

ANGEL PLACE
LEVEL 8, 123 Pitt Street
SYDNEY NSW 2000

URBIS.COM.AU
Urbis Pty Ltd
ABN 50 105 256 228

9 October 2020

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

To whom it may concern,

SUBMISSION ON DRAFT CUMBERLAND PLAIN CONSERVATION PLAN

This letter has been prepared on behalf of [REDACTED] in response to the public exhibition of the draft Cumberland Plain Conservation Plan 2020-56 (**the draft CPCP**).

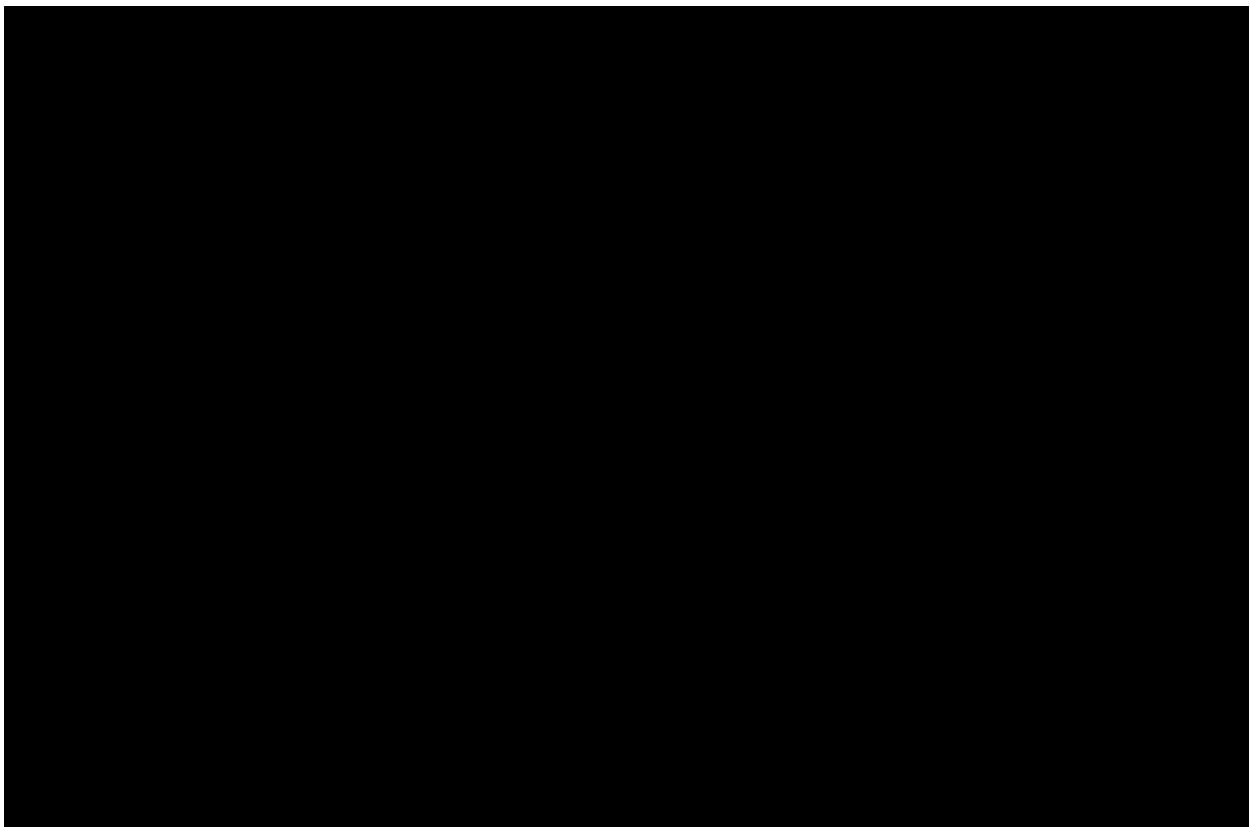
This submission is made in respect to [REDACTED] **Orchard Hills (the site)**.

