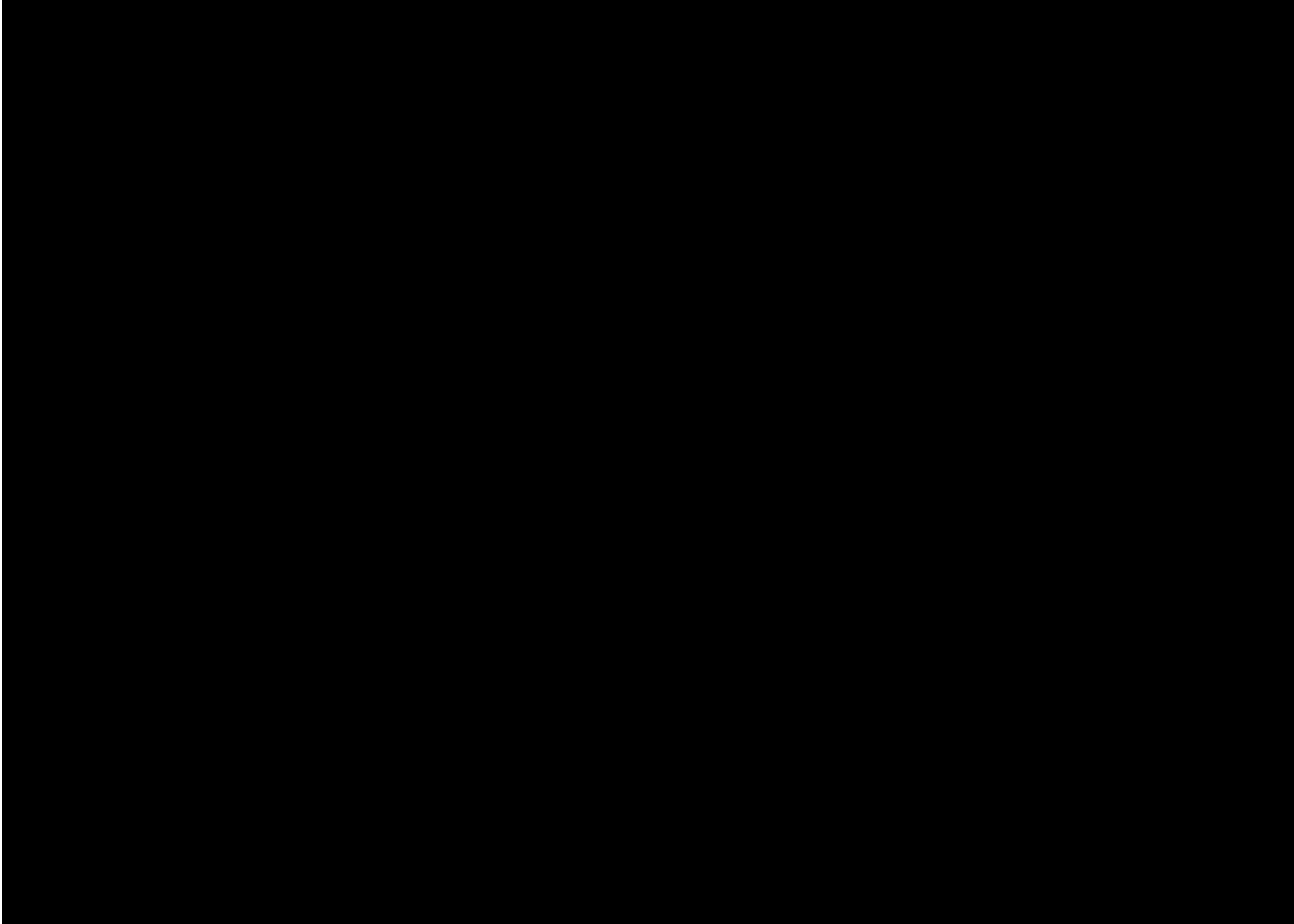
Project Botanist

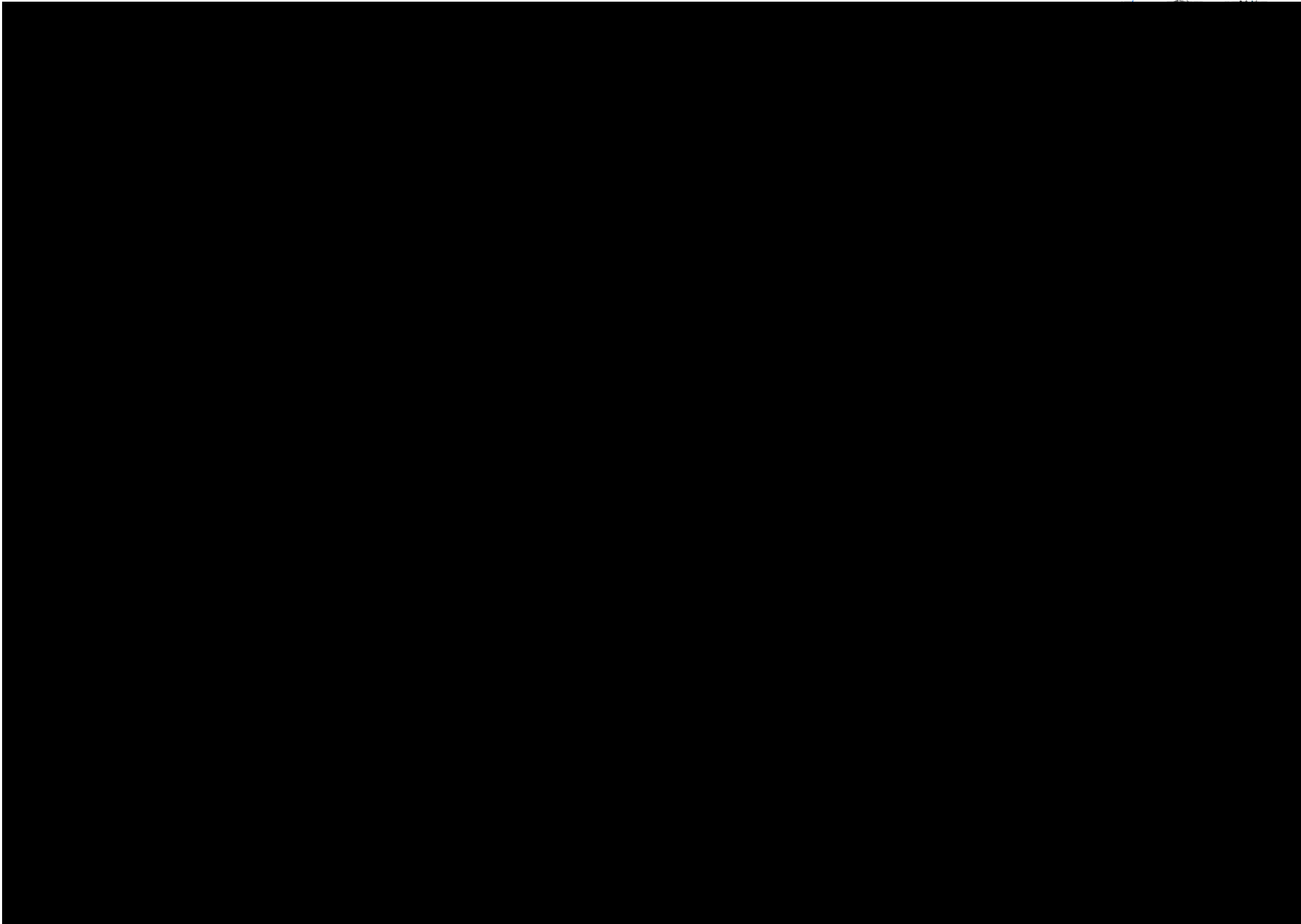
References

Biosis 2019. *Preliminary biodiversity assessment and offset estimation, Menangle.*, Report prepared for Mirvac Homes Pty Ltd. Price P. and Cable A., Biosis Pty Ltd, Sydney, NSW. Project no. 24758.

Appendices

Appendix 1 Figures

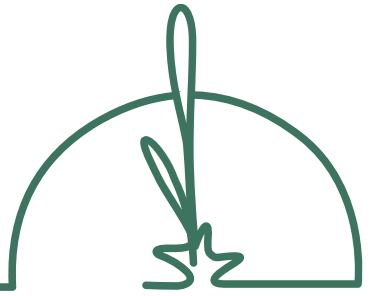




APPENDIX B

GUNNINAH DCPCP SUBMISSION

gunninah



Glenmore Park Stage 3
Mulgoa

Draft Cumberland Plain Conservation Plan

Submission

F Dominic Fanning

Gunninah

October 2020

GLENMORE PARK STAGE 3, MULGOA
DRAFT CUMBERLAND PLAIN CONSERVATION PLAN
SUBMISSION

F Dominic Fanning

October 2020

1 INTRODUCTION

1.1 Submission

This *Submission* with respect to the *Draft Cumberland Plain Conservation Plan* (the 'Plan') has been prepared by the undersigned at the request of Mirvac Homes (NSW) Pty Ltd (Mircvac). Mirvac is the lead proponent for the *Planning Proposal* to rezone the area known as Glenmore Park Stage 3 (the 'Subject Land') for urban development purposes. The Subject Land is located within the Greater Penrith to Eastern Creek Investigation Area (refer Figure 1).

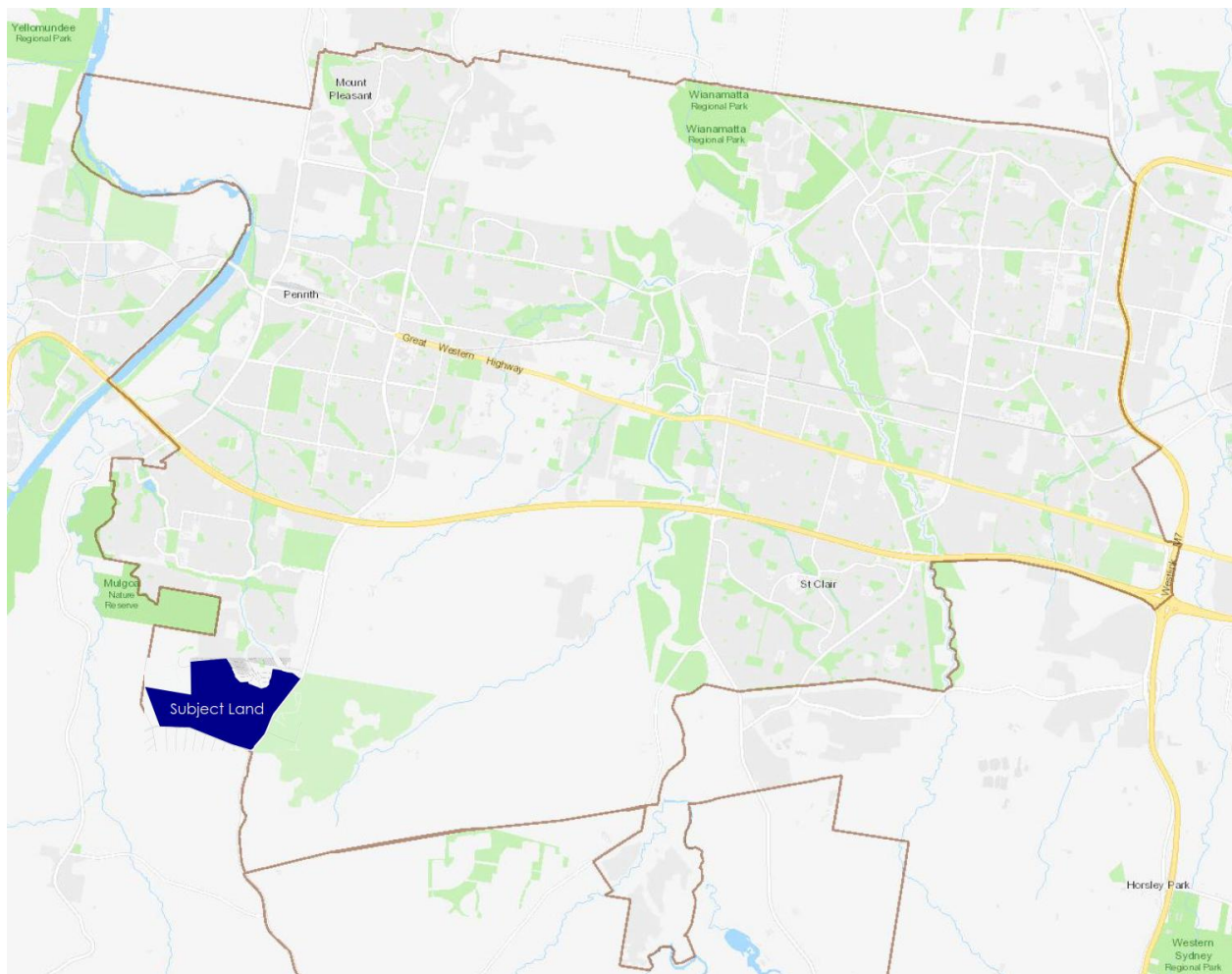


Figure 1 Locality Plan (GPEC Investigation Area outlined in Brown, source: DCPCP Spatial Viewer)

The Planning Proposal - Glenmore Park Stage 3 (refer Figure 2 for master plan) was endorsed by Penrith City Council in May 2020 and was subsequently submitted to the NSW Department of Planning, Industry & Environment (DPIE) for Gateway Determination (<http://leptracking.planning.nsw.gov.au/proposal/details.php?rid=6744>). On 23 September 2020, DPIE issued the Gateway Determination confirming that the rezoning is supported by the Minister for Planning & Public Spaces. Figure 3 illustrates the proposed Land Zoning Map submitted to DPIE as part of the Planning Proposal package.