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 ensure a vibrant and liveable city going into the future. The draft CPCP will inform the zoning for certified – urban capable land and non-certified land, land that is either avoided land for biodiversity or other environmental purposes.

1. THE SITE

The site located at [REDACTED] Orchard Hills is a very strategically important site within the Greater Penrith to Eastern Creek Investigation Area. The major land holding comprises 1,235,713m² of undeveloped land, immediately north of the Western Sydney Aerotropolis and west of the Western Sydney Employment Area. The site has been historically cleared for agricultural purposes and supports little native vegetation. A fourth order stream runs north-south in the north-west corner of the site.

Figure 1 Subject Site



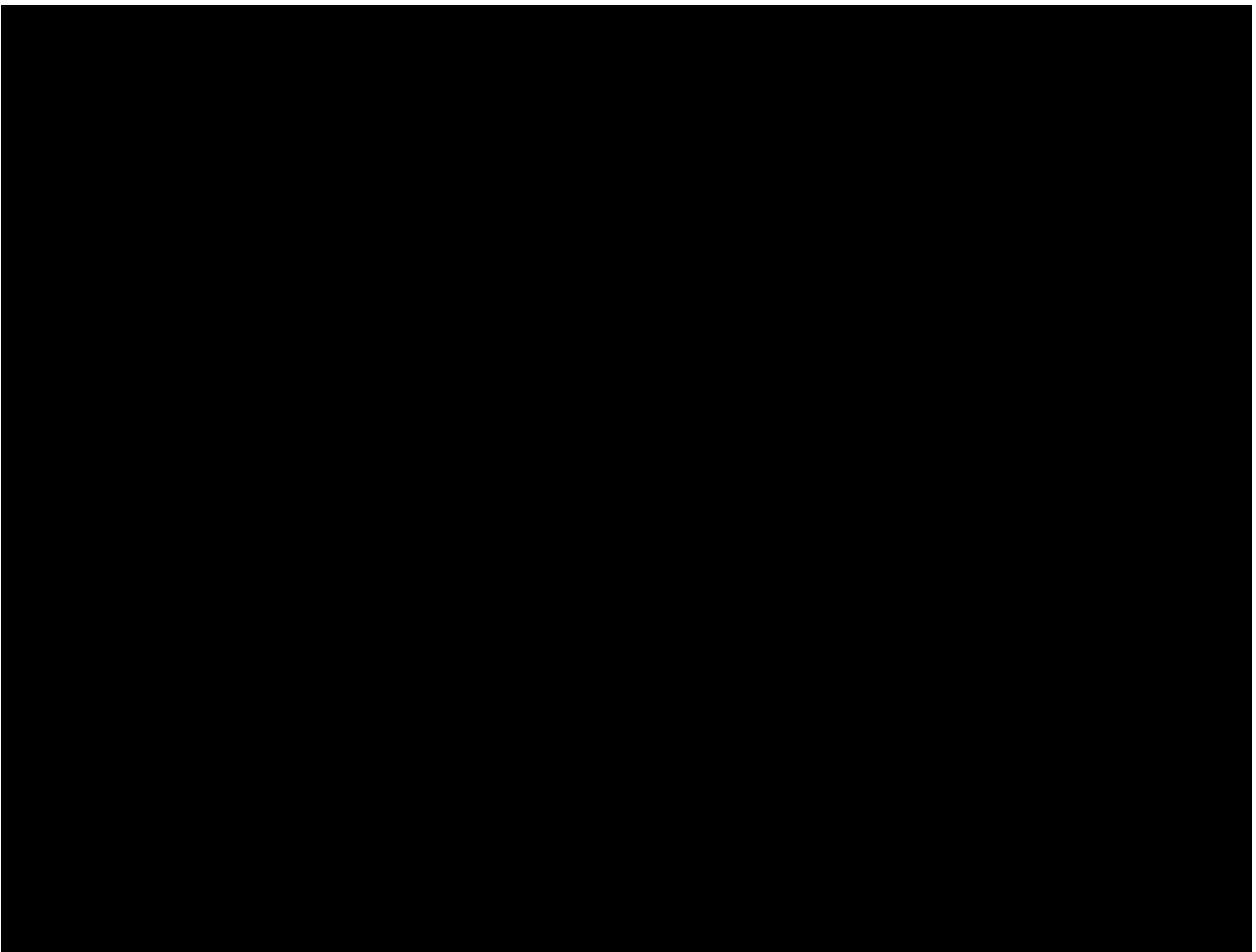
Source: Near Maps

1.1. CURRENT PLANNING PROPOSAL

A Planning Proposal was submitted to Council on 26th August 2020 for future employment uses on the site, leveraging off the future North South Rail Line, Outer Sydney Orbital Motorway and Western Sydney Freight Line which further enhance the sites optimal position to deliver employment lands.

The Planning Proposal seeks to rezone land from RU2 Rural Landscape to IN1 General Industrial, part SP2 Infrastructure to accommodate the future Outer Sydney Orbital Motorway and part E2 Environmental conservation across areas of high biodiversity value constrained land. Specifically, the following structure plan has been proposed.