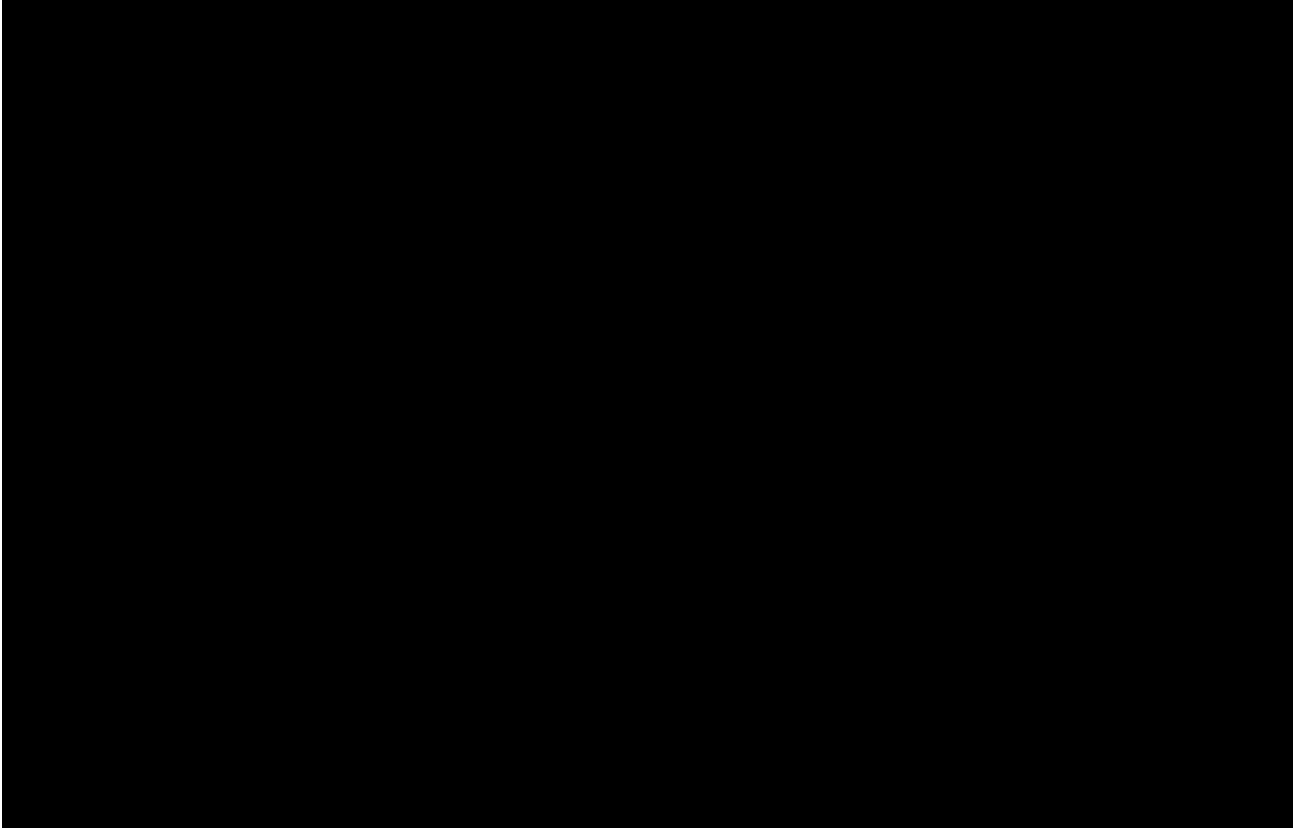


Figure 2 Glenmore Park Stage 3 Master Plan (Subject Land outlined in Red)

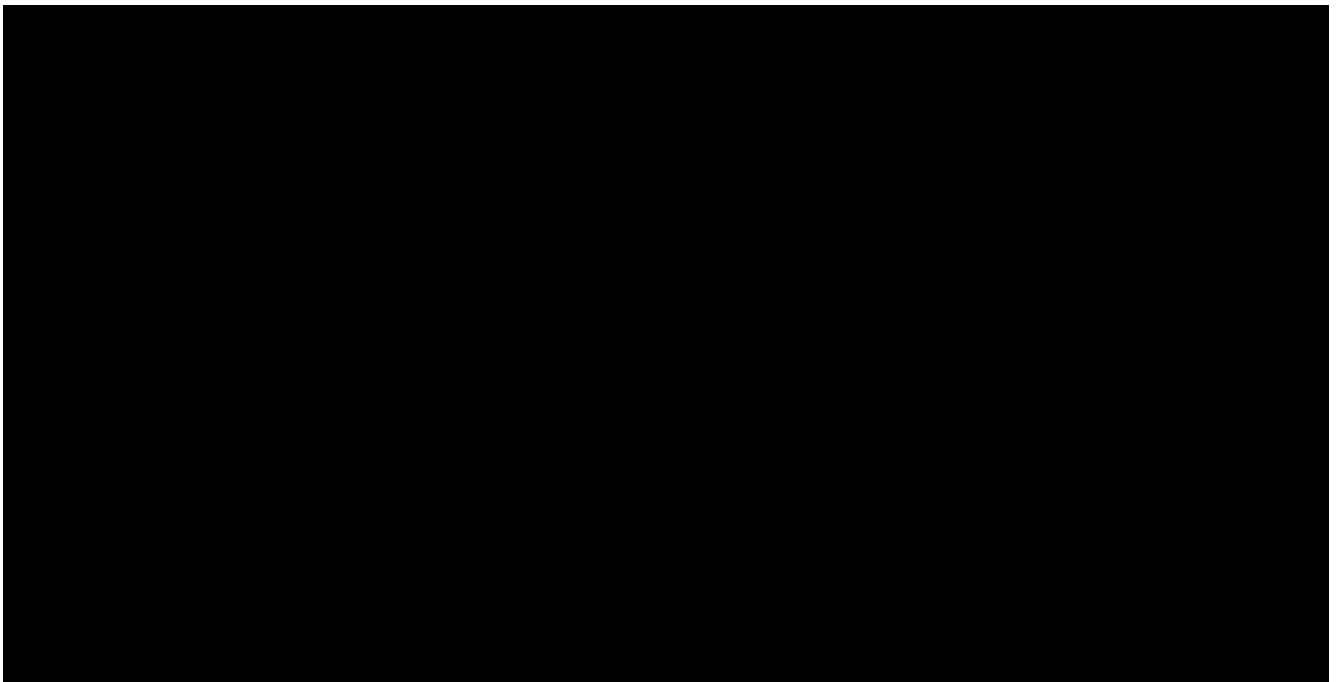


Figure 3 Proposed Land Zoning Map Gateway Determination Issue

1.2 The Subject Land

The Glenmore Park Stage 3 rezoning site is approximately 205 hectares in area and consists of the properties shaded yellow and orange in Figure 4.

The Subject Land is located in the western Sydney suburb of Mulgoa and is bound by The Northern Road along its eastern boundary, Chain-O-Ponds Road along its southern boundary, private land and Mulgoa Nature Reserve (land managed by the OEH) along its western boundary and the suburb of Glenmore Park along its northern boundary.

Current zoning of the Planning Proposal site is RU2 Rural Landscape and E3 Environmental Management.

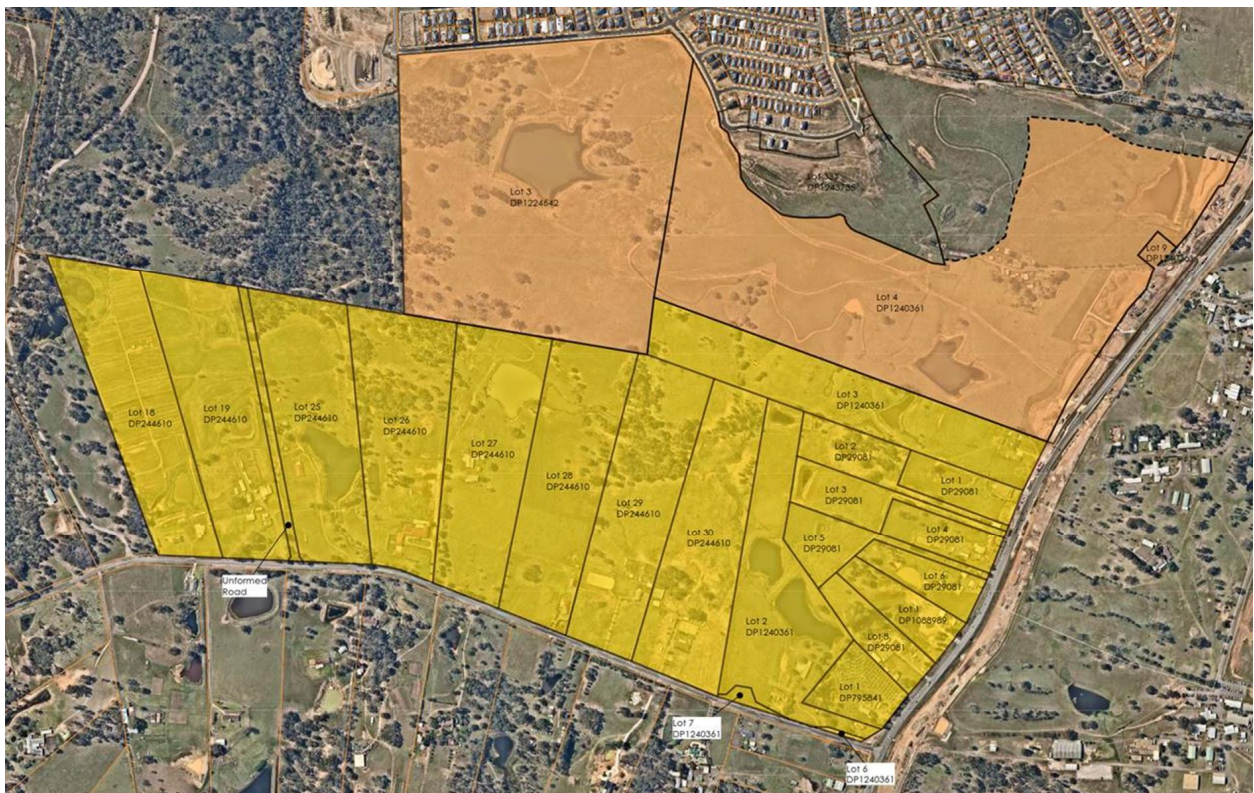


Figure 4 Properties comprising Glenmore Park Stage 3 Planning Proposal Site

2 ISSUES

There are a number of issues of concern raised by the Plan with respect to Glenmore Park Stage 3 particularly in relation to the proposed mapping on the Subject Land.

Gunninah was responsible for the mapping of vegetation on the Subject Land for the purposes of the Planning Proposal which has been supported by both Penrith City Council and DPIE. The Vegetation Mapping is provided in Attachment A and was based on dedicated ground-truthing of the land in 2018.

2.1 Vegetation

The mapping of Native Vegetation and Threatened Ecological Communities (TECs) on the Subject Land, as presented in the *Draft Cumberland Plain Conservation Plan Spatial Viewer* (the 'Plan Viewer'), is incorrect. To demonstrate the inconsistencies between the Plan Viewer and the existing vegetation on site, the areas of Cumberland Plain Woodland and River-flat Eucalypt Forest provided by the Plan Viewer have been overlaid on an aerial photograph of the Subject Land (refer Figure 5 and Attachment B).

There are four patches of alleged Native Vegetation / TECs mapped on the Subject Land, marked 'X' in Figure 5 below, which do not accurately represent the extent of vegetation at these locations.

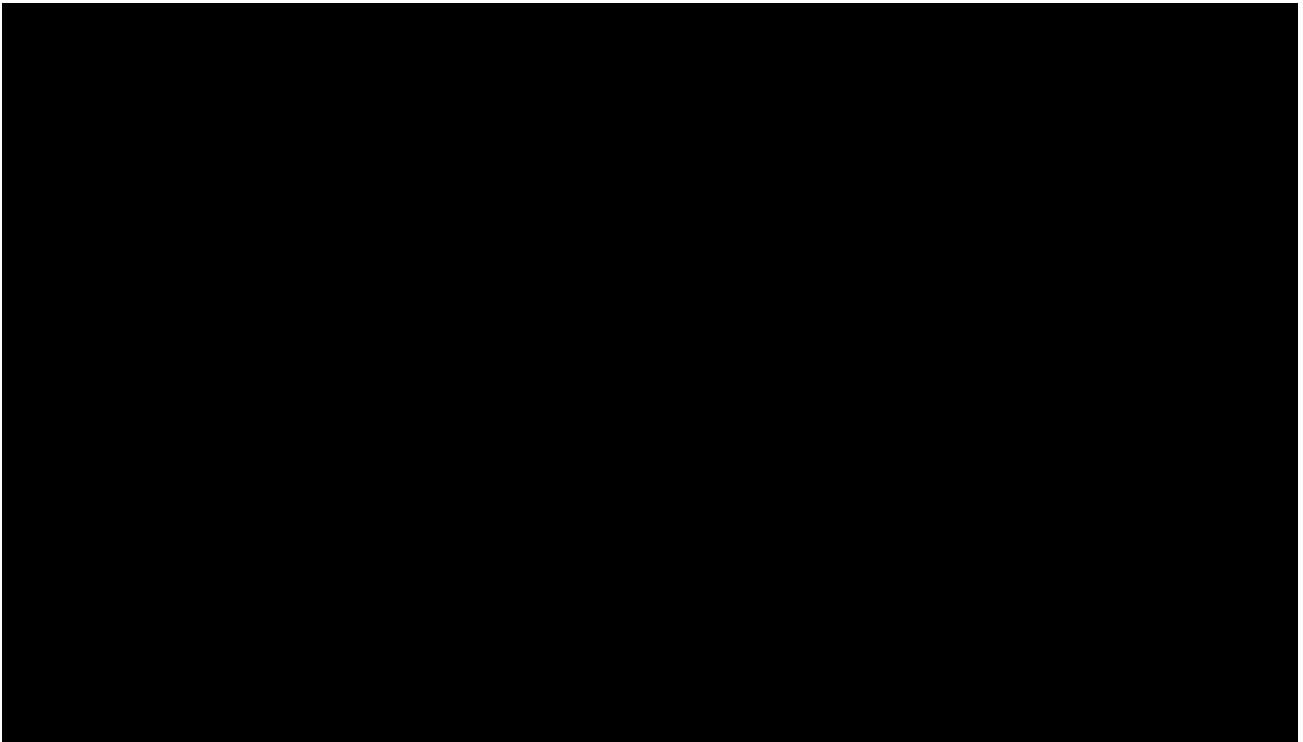


Figure 5 NSW Threatened Ecological Community Locations (source: DCPCP Spatial Viewer and Nearmap, aerial image dated 5 August 2020)

2.2 Non Certified Land

It is relevant to note that three of the four areas marked 'X' in Figure 5 are not included within the Non Certified areas of the Plan Viewer (refer Figure 6 and Attachment C) and that only 50% of the one other area marked 'X', at the centre of the site, is within proposed non certified land. The undersigned believes the mapping to be appropriate in this regard given the nature and condition of those patches of vegetation.