Figure 2 Proposed Structure Plan

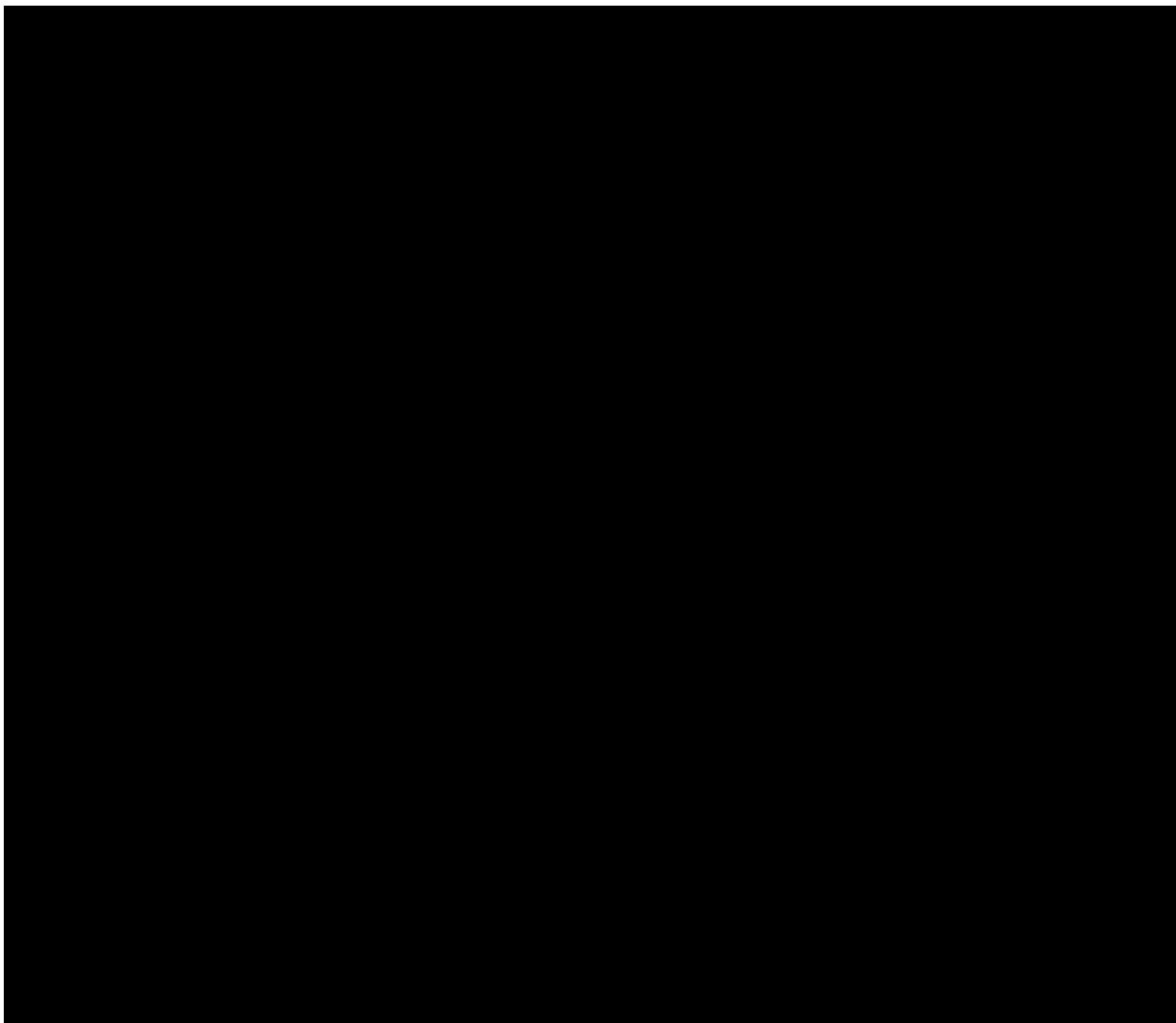


Source: Nettleton Tribe

The structure plan has been informed by the overall vision for the site, one which will deliver employment uses and infrastructure including the Outer Sydney Orbital Motorway, whilst retaining biodiversity and ecologically significant land where possible or offsetting impacts of development.

The site is proposed to be developed for an industrial business park comprising (24) warehouses, ancillary offices, internal roads and landscaping through the staged development of a master planned estate (refer **Figure 3**).

Figure 3 Proposed Masterplan with CPCP overlay



Source: Nettleton Tribe

1.2. EXISTING ECOLOGICAL CONDITION

The site is transverse by a fourth order stream in the north west corner which is currently zoned E2 Environmental Conservation under the Penrith Local Environmental Plan 2012 (PLEP 2012), consistent with the draft CPCP mapping. This area of land has been avoided for any building works and additional planting is proposed to this area.

The site is located within the 'Greater Penrith to Eastern Creek Urban Release Investigation Area; of the draft CPCP. It is noted that the draft CPCP identifies approximately 16 hectares of land along the southern site boundary as being non-certified for the purpose of strategic conservation, refer **Figure 3**.