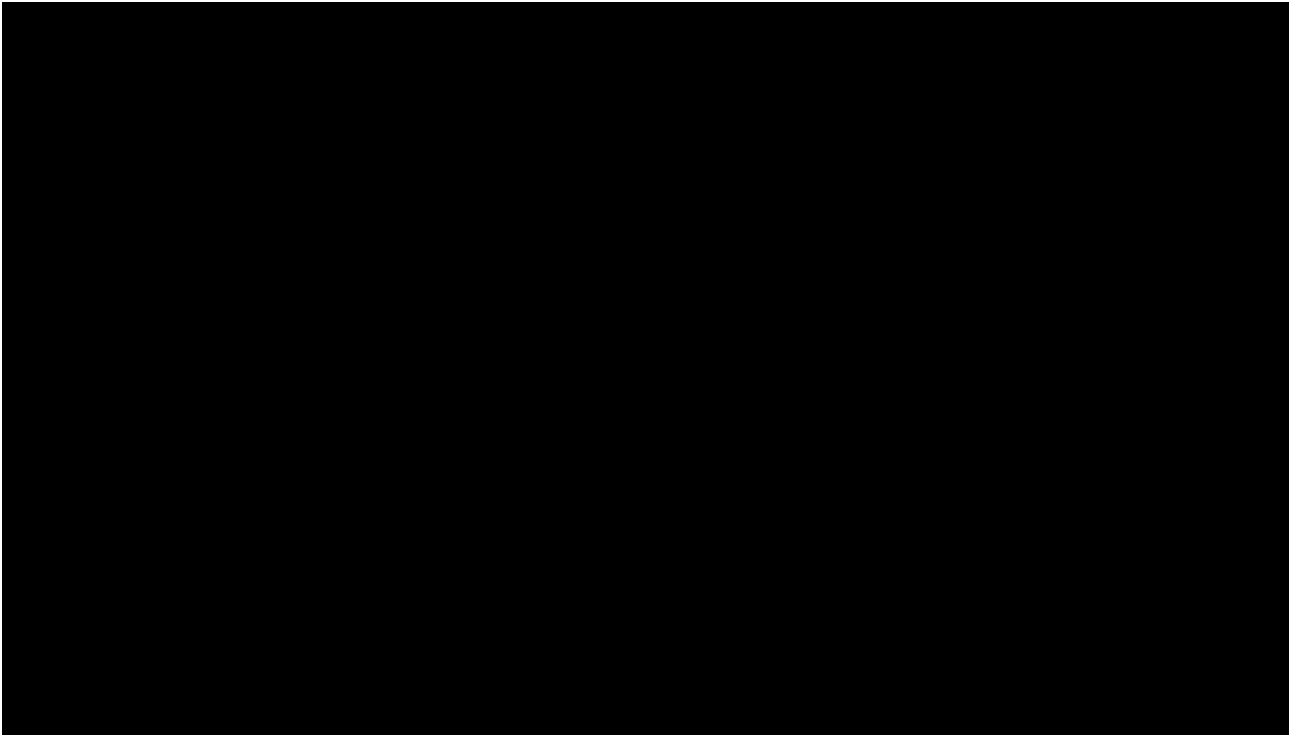


Figure 6 Non Certified Areas and TECs (Plan Viewer)

For the Subject Land, the mapping of *Non Certified – Avoided for Other* areas has been based on those watercourses identified in the Plan Viewer as being classified as 2nd order or higher. Strahler classification of the watercourses according to the Plan Viewer are provided in Figure 7 below.

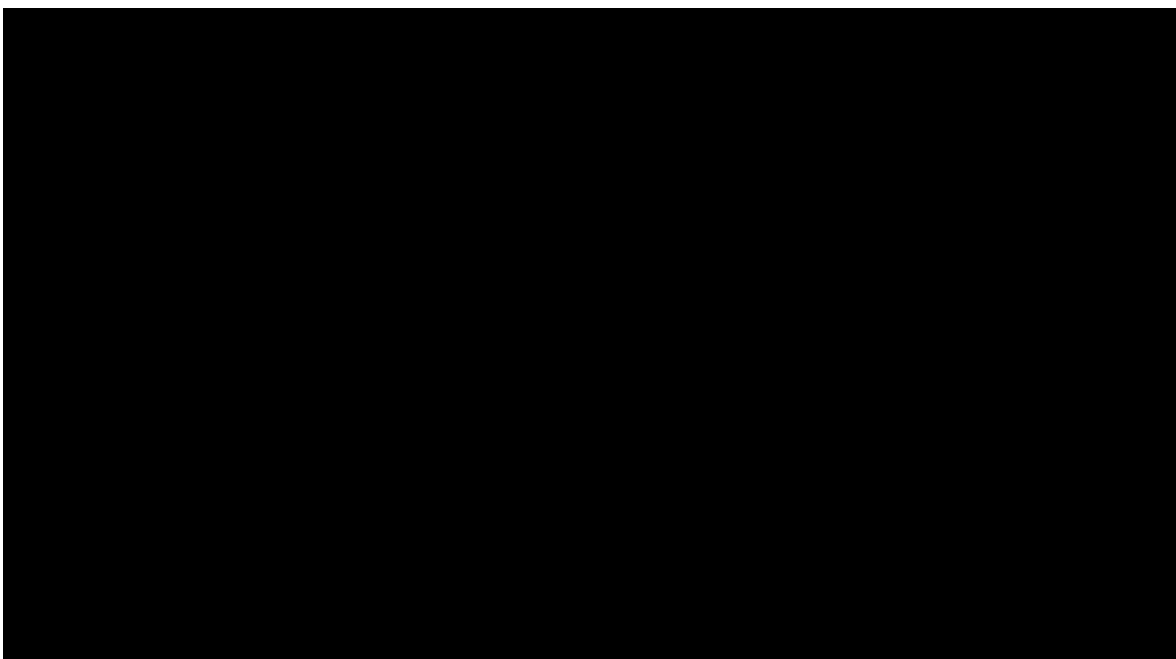


Figure 7 Strahler Classifications (source: DCPCP Spatial Viewer)

As stated above, Gunninah was responsible for the mapping of those areas within Glenmore Park Stage 3 constrained by significant vegetation. The study found that much of the vegetation with higher biodiversity values identified within the Subject Land was located outside the riparian zones of those watercourses which the Planning Proposal seeks to remove.

To further support the removal and the reclassification of existing watercourses, a detailed riparian corridor assessment was undertaken by J. Wyndham Prince. The findings of this assessment are summarised in Figure 8 below and were generally supported by the Natural Resources Access Regulator. There is limited to zero riparian vegetation in the watercourses proposed for removal and they generally do not exhibit defined channels. Glenmore Park Stage 3 has explicitly recognised those watercourses that better exhibit the traits of riparian corridors and it is intended to retain and rehabilitate them as fully functional riparian zones for the benefit of the future development and wider community.

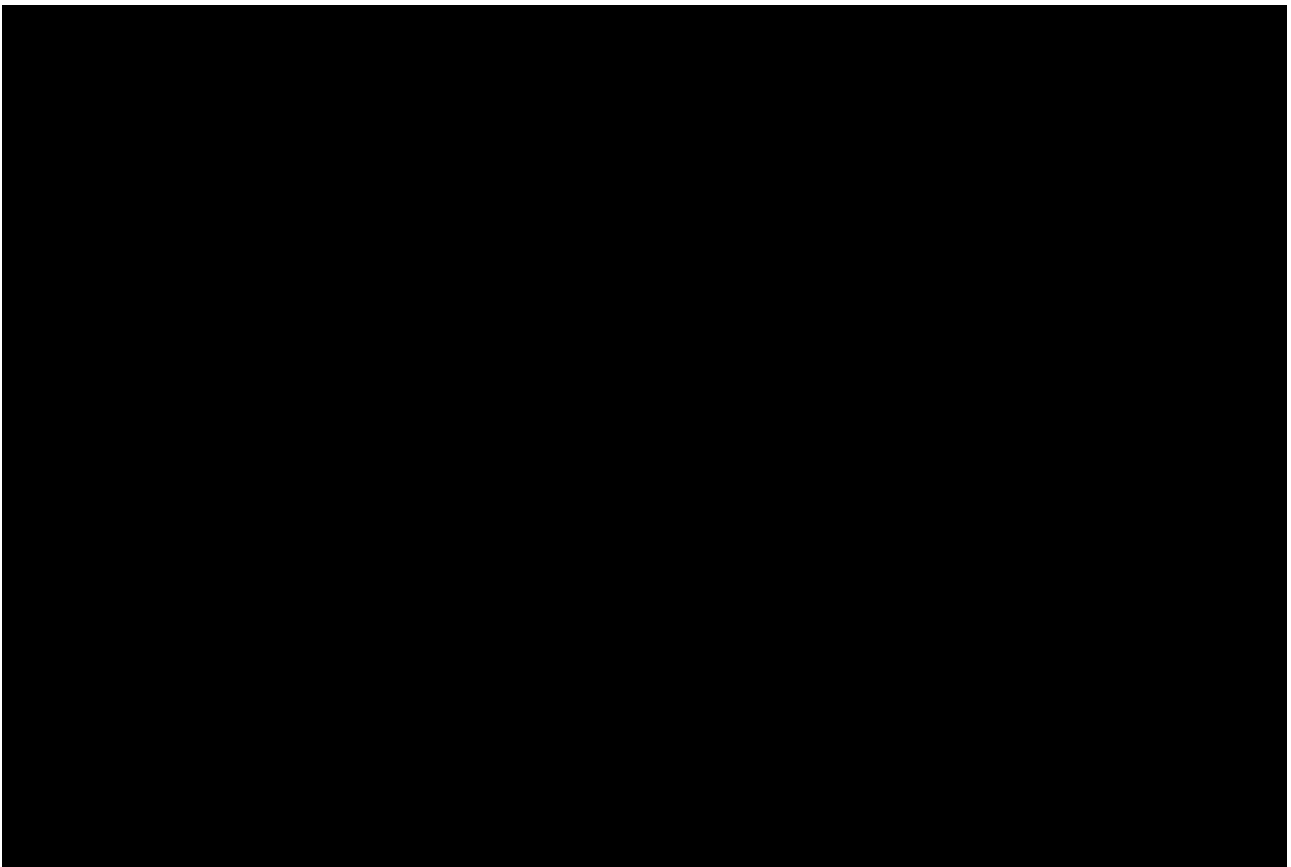


Figure 8 Strahler Plan (source: Glenmore Park Extension Planning Proposal Water Cycle Management Strategy Report dated March 2020)

Based on the foregoing, the mapping of *Non Certified – Avoided for Biodiversity* and *Non Certified – Avoided for Other* on the Subject Land is in part inappropriate, particularly in those areas currently occupied by farm dams and land that has been cleared or already developed. The mapping anomalies are more evident when applied to watercourses / riparian zones. Parts of some of the mapped watercourses are farm dams which contain little or no native vegetation and have no ecological value whatsoever.

The correct and relevant mapping of Non Certified land within the Subject Land is of critical importance due to the restrictions which will be imposed by the Plan. The restrictions include the proposed zoning of the Non Certified lands as E2 Environmental Conservation and a prohibition on any development within those lands.

To reiterate, several portions of proposed Non Certified land in relation to Glenmore Park Stage 3 are currently of no ecological value; and possess no relevant biodiversity values.

2.3 Proposed Environmental Conservation Areas/Zoning

The *Proposed Environmental Conservation* (PEC) areas presented in the Plan Viewer are based in part on the incorrect and/or inappropriate mapping identified above. Consequently, some of the PEC areas within the Subject Land are regarded by the undersigned as inappropriate, particularly in that Environmental Conservation (E2) zoning will prohibit large parts of the Non Certified lands from being developed practically for residential purposes and for nothing other than *environmental protection works or flood mitigation works*.

There are several PEC areas within Glenmore Park Stage 3, designated for E2 zoning, which are of great concern. Please see Figure 9 for locations of Areas of Concern and table of site descriptions/conditions below. The aerial imagery in Attachment D supports the descriptions provided.