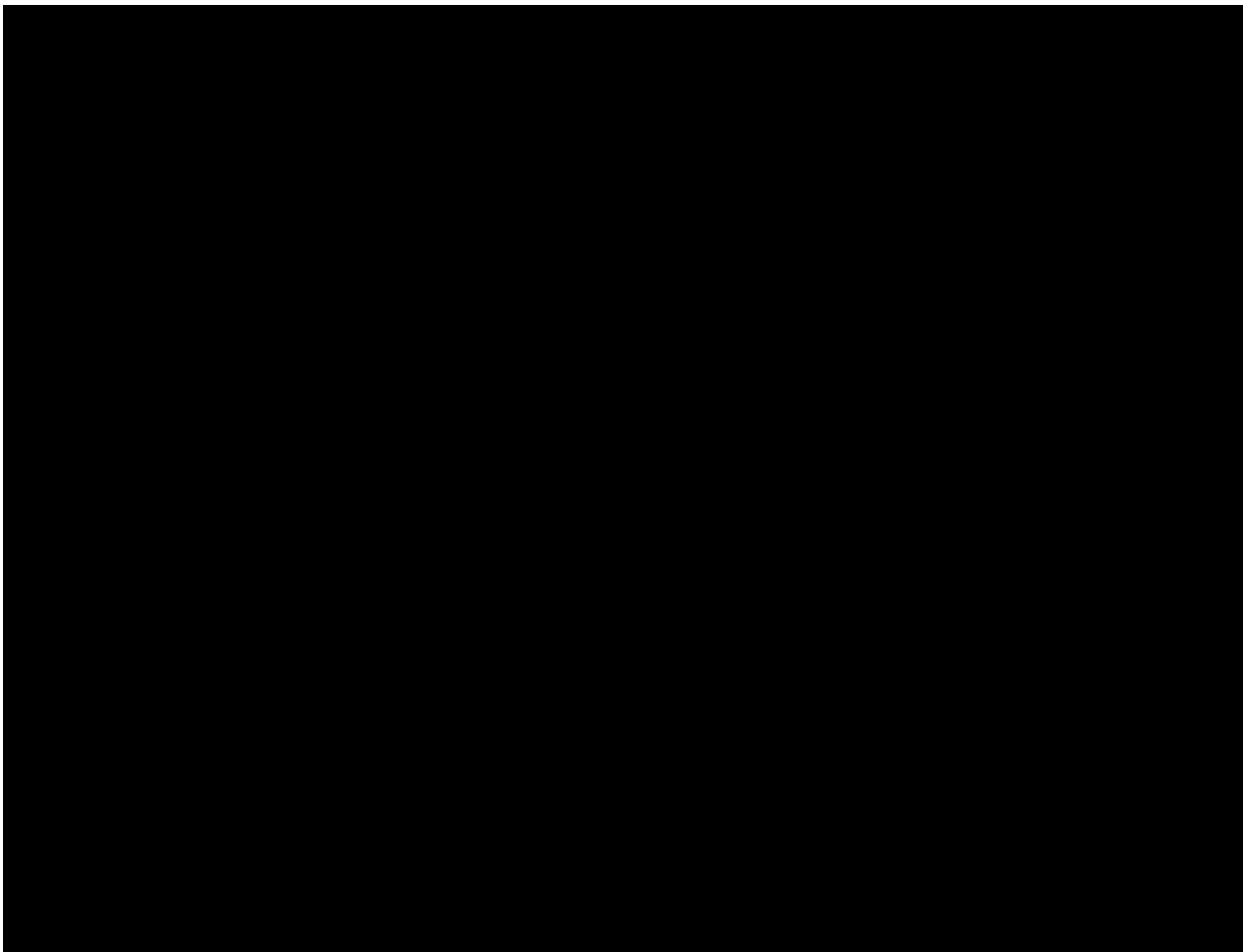


Under the draft CPCP, land within this area is ‘avoided’ to minimise the impacts to biodiversity from development as required under the BC Act and EPBC Act. As part of the Planning Proposal, an Ecological Constraints Assessment was undertaken which assessed the presence of native vegetation and areas of high ecological value across the site, Ecoplanning have provided ecological advice in response to the draft CPCP which is attached to this letter.

Three populations of threatened flora species were confirmed as occurring across the southern portion of the site, which included *Dillwynia tenuifolia*, *Grevillea juniperina* subsp. *juniperina* and *Pultenaea parviflora*. Two threatened fauna species were also likely to use the site for foraging purposes including the Eastern Coastal Free-tailed Bat (*Micronomus norfolkensis*) and Latham's Snipe (*Gallinago hardwickii*).

The CPCP team have confirmed that ground truthing was not undertaken across the site in preparing the draft CPCP. The Ecological Constraints Assessment found that the three threatened species are scattered and not densely populated. For the purpose of avoidance, no works have been proposed within the Outer Sydney Orbital Corridor or the western slither of land between the North-South Rail Line, both of which contain the threatened species and are excluded land under the draft CPCP.