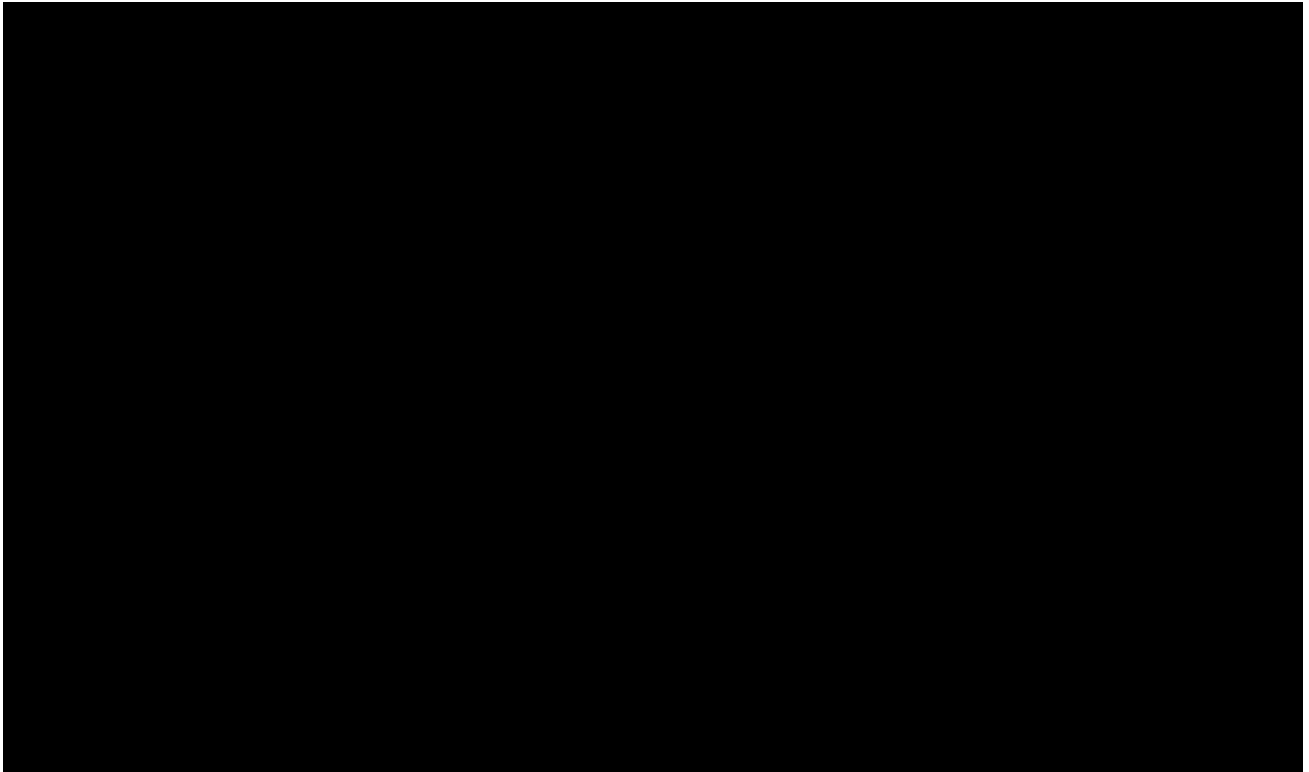


Figure 9 Proposed Environmental Conservation Areas (hatched in Red) and Land Zoning Comparison including Areas of Concern

Area	Description and Condition
A	Ploughed fields and large farm dam; no current ecological value. Note Planning Proposal reflects realignment of watercourse following the required removal of the dam.
B	Scattered trees; minimal ecological value.
C	A very minor watercourse with a farm dam; minimal ecological value.
D	A very minor watercourse at the top of a large farm dam; minimal ecological value.
E	A minor watercourse; minimal ecological value. Note area not considered as containing any <i>Native Vegetation</i> in the Plan Viewer.
F	Two farm dams; minimal ecological value.
G	A minor watercourse with farm dam; low quality vegetation. Note Planning Proposal reflects improved realignment of creek.

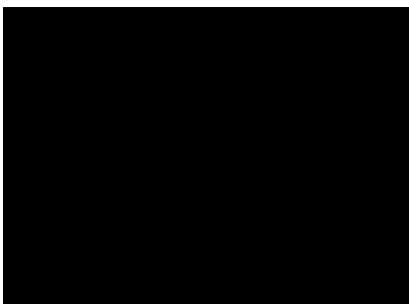
H	Native vegetation (Cumberland Plain Woodland); groundcover layer substantially replaced by pasture grasses and weeds; highly level of disturbance by livestock (mainly cattle). Note retention of Area H impractical due to extensive regrading of land immediately surrounding Area H required for a practical engineering outcome in terms of stormwater management, future subdivision and dwelling construction. Additional open space proposed to offset loss.
I	Native vegetation (Cumberland Plain Woodland); farm dam with minimal ecological value. Note proposed E2 zone expanded to offset loss using nearby land which is more suitable for rehabilitation and connectivity.

3 RECOMMENDATION

The Planning Proposal for Glenmore Park Stage 3 has been carefully considered in relation to biodiversity impacts and conservation - with the proposal having been informed by a thorough assessment of the Subject Land, including extensive ground-truthing. Approximately 42ha of land has been reserved for future open space and conservation which represents some 20% of the total site area.

The proposed Environmental Conservation (E2) zoning should be consistent with that of the Planning Proposal to ensure the development potential of Glenmore Park Stage 3 is fulfilled. Not only will doing so maximise new housing opportunities (one of the key objectives for the Western Parkland City) but more importantly the current proposal for Glenmore Park Stage 3 will enable a far more practical and sustainable biodiversity outcome for the Subject Land than that under the current Draft Cumberland Plain Conservation Plan.

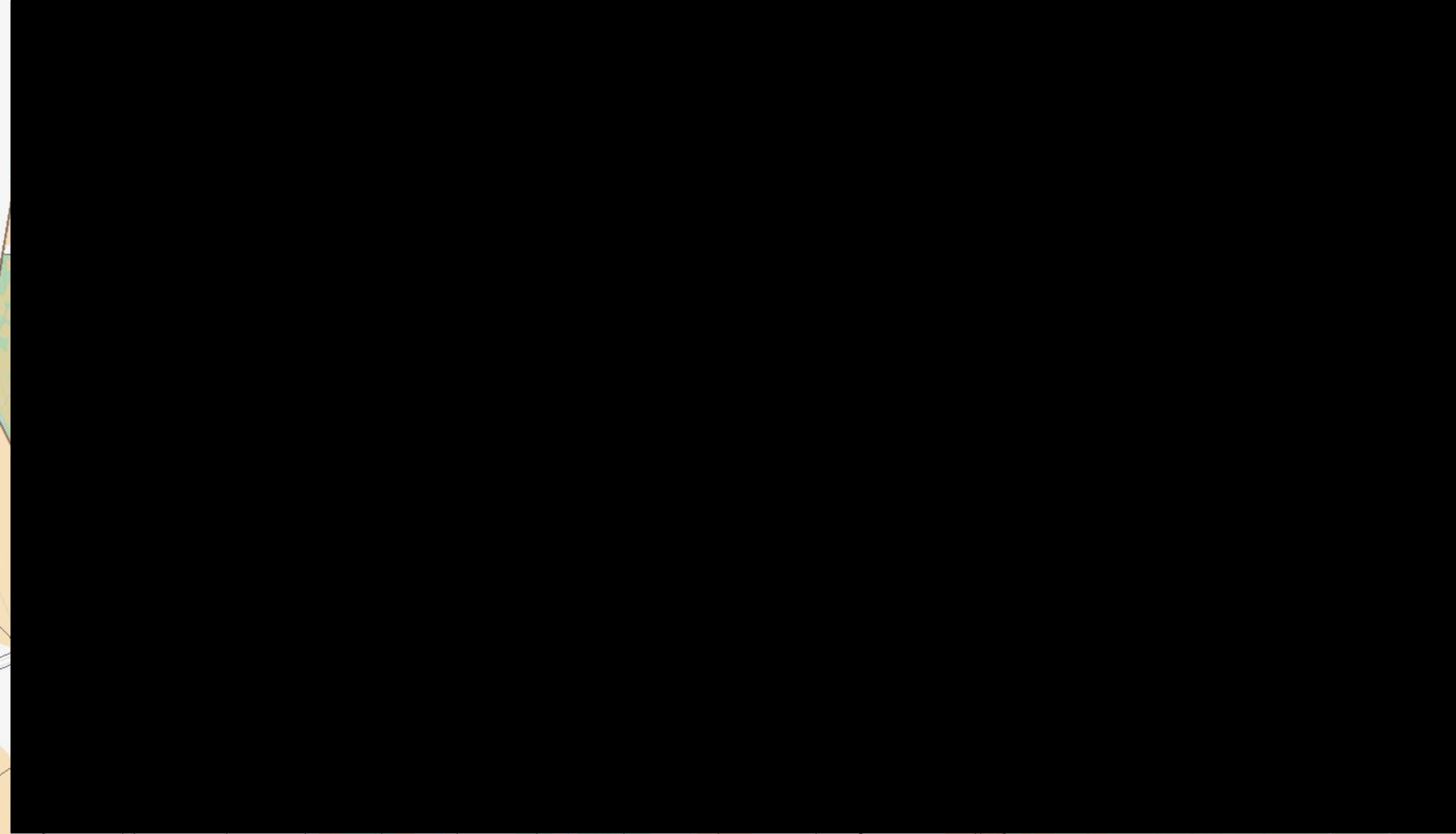
Gunninah strongly recommends that the current mapping of the Plan be reviewed to align with the Glenmore Park Stage 3 Planning Proposal, specifically the limits of the proposed Environmental Conservation (E2) zones and the reclassification of watercourses within the Subject Land to facilitate the urban development of the land in accordance with the Planning Proposal supported by DPIE.

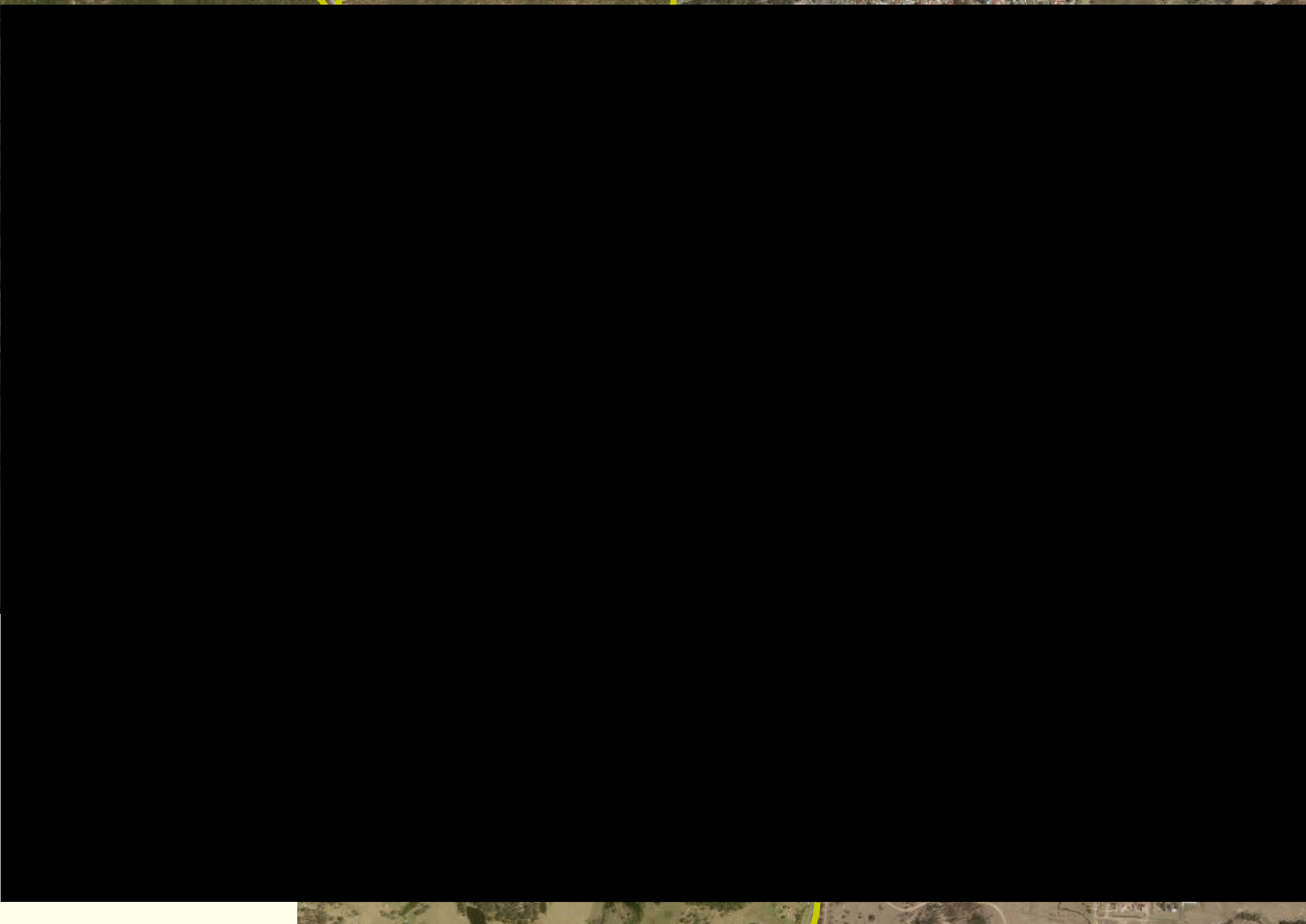


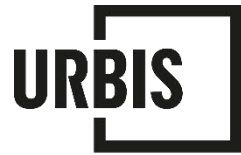
F Dominic Fanning
Gunninah











APPENDIX C

CUMBERLAND ECOLOGY DCPCP SUBMISSION

9 October 2020



Sydney, NSW 2000

Draft Cumberland Plain Conservation Plan: Supporting Ecological Assessment for submission for the Riverlands Site at 56 Prescott Parade, Milperra

Cumberland Ecology
PO Box 2474
Carlingford Court 2118
NSW Australia
Telephone (02) 9868 1933
ABN 14 106 144 647
Web: www.cumberlandecology.com.au

Dear 

This letter presents our ecological assessment of the biodiversity values of the area known as the 'Riverlands site' to support a submission to the NSW Department of Planning, Industry and Environment (DPIE), regarding the Draft Cumberland Plain Conservation Plan ("the DCPCP"). The DCPCP has implications for the development of the Riverlands site due to the mapping of parts of the site as Strategic Conservation Areas.