Figure 4 Proposed draft CPCP mapping



Given the location of the site and proposed surrounding transport infrastructure, the non-certified land which is proposed for E2 Environmental Conservation under the draft CPCP would become an isolated pocket once all the future transport infrastructure is built, with no connectivity to other larger conservation areas. In these circumstances the long term viability of the protected area is seriously questioned. There is little value in protecting an isolated and fragmented environmental protection area.

1.3. PROPOSED BIODIVERSITY OFFSET

A number of mechanisms are proposed to offset the impacts of urban development across the site, specifically where high biodiversity value areas are identified with consideration given to the findings of the Ecological Constraints Assessment and ground truthing undertaken by Ecoplanning.

Given the context of the site, being in a strategically optimal location and highly capable of delivering a high-quality industrial estate to service the employment needs of Western Sydney and industrial land supply in Greater Sydney, the loss of five (5) high-quality industrial warehouses is considered

unreasonable. Therefore, it is essential that the proposed non-certified mapping be abandoned and the following offset mechanisms be considered adequate in compensating for the loss of any native vegetation at the site.

The following is proposed:

1. As part of future development of the site, seedlings from the three threatened species would be collected and planted at the north west corner of the site where the E2 Environmental Conservation zone is located.
2. The proposed development would pay the biodiversity offset credits for the loss of native vegetation at the site.

Further to the above, compensation for the area lost to conservation would be the equivalent to:

$$16 \text{ hectares} \times \boxed{}^2 \text{ (rate for raw industrial land)}$$
$$= \boxed{}$$

The opportunity cost of the foregone employment area is significant and cannot be justified.

The loss of vegetation will have little impact on the 11,000 hectares of land proposed to be conserved, inclusive of the offset target of 5,475 hectares identified in the draft CPCP.

2. RECOMMENDATION ON THE DRAFT CPCP

For the reasons outlined in the previous sections and Ecoplanning's response to the draft CPCP, we provide the following recommendations to the draft CPCP:

- Consideration be given to the long-term outcomes of proposed transport infrastructure and likely fragmentation of land containing high value biodiversity;
- The entire southern portion of the site be mapped as certified – urban capable land given the sites highly strategic location and capabilities to provide employment land, consistent with the proposed Structure Plan in **Figure 2**.

We acknowledge the effort of 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, the opportunity cost of lost prime industrial land is significant and unreasonable. The preparation of the live planning proposal included discussions for more than one year with both Penrith City Council and DPIE. It is both unfair and unreasonable that the E2 zone is included in this late stage of the planning proposal process. A logical and acceptable offsetting process is available for the loss of fragmented and isolated ecological land. We respectfully request that the proposed E2 rezoning be abandoned so that this vitally important employment zone for Western Sydney can continue. In the current COVID economic crisis it is essential that employment lands which will fulfill a clearly defined shortfall in employment land can continue.



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.

Yours sincerely,

A large black rectangular redaction box covering the signature area.

Bruce Colman
Director

Two horizontal black redaction bars.

Danny Kataieh
Development Manager

[REDACTED]
[REDACTED]
Supplied by email

9 October 2020

Re: Response to Cumberland Plain Conservation Plan, [REDACTED] Hills, NSW.

Dear Danny

This letter has been prepared in response to the recently released Cumberland Plain Conservation Plan (DPIE 2020), and the potential effect this may have on your recently lodged Planning Proposal (Urbis 2020). The subject land is identified as [REDACTED] [REDACTED] Orchard Hills, NSW (the 'study area'; **Figure 1**).

Background and purpose of report

In May 2020 his year, Ecoplanning (2020) provided an Ecological Constraints Assessment (ECA) of the study area to assess the ecological values present and potential constraints for future development of the study area. Specifically, this report assessed impacts associated with a Draft Masterplan (**Figure 2**) and presents mapping of vegetation communities in accordance with the Biodiversity Assessment Method (BAM) (OEH 2017).

The ECA indicated that whilst the Draft Masterplan identifies areas of avoidance and minimisation of impacts to biodiversity, it would trigger the NSW Biodiversity Offsets Scheme (BOS) under the *Biodiversity Conservation Act 2016*, due to the triggers outlined in s7.3 of the BC Act, which are as follows:

- Clearing of 1 ha or greater of native vegetation (based upon the minimum lot size of 40 ha)
- Clearing of land identified on the Biodiversity Values (BV) Map (DPIE 2020a; **Figure 3**)
- Any works which would significantly affect threatened species in accordance with s7.3 of the BC Act.

Study area description

The study area covers an area of approximately 125.4 ha, the vast majority of which has been historically cleared for agricultural purposes and no longer supports native vegetation (69.92 ha of cleared land; ~ 56 % of the study area). The study area consists of relatively flat land, gently sloping with a generally north-westerly aspect and elevations between 38-52 metres above sea level (masl).

The study area includes waterfront land as defined under the NSW *Water Management Act 2000* (WM Act), which includes the bed of any river, together with any land lying 40 m of the highest bank of the river (**Figure 3**). Waterfront land is present within the north-west of the study area associated with an un-named 4th order stream which is a tributary of South Creek. Additionally, an un-named 1st order stream is mapped in the central west of the study area, although this drainage line does not exhibit the features of a defined channel with bed and banks and may not be waterfront land for the purposes of the WM Act (**Figure 3**).

The study area is mapped as predominately including soils of the 'Blacktown' soil landscape, which are typically loams or clay loams derived from shales of the Wianamatta Group (Hazelton et al 1989). In association with drainage lines, the 'South Creek' soil landscape has been mapped which is associated with Quaternary alluvium and typically includes a sandy clay loam or sandy loam (Hazelton et al 1989).

The study area is located within the Penrith City Council Local Government Area on land currently zoned RU2 – Rural Landscape. The study area is not mapped as 'Biodiversity' on the Terrestrial Biodiversity Map under the Penrith Local Environment Plan (PLEP) (2010), however parts of the study area are identified on the NSW BV Map as supporting "*Threatened species or communities with potential for serious and irreversible impacts*" (**Figure 3**).

The study area forms part of the '*Greater Penrith to Eastern Creek Urban Release Investigation Area*' of the Cumberland Plain Conservation Plan. This strategic conservation plan aims to avoid and minimise impacts on biodiversity at a landscape scale early in the planning process, ensuring environmentally significant land is safeguarded ahead of development and rezoning.

Methods

Literature review and database review

The ECA (Ecoplanning 2020) was informed by a site-specific literature and database review, followed by field survey conducted on 30 and 31 March 2020 by Brian Towle (Senior Ecologist), Bret Stewart (Senior Ecologist) and Ben Brown (Ecologist) over approximately 44 hours. The survey included traversing the study area to determine the extent of native vegetation and surveying the study area for potential fauna habitat, including recording any hollow bearing trees (HBT), stags, decorticating bark, mature/old growth tree, winter flowering eucalypts etc. Vegetation zones across the study area were sampled within floristic plots conducted in accordance with the BAM.

Results

Vegetation communities

Native vegetation within 5 km of the study area was assessed using desktop GIS analysis (**Figure 4**). The regional vegetation mapping by OEH (2015) identified that across the locality 'Shale Plains Woodland' (SPW) is dominant with 'Alluvial Woodland' (AW) commonly occurring in association with drainage lines (**Figure 4**). Small areas of 'Shale Gravel Transition Forest' (SGTF) are mapped to the south-east of the study area. Within the study area OEH (2015) mapped approximately 6.8 ha of SPW and 5.5 ha of AW. The relationship between the vegetation communities of OEH (2015), Plant Community Types (PCTs) used by the BAM and ecological communities listed under the BC Act and EPBC Act are outlined within **Table 1**.