The DCPCP area includes parts of eight local government areas - Blacktown, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly – and covers approximately 200,000 hectares from north of Windsor to south of Picton, and from the Hawkesbury—Nepean River in the west to the Georges River near Liverpool in the east.

Although the Riverlands site lies outside of the DCPCP area boundary, it has nonetheless been mapped as part of the Strategic Conservation Areas (SCAs) of the DCPCP. The SCAs comprise lands that have been identified as having important biodiversity value and *"includes areas with large remnants of native vegetation and important connectivity across the landscape, and that has ecological restoration potential."*

Cumberland Ecology has conducted numerous surveys within the Riverlands site as part of ongoing development applications for parts of the Riverlands site. Although some of the areas mapped for strategic conservation do contain biodiversity values, notably the threatened ecological communities River-flat Eucalypt Forest (RFEF) and Swamp Oak Floodplain Forest (SoFF), the SCA mapping has inaccurately assessed the area and biodiversity value of the mapped land for strategic conservation. The mapping has not taken into consideration the current condition of vegetation which generally reflects the historic and current land uses of the Riverlands site, including rural grazing, a former golf

course and sand extraction works, which reduce the natural resilience of the site as conservation lands. The broad-scale SCA mapping also does not appear to consider historic and ongoing assessments conducted in relation to the proposed re-development of Riverlands site and current land use zonings.

Based on our knowledge of the ecological conditions and land zonings, the mapping of parts of the Riverlands site as Strategic Conservation Areas is not considered to be appropriate as it does not reflect the former land uses, current vegetation conditions/biodiversity values and allowed works under current land zoning. Hence, this submission objects to the inclusion of parts of the Riverlands site within the SCA zoning.

Our detailed assessment to support the submission to DPIE is provided in **Appendix A** to this letter. Supporting figures are attached at the end of this document.

If you have any queries or wish to discuss the contents of this letter further, please do not hesitate to contact me at our Sydney office on [REDACTED]

Yours sincerely,


[REDACTED]

Gitanjali Katrak
Senior Project Manager/Ecologist

[REDACTED]

APPENDIX A :

Draft Cumberland Plain
Conservation Plan:
Ecological assessment of
Riverlands Site at 56
Prescot Parade, Milperra



A.1. Introduction

This submission has been prepared for Mirvac Homes (NSW) Pty Ltd (Mircvac) to provide ecological advice regarding the mapping of ecologically significant land under the Draft Cumberland Plain Conservation Plan within parts of the area known as the 'Riverlands Site'.

The Riverlands site is located in the suburb of Milperra and is generally bounded by the Georges River to the west and north-west, the M5 Southwest Motorway and an area of land owned by Canterbury-Bankstown Council (known as Lot 5) to the south, residential development to the east, and public open space/Vale of Ah Reserve to the north (**Figure 1**).

The Riverlands site is currently zoned as a mix of RE1 – Public recreation, RE2 – Private Recreation and R2 – Low density Residential under the *Bankstown Local Environmental Plan 2015* (**Figure 2**) The Riverlands site has been extensively modified and disturbed from its original condition due to historic land uses such as a former golf course, soil extraction areas along the Georges River and current land uses for cattle grazing. However, areas of remnant native vegetation are also present within the Riverlands site.

A.2. Draft Cumberland Plain Conservation Plan

A.2.1. Background

The NSW Government has identified four areas for urban growth and other development (referred to as 'nominated areas') and a series of transport corridors within and outside the nominated areas to support the future growth of Western Sydney. The nominated areas include:

- Greater Macarthur Growth Area;
- Greater Penrith to Eastern Creek Investigation Area;
- Western Sydney Aerotropolis; and
- Wilton Growth Area.

The key infrastructure/transport corridors include:

- Metro Rail future extension to Macarthur (excluding areas within the South West Growth Area);
- M7/Ropes Crossing Link Road;
- Outer Sydney Orbital between Box Hill and the Hume Motorway near Menangle; and
- Western Sydney Freight Line corridor.

The nominated areas program is administered by the NSW Department of Planning, Industry and Environment (DPIE) while the transport corridors program is administered by Transport for NSW (TfNSW), who are a major project partner.

As part of the biodiversity approvals required for the development of the nominated areas, DPIE has prepared the Draft Cumberland Plain Conservation Plan (DCPCP) to provide long-term certainty for biodiversity and

development in Western Sydney. The DCPCP will support two separate statutory approvals processes under State and Commonwealth laws that are required to address the impacts of the proposed development on biodiversity values. These include:

- Strategic biodiversity certification under Part 8 of the *Biodiversity Conservation Act 2016* (BC Act); and
- Strategic assessment under Part 10 of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The aim of the DCPCP is to support the delivery of infrastructure, housing and jobs for Western Sydney in a planned and strategic way that also protects and maintains key biodiversity values of Western Sydney and includes a conservation program of commitments and actions that seeks to improve ecological function and resilience in the Cumberland Plain and provide an enduring conservation legacy for Western Sydney.

The DCPCP identifies several categories of land within the four nominated areas and also identifies the major transport corridors and strategic conservation areas (SCAs) outside of the nominated areas. These SCAs include lands with high-value biodiversity, as well as areas with important connectivity or potential for ecological restoration. Although the area that the DCPCP technically applies to is limited to parts of eight local government areas - Blacktown, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly, areas adjacent to outer boundaries of the DCPCP area have nonetheless been considered as part of the SCAs.

The SCAs are to be used to identify and prioritise suitable conservation lands as offsets for biodiversity impacts over the life of the Plan. Suitable areas may be protected as a future reserve or biodiversity stewardship site or enhanced through an ecological restoration project to deliver the Plan's offset targets for affected native vegetation communities. Not all of the mapped SCAs will be established as conservation land under the Plan and identification of suitable conservation lands from within the strategic conservation area will continue over the life of the Plan to ensure that potential sites are appropriate, can be implemented and are based on the best available information and data.

A.2.2. Mapping of the Riverlands site and surrounds

The DCPCP area includes parts of eight local government areas - Blacktown, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly – and covers approximately 200,000 hectares from north of Windsor to south of Picton, and from the Hawkesbury-Nepean River in the west to the Georges River near Liverpool in the east.

The Riverlands site is within the Canterbury-Bankstown local government area and therefore does not lie within the boundaries of the DCPCP area. However, the site appears to have been included within the SCA mapping as it is located to the immediate east of parts of the DCPCP boundary along the Georges River.

The SCA mapping is largely limited to the south to south-eastern parts of the Riverlands site as shown in **Figure 3**. The parts of the Riverlands site that have been mapped as SCAs under the DCPCP encompass the entirety of the R2 zoned lands and parts of the RE2 and RE1 zoned land (see **Figure 2** and **Figure 3**).

Given the broad-scale nature of the SCA mapping, it is assumed that the SCA mapping is based on the perceived ecological values, as per available broad-scale mapping, which shows vegetation in parts of the Riverlands site being mapped as variants of threatened ecological communities (TECs) such as Swamp Oak Forest (PCT 1800, PCT 1234) and River-flat Eucalypt Forest (PCT 835), as well as estuarine wetland communities such as Mangrove forest (PCT 920) and Reedlands (PCT 1808) (**Figure 4**). However, the mapped SCA areas within the Riverlands site also include the former golf course areas, which are mapped as Urban Native/Exotic and therefore have significantly reduced biodiversity values.

It is noted that vegetated areas immediately adjacent to southern boundary of the Riverlands site as well as large patches of vegetation to the south of the M5 motorway, which also occur adjacent to the DCPCP area boundary, have not been included within the SCA mapping. This indicates an inconsistency in mapping of SCAs as these adjacent areas of vegetation also comprise threatened ecological communities such as Shale-Gravel Transition Forest (PCT 724) and River-flat Eucalypt Forest (PCT 835) and therefore would have similar biodiversity values as those within the Riverlands site as well as potential for connectivity and restoration as those identified within the Riverlands site (**Figure 4**). It is noted that areas of PCT 724 and PCT 835 within the DCPCP area to the west of the Georges River are included within SCAs, thus confirming the biodiversity/connectivity value of these communities and the inconsistency of the SCA mapping.

A.3. Methodology

The proposed mapping/zoning under the DCPCP has implications for the future development of the Riverlands site due to the SCA mapping. Therefore, the suitability of the proposed mapping/zoning with due consideration to on-ground conditions, future land uses and objectives of the DCPCP was assessed as follows:

A.3.1. Desktop Assessments

Desktop assessments involved a detailed review of the Draft Cumberland Plain Conservation Plan and supporting documents, as well as results of field surveys and ecological assessment documents prepared specifically for the Riverlands site. The documents reviewed included, but are not limited to:

- DCPCP exhibition documents, as publicly available;
- Prior Biodiversity Development Assessment Report (BDARs) prepared by Cumberland Ecology for development applications within parts of the Riverlands site;
- Riverlands Golf Course site in Milperra - Planning Proposal (August 2013) and supporting ecological assessment documentation;
- Bankstown Local Environment Plan (LEP) 2015, in particular Clause 6.4, Clause 6.11;
- Bankstown Development Control Plan (DCP) 2015, in particular Part A3 Section 6 - Riverlands Golf Course Site;
- Planning Agreement Riverlands Golf Course (2015): Demian Holdings Pty Ltd and Bankstown City Council;
- *Armillaria sp.* and *Phytophthora sp.* Georges River Management Plan: Former Riverlands Golf Course (SESL 2017);

- The Native Vegetation of the Sydney Metropolitan Area (OEH 2016);
- Vegetation Information System (VIS) (EES 2020b); and
- BioNet (EES 2020a).

A.3.2. Field Surveys

Field surveys were not specifically conducted for the purposes of this DCPCP submission. However, Cumberland Ecology has conducted extensive vegetation mapping surveys, flora plots, habitat assessments and targeted threatened species surveys in accordance with the Biodiversity Assessment Method (BAM) and former planning provisions within the Riverlands site for multiple development applications (DAs) in relation to the Riverlands site between December 2018 and September 2020, the results of which were taken into consideration for this submission.

A.4. Key Findings

A.4.1. Riverlands site – Project Background

Canterbury-Bankstown Council (then Bankstown Council) submitted a planning proposal in 2015 based on amendments to the Bankstown Local Environment Plan 2001, which included provisions to enable the redevelopment of the Riverlands Golf course site. Several ecological assessments were conducted to inform the planning proposal. These include:

- The 'Flora Assessment.' Updated Study of the approximately 82 ha site of the Riverlands Golf Course site at Milperra; dated 23 January 2012, prepared by Anne Clements and Associates (Clements 2012);
- The 'Fauna Habitat & Species Constraints to Potential Redevelopment of the Riverlands Golf Course, Milperra; dated 22 January 2012, prepared by Ambrose Ecological Services (Ambrose Ecological Services 2012); and
- The 'Fauna Investigation and Tree Retention Advice', dated June 2015, prepared by NGH Environmental (NGH Environmental 2015).

Following the approval of the planning proposal, the Riverlands site was zoned as a mix of RE1 – Public recreation, RE2 – Private Recreation and R2 – Low density Residential under the *Bankstown Local Environmental Plan 2015* (BLEP 2015) (**Figure 2**). The former golf course areas were rezoned to R2 based on the findings of lower biodiversity values within these sections of the Riverlands site. Parts of the Riverlands site within the RE1 and RE2 zones were mapped as Biodiversity and/or Riparian Lands under BLEP 2015.

The BLEP 2015 also included a specific clause (Clause 6.11) that applies to the entire Riverlands site. The ecological objectives of this clause are to ensure that any future development will protect and conserve the cultural heritage, ecological and habitat values of the site and the scenic values of the surrounding waterways and riparian corridors. The associated Bankstown Development Control Plan 2015 (BDCP 2015) included specific precinct controls for 'Key infill development sites' (Part A3 of the BDCP 2015). In particular, Section 6 of Part A3 outlines specific development controls for the Riverlands Golf Course site and requires that the

future development conforms to the recommendations of the ecological studies that informed the planning proposal.

The Riverlands site is also subject to an executed Voluntary Planning Agreement (VPA) as a result of the planning proposal and allowed development within the Riverlands site. The VPA contains several works that are to be implemented within the Riverlands site, including (but not limited to):

- Staged infrastructure works including construction of a connecting road network and road infrastructure upgrades;
- Bank stabilisation works on the Georges River;
- Construction of a foreshore walkway/cycleway along the Georges River; and
- Revegetation and enhancement of riparian corridors along the Georges River and Northern creekline.

To date, the following DAs have been submitted to Canterbury-Bankstown Council by Mirvac for development works within the Riverlands site:

- Development application for Residential subdivision within R2 zoned land (submitted January 2020);
- Development application for the Connector Road as per requirements of the executed VPA for a connecting road network (submitted February 2020); and
- Development application for Georges River bank stabilisation works and future vegetation management works as per requirements of the executed VPA (submitted February 2020);

A further development application for the foreshore walkway/cycleway along the Georges River (referred to as the shared pathway) is currently being prepared. As this particular development comprises both designated development and integrated development, Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement were issued for the Shared pathway DA in March 2020.

The locations of the development footprints of each of the above DAs is shown in **Figure 5**.

Each of these DAs are supported by Biodiversity Development Assessment Reports (BDARs) prepared by Cumberland Ecology in accordance with the requirements of the BAM and the BC Act.

A.4.2. Vegetation of the Subject Site

The Riverlands site has long been modified and disturbed from its original condition.

The former 18-hole Riverlands Golf Course was created in stages between the 1940s and 1960s and is now typified by large expanses of grassland which used to comprise the fairways amid rows of remnant trees and planted vegetation. The landform has been reshaped for the disused Riverlands golf course, which has been subject to extensive filling with unconsolidated fill material covering the whole of the disused golf course to a depth of between 20cm and 150cm. Parts of the former golf course are currently used for grazing cattle.

Parts of the wider Riverlands site between the now disused golf course and the Georges River were utilised for sand extraction activities in the 1960s. The former sand extraction activities have resulted in a general lowering of the land surface and significant changes in hydrology, which has resulted in the landward spread of wetland vegetation communities, following cessation of the extraction activities.

The survey results conducted to date have found that the vegetation within the Riverlands site comprises a mix of remnant/regrowth communities that conform to TECs as listed under the BC Act, modified areas consisting largely of canopy trees only within the former golf course area and planted areas. These vegetation communities were assigned to Plant Community Types (PCTs) during the preparation of BDARs, including 'best-fit' PCTs for areas of planted and/or modified vegetation, in accordance with the BAM. The condition classes of the mapped PCTs within the site are summarised in **Table 1**. Photographs of representative examples of vegetation within areas mapped as SCAs in the Riverlands site are provided in **Appendix B** while the layouts of the DAs are shown in **Figure 5**.

Table 1 PCTs and number of conditions classes recorded within the Riverlands site

Plant Community Type	# of vegetation condition classes	Location within Riverlands Site	Relevant DAs
849 - Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	Occurs in a single condition class. Best fit PCT for highly modified vegetation (canopy trees only) on modified soils of the former golf course	Present in R2 zoned land only	Residential subdivision, Shared pathway
835 - Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion	Occurs in two condition classes Class 1 = Remnant/regrowth vegetation that conforms to the River-flat Eucalypt Forest TEC; Class 2 = Best fit PCT for highly modified vegetation (canopy trees only) on modified soils of the former golf course	Class 1 – RE2 and RE 1 zoned land Class 2 – R2 zoned land	Residential subdivision (both classes), connector road (class 1 only), shared pathway (class 1 only)
1083 - Red Bloodwood - scribbly gum heathy woodland on sandstone plateaux of the Sydney Basin Bioregion	Occurs in a single condition class. Best fit PCT for planted non-endemic native trees on modified soils of the former golf course	Present in R2 zoned land only	Residential subdivision
1232 - Swamp Oak floodplain swamp forest, Sydney Basin Bioregion and South East Corner Bioregion	Occurs in a single condition class. Remnant/regrowth vegetation that conforms to the Swamp Oak Floodplain Forest TEC	Present on RE1 and RE2 land, mainly along the Georges River and mapped watercourses	Residential subdivision, connector road, shared pathway
1800 - Swamp Oak open forest on riverflats of the Cumberland Plain and Hunter valley	Occurs in a single condition class. Best fit PCT for planted native trees on modified soils of the	Present within R2 zoned land and existing roadways in RE2 zoned land	Residential subdivision, connector road,

Plant Community Type	# of vegetation condition classes	Location within Riverlands Site	Relevant DAs
	former golf course and along existing roads		
920 - Mangrove Forests in estuaries of the Sydney Basin Bioregion and South East Corner Bioregion	Occurs in a single condition class. Remnant/regrowth vegetation	Present in RE1/RE2 zoned land along the banks of the Georges River	Shared pathway

All DAs submitted to date have given due regard to the avoid and minimise hierarchy, and a biodiversity credit liability for residual impacts for all DAs have been calculated in accordance with the requirements of the BAM and BC Act.

A.4.3. Fauna Habitats

Fauna habitats present on the subject site are limited, due to the historical modifications and current land uses, which provide insufficient cover and foraging resources for the majority of fauna. However, resources present include:

- Waterbodies, in the form of farm dams, streams and wetlands;
- Hollow-bearing trees;
- Dead wood and logs; and
- Fruiting and flowering trees.

While the existing vegetation within the Riverlands site can potentially function as 'stepping-stone' habitat for fauna movement, the potential for fauna movement is currently limited as the Riverlands site is bounded by residential development to the north, east and south-east. Although an area of native vegetation is present in the Council land (Lot 5) to the south of the residential development area (see **Figure 1**), connectivity to bushland further south of the Council land is disrupted by the presence of the M5 South Western Motorway.

The suitability of habitats within the Riverlands site is therefore limited to highly mobile species such as birds and bats. Common frog species would also be likely to occur, within the dams present on the subject site. However, based on the land use in the vicinity, the majority of the habitats are considered likely to be dominated by urban adapted species. This is consistent with surveys conducted to date which found hollows to largely be occupied by common, urban-adapted species.

It is noted that the Arboricultural assessment has determined that the health of a significant portions of trees, including the hollow-bearing trees, is in decline due to a combination of heavy watering/nutrient pumping during the golf course maintenance regime (when active), subsequent lack of maintenance, potential infection from known occurrences of fungal soil pathogens (*Phytophthora cinnamomi* and *Armillaria* sp) and the

prolonged drought conditions in NSW. It should also be noted that a large proportion of the areas mapped as SCAs lie within the areas requiring remediation due for the presence of soil pathogens.

Surveys to date have determined the presence of several microchiroptern bats species within the Riverlands site including threatened species such as Southern Myotis (*Myotis macropus*), Eastern Coastal Freetail-bat (*Micronomus norfolkensis*), Eastern False Pipistrelle (*Falsistrellus tasmaniensis*), Yellow-bellied sheath-tailed bat (*Saccolaimus flaviventris*) and Greater Broad-nosed Bat (*Scoteanax rueppellii*). Although the presence of the Green and Golden Bell Frog (*Litoria aurea*) has not been definitively confirmed onsite, a conservative approach has nonetheless been taken and habitat for this species has been mapped within the Riverlands site by expert Ross Wellington.

As is the case with vegetation communities/PCTs, all DAs submitted to date have given due regard to the avoid and minimise hierarchy, and a biodiversity credit liability for residual impacts on species credit species for all DAs have been calculated in accordance with the requirements of the BAM and BC Act.

A.4.4. Watercourses within subject site

Based on topographic maps, two unnamed streams are present within the Riverlands site

One stream, which comprises a 1st order stream as per the Strahler System of ordering watercourses is present towards the southern parts of the Riverlands site and drains into a series of dams. Prior studies have determined that this stream was a constructed drainage channel that was likely formed between 1961 and 1965 when the Riverlands site was subject to sand extraction works. The majority of this stream lies outside of the mapped SCA except for the southern extent of the stream that lies within the SCA mapped area.

A second un-named stream is present towards the northern parts of the subject land near Keys Parade. This stream comprises a 2nd order stream as per the Strahler System of ordering watercourses and has been mapped as Riparian lands under the Bankstown 2015 LEP. This stream is subject to the VPA which requires revegetation of a riparian buffer. This stream lies completely outside of the mapped SCA areas.

A.4.5. Strategic Conservation Considerations

The field surveys have confirmed the presence of the TECs RFEF and SOFF within the Riverlands site.

On a local level, the areas identified as SCA within the Riverlands site do contain some areas with high biodiversity values, notably the TECs RFEF and SOFF. However, a large portion of the areas mapped as SCA do not fit the DCPCP criteria for maximising conservation of high-quality remnants as the mapped areas comprise highly modified Urban/Exotic vegetation on modified soils/consolidated fill that are also contaminated by soil pathogens.

On a wider strategic/landscape level, the feasibility for conservation is significantly reduced when the current land uses, land zoning and surrounding land uses are considered. The area mapped as SCAs within the Riverlands site, particularly the sections that overlap with the R2 zoned land, are bound by existing residential development and highly cleared lands to the north and east and is largely cut off from vegetation to the south by the presence of the M5 motorway. Although there is connectivity to the patch of vegetation within Council Lot 5 along the southern boundary of the Riverlands site, this area has not been included within the mapped

SCA areas (see **Figure 1** and **Figure 3**). Therefore, there is no guarantee that any connective vegetation will be present to the south of the proposed SCA areas.

Although the Georges River, located to the west of the mapped SCA areas within the Riverlands site, presents a potential connectivity corridor, areas to the north and south of the Riverlands site have not been identified as potential SCAs. The proposed SCA mapping within the Riverlands site will therefore largely create an isolated 'island' of native vegetation within the Riverlands site that is detached from other areas of native vegetation.

Under the DCPCP, landholders in the SCA who want to develop their land will still be able to submit development applications through the relevant development assessment pathway. Any impacts on ecology associated with these development applications will need to be assessed in accordance with the requirements of the BC Act and/or the EPBC Act, which include requirements to avoid and minimise impacts.

This has already been conducted for the Riverlands site, in accordance with the allowances/requirements of the Riverlands Planning proposal, BLEP 2015 and executed VPA, for the residential subdivision DA, connector road DA, bank stabilisation DA and is currently in progress for the shared pathway DA. It should be noted that the footprint of these DAs, particularly the residential subdivision DA largely encompass the areas mapped as SCAs under the DCPCP.

It is noted that the DCPCP proposes to introduce planning controls for the SCAs that will minimise impacts on areas with high biodiversity value that can deliver regional biodiversity outcomes. As part of this assessment process the consent authority will need to consider the region's biodiversity values when assessing development applications.

As assessments under the BC Act already require assessments at landscape levels as well as measures to avoid and minimise impacts on areas with high biodiversity value, the introduction of additional planning controls under the DCPCP do not appear to significantly add any further ecological safeguards beyond that already provided by the BC Act. Furthermore, additional planning controls, beyond those of the BC Act, are already in place for developments within the Riverlands site under the BLEP 2015 and corresponding BDCP 2015.

The DCPCP states that not all of the mapped areas in the SCAs will be established as conservation land under the Plan and identification of suitable conservation lands will be based on the best available information and data. Based on our assessment of the Riverlands site, the mapping of the site as SCA is incompatible with the proposed land use zonings of the Riverlands site, which were based on a site-specific planning proposal. Therefore, the mapping of parts of the Riverlands site as SCAs places an unnecessary administrative burden upon allowed development within the Riverlands site, which is inconsistent with the DCPCP's objective of streamlining assessment processes.

A.5. Conclusion

Although the Riverlands site lies outside of the DCPCP area boundary, it has nonetheless been mapped as part of the SCAs of the DCPCP. Although some of the areas mapped for strategic conservation do contain biodiversity values, notably the TECs RFEF and SOFF as well as estuarine wetlands, the SCA mapping has inaccurately estimated the extent and biodiversity value of the mapped land for strategic conservation.

The mapping has not taken into consideration the current condition of vegetation which generally reflects the historic and current land uses of the Riverlands site, including rural grazing, a former golf course and sand extraction works which reduce the natural resilience of the site as conservation lands. The broad-scale SCA mapping also does not appear to consider historic and ongoing assessments conducted in relation to the Riverlands site and current land use zonings, which were based on a site-specific planning proposal informed by site specific ecological surveys and assessments.

Under the DCPCP, landholders in the SCA who want to develop their land are still be able to submit development applications through the relevant development assessment pathway, a process which has already been conducted for the Riverlands site in the form of multiple development applications, in accordance with the allowances/requirements of the Riverlands Planning proposal, BLEP 2015 and executed VPA. As the footprint of these developments, particularly the residential subdivision, overlap with a significant proportion of the mapped SCAs within the Riverlands site, the SCA mapping under the DCPCP is incompatible with the allowances and requirements of the Riverlands Planning proposal, BLEP 2015 and executed VPA.

Based on our knowledge of the ecological conditions and land zonings, the mapping of parts of the Riverlands site as SCAs is not considered to be appropriate as it does not reflect the former land uses, current conditions/biodiversity values and allowed works under current land zoning. As the SCA mapping does not provide any additional ecological safeguards beyond those already in place under the BC Act and relevant clauses of the BLEP 2015 and related development control plans, the SCA mapping should be removed from the Riverlands site, especially given that the site does not occur within land legally subject to the DCPCP.

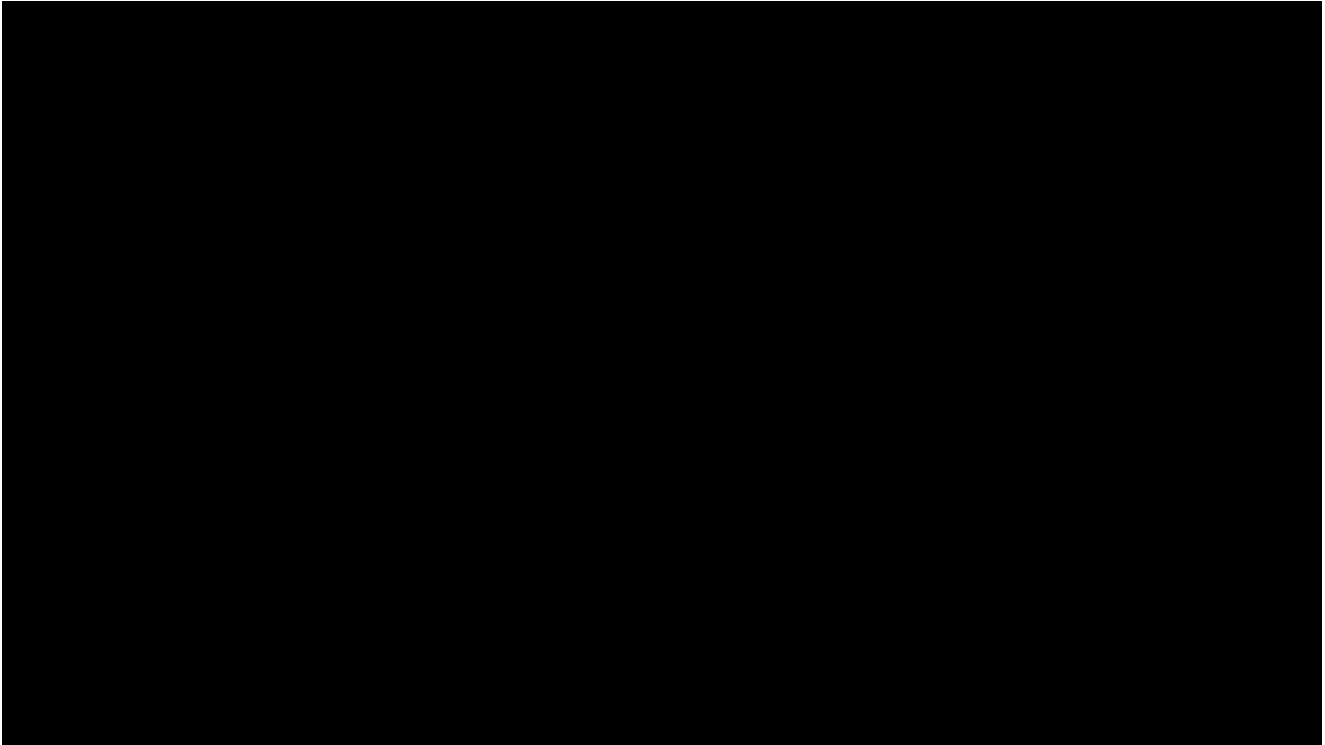
A.6. References

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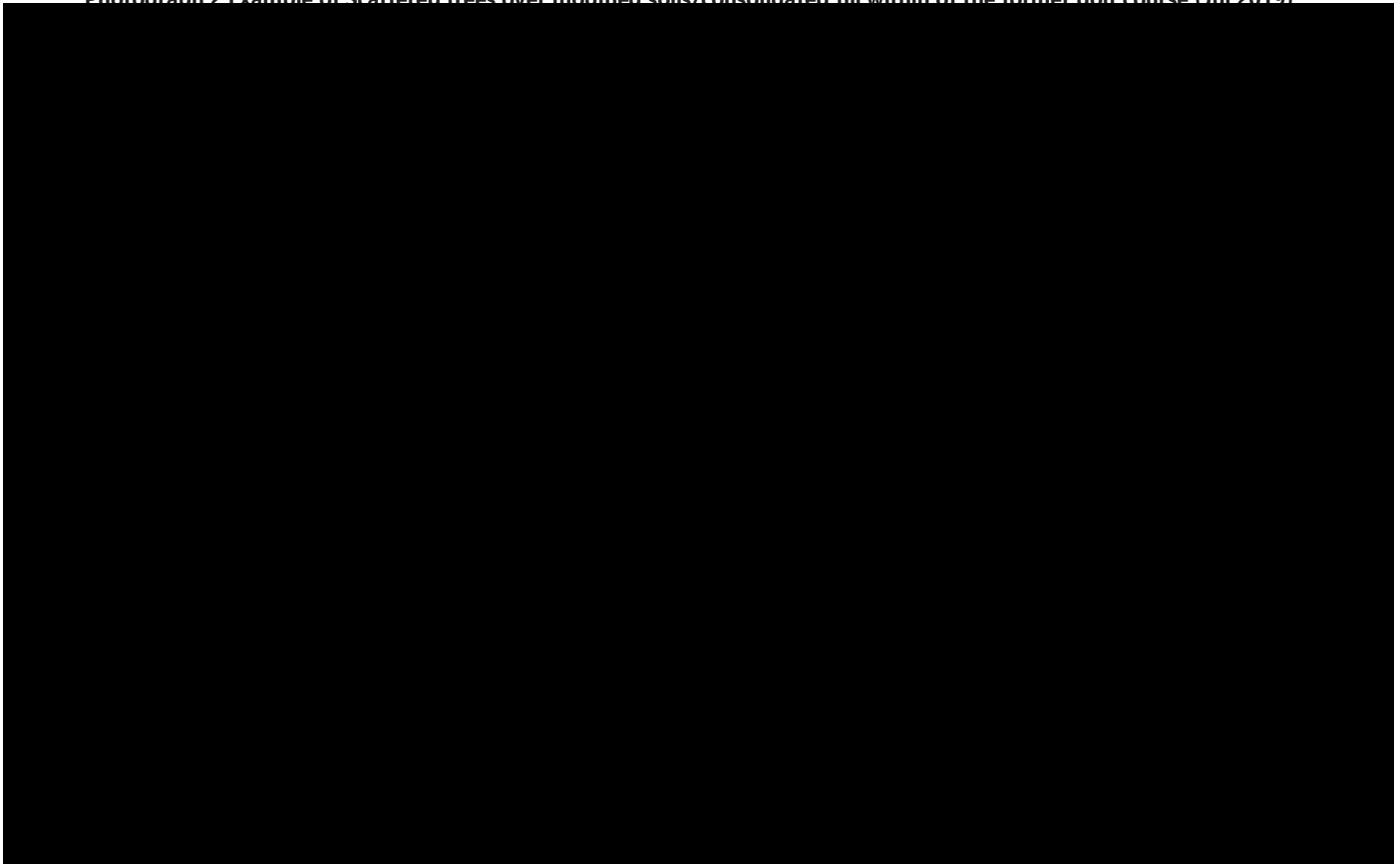
APPENDIX B :

Site Photographs

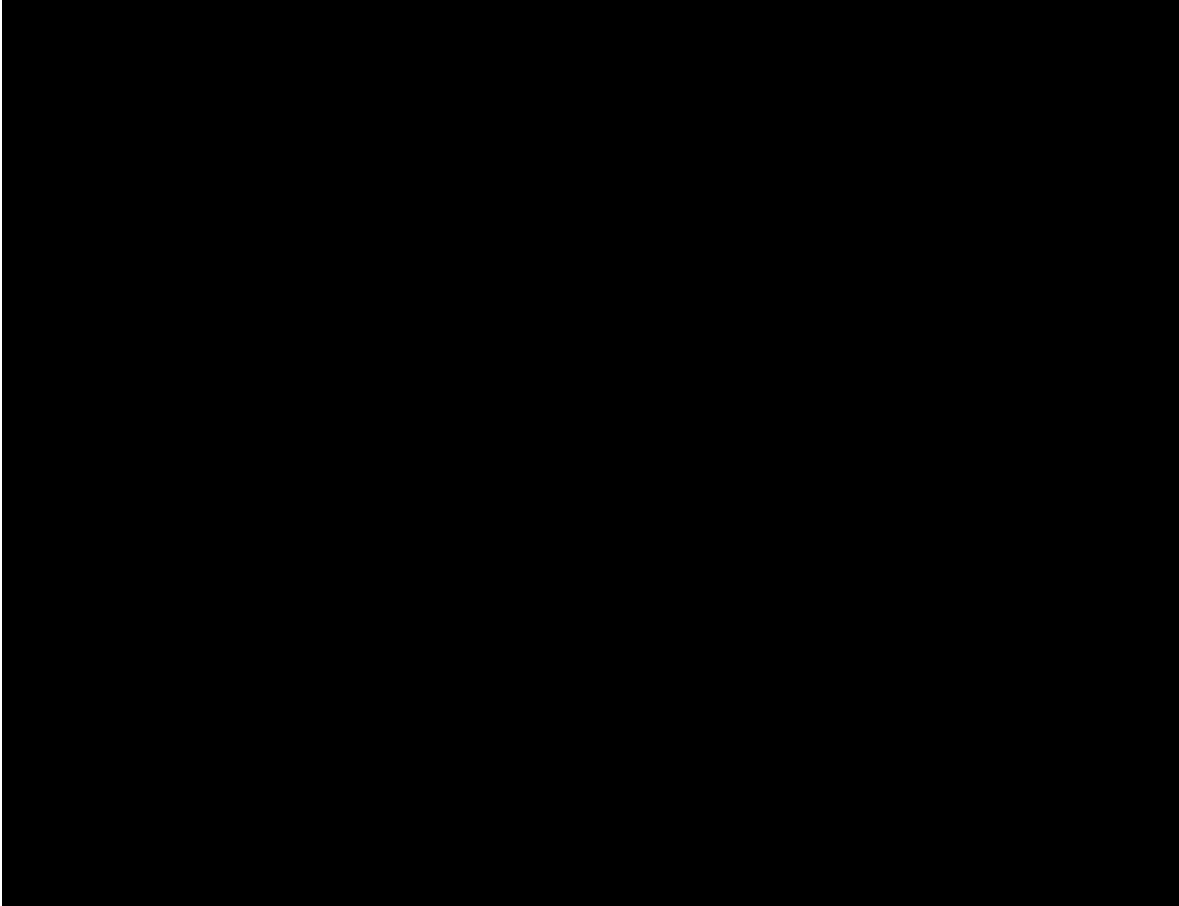
Photograph 1 Example of Scattered trees over modified soils/consolidated fill within the former golf course (Dec 2019)



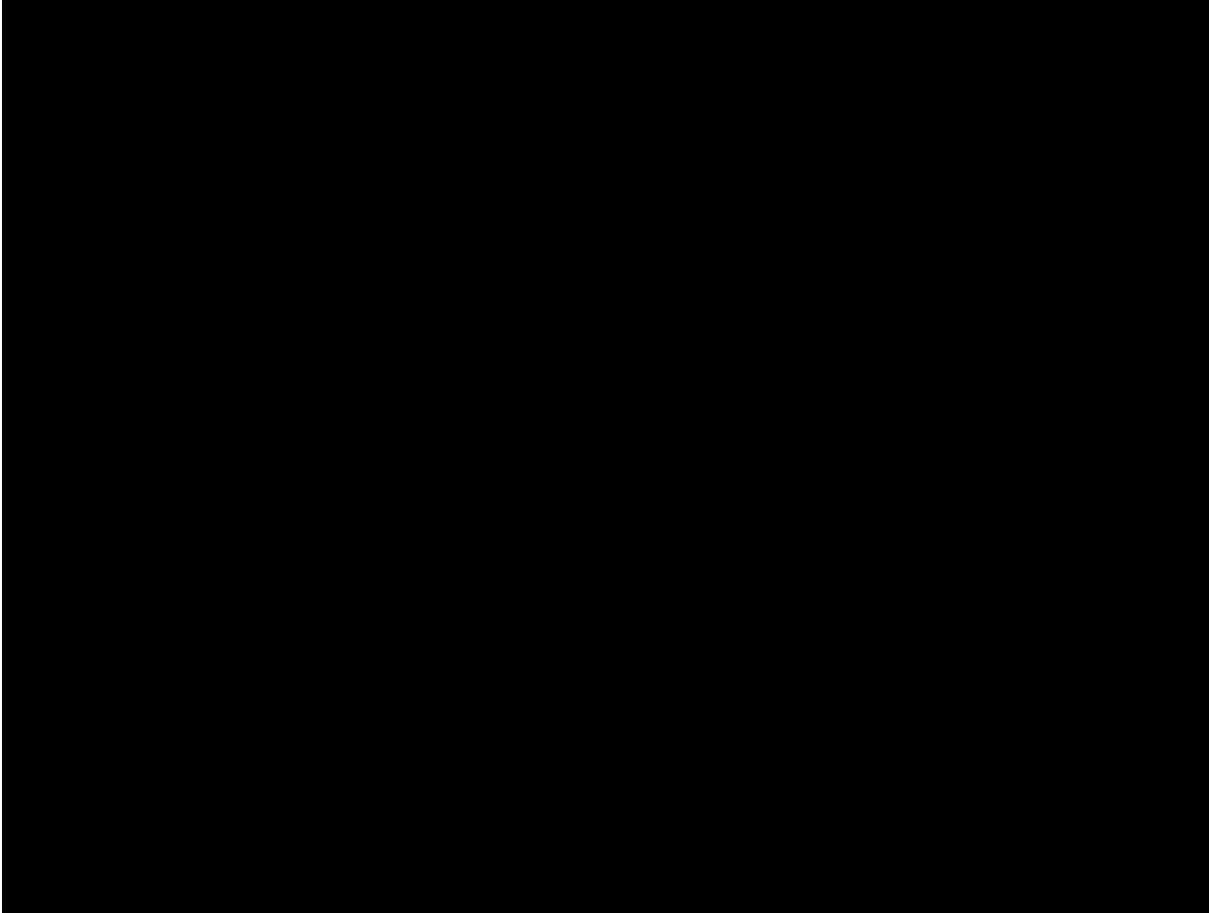
Photograph 2 Example of Scattered trees over modified soils/consolidated fill within of the former golf course (Jul 2019)



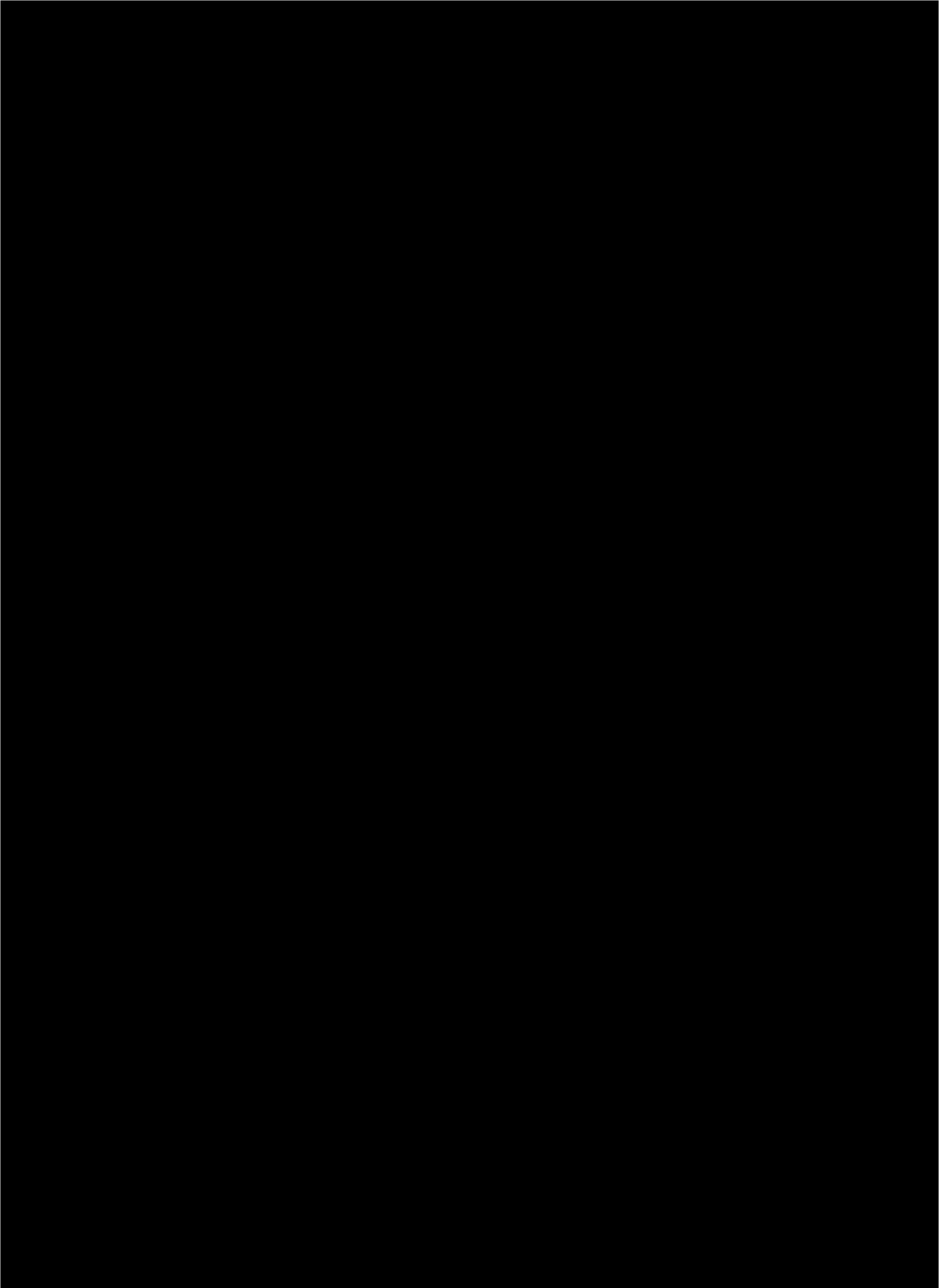
Photograph 3 Vegetation along bitumen track at southern tip of Riverlands site. Note vegetation to the right of the barb wire fence is outside the Riverlands site (within Council Lot 5) and not included within the SCA mapped area

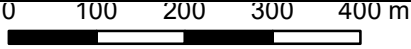
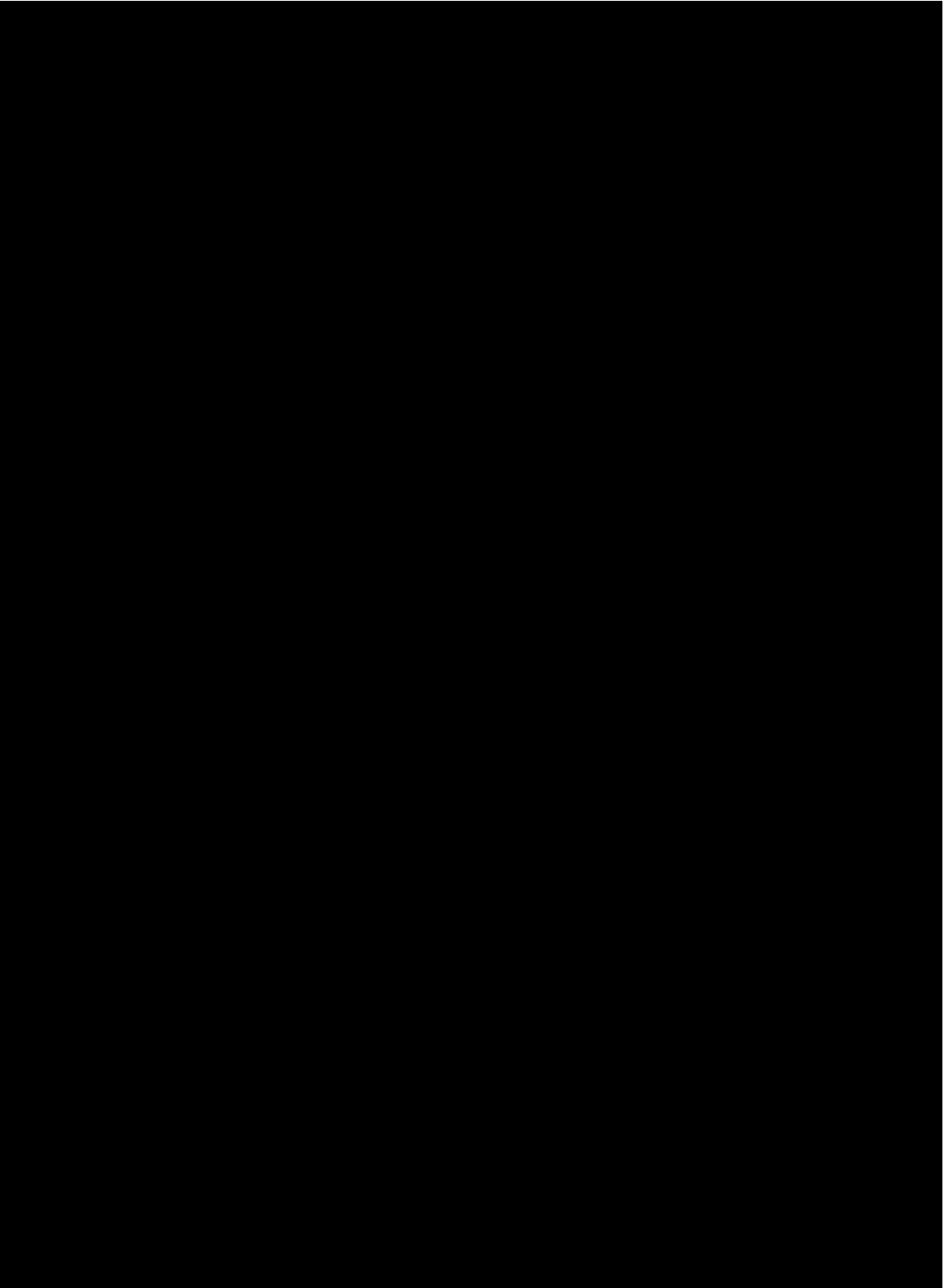


Photograph 4 Swamp Oak Floodplain Forest within BLEP 2015 Biodiversity area



FIGURES





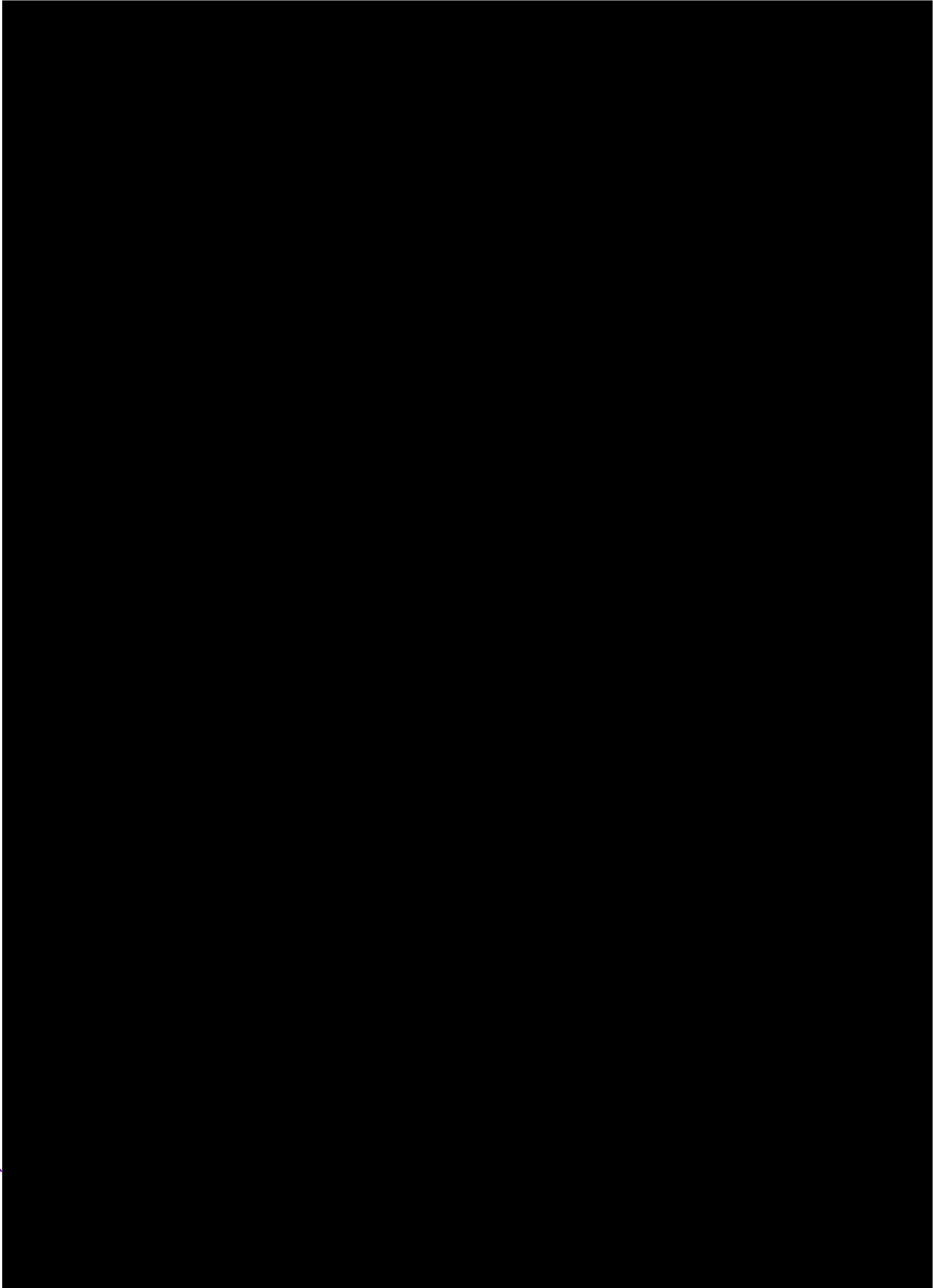
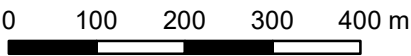
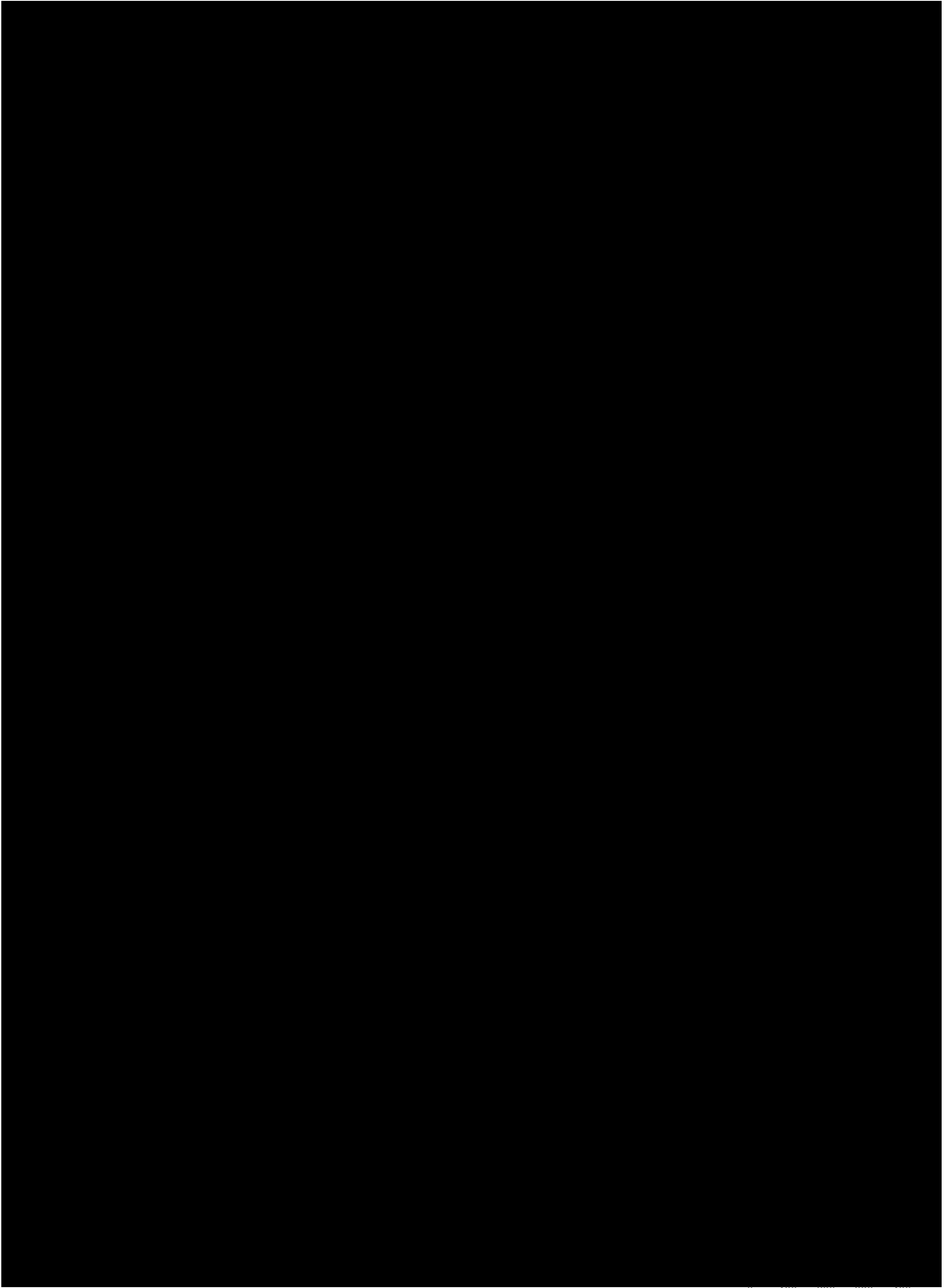


Figure 4. Broad-scale vegetation mapping of Riverlands site and surrounds





0 100 200 300 400 m