Field validation followed the mapping protocols of the BAM, which requires all vegetation native to NSW to be allocated to a PCT that was likely to have occurred onsite prior to European settlement. Whilst it is more likely that the study area retained a complex of many intergrading PCTs, the highly developed and modified state does not allow for any level of confidence predicting the pre-1750 vegetation. Mapping and delineation of vegetation boundaries has been informed by small areas of native vegetation, where present, and interpretation of the topography and landforms across the study area. Field validation of vegetation communities confirmed that vegetation in the north-west of the study area corresponded with AW, however much of the vegetation mapped as SPW by OEH (2015) was found to more closely resemble SGTF (**Figure 5**). Features of the vegetation within the study area which were used to distinguish SGTF from SPW included: a canopy commonly including *Eucalyptus fibrosa* (Broad-leaved Ironbark); a moderately dense mid-storey of *Melaleuca* spp. (Paperbarks); and the presence of iron-indurated gravels. Areas of the study area without a mid-storey of *Melaleuca* spp. or iron-indurated gravels were retained as SPW.

Table 1: Relationship between vegetation communities of OEH (2015), PCTs and TECs

Vegetation communities (OEH 2015)	Plant Community Types (PCTs)	Threatened Ecological Communities	
		BC Act	EPBC Act
Alluvial Woodland	PCT 835 - Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion	E: River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Not listed
Shale Plains Woodland (MU10)	PCT 849 - Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion	CE: Cumberland Plain Woodland in the Sydney Basin Bioregion	CE#: Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest
Shale Gravel Transition Forest	PCT 724 - Broad-leaved Ironbark - Grey Box - <i>Melaleuca decora</i> grassy open forest on clay/gravel soils of the Cumberland Plain, Sydney Basin Bioregion	E: Shale gravel transition forest in the Sydney Basin Bioregion	

Vegetation condition

All native vegetation (as applied by the BAM) across the study area (approximately 52.99 ha) included evidence of past disturbance including selective thinning, slashing, under-scrubbing, non-indigenous plantings and weed invasion. Generally past disturbance was less evident within areas of AW adjacent to the un-named drainage line in the north-west of the study area, while past disturbance was more evident in native vegetation in the southern and eastern portions of the study area. Field assessment identified four condition classes across the study area (**Figure 5**) which are briefly summarised as follows:

- "Intact" – Areas in which all structural layers were present and dominated by native species.
- "Scattered trees" – Areas which have been historically cleared and now only include isolated remnant canopy trees, or planted canopy trees, over a predominately exotic or cleared understorey.
- "Derived Shrubland" – Areas of the study area where native canopy has been removed, although the shrub-layer and understorey remain.
- "Derived Grasslands" – Areas where the canopy and shrub layer vegetation have been removed, although native understorey species remain. This condition class included various levels of infestation of exotic understorey species.

For each vegetation zone (combination of the PCT and condition class) a Vegetation Integrity (VI) score was calculated from a single plot data in each vegetation zone. The exception was the 'scattered trees' vegetation zone, which was only sampled once, despite being present across three PCTs. For these vegetation zones plot data from PCT 724 has also been entered for PCTs 835 and 849. Plot locations are shown in **Figure 5**.

The VI scores ranged from 14.8/100 to 67/100 for vegetation zones within the study area (**Table 2**). The VI Scores for each zone represent a combination of scores for vegetation composition, structure and function. Across the study area all vegetation zones had a low composition score, except for intact areas of PCT 835, which is attributed to the history of vegetation clearing, under-scrubbing and across much of the subject land.

The Listing Advice for Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest (DEWHA 2009) under the EPBC Act provides condition thresholds for when a patch retains sufficient conservation value to be considered as a Matter of National Environmental Significance (MNES). The Listing Advice specifically excludes derived grasslands and shrublands from the listing of the community under the EPBC Act. Additionally, the Listing Advice excludes patches of the community where less than 30% of the perennial understorey vegetation cover is made up of native species. On these criteria, the vegetation within the study area does not form part of the ecological community as listed under the EPBC Act.

Table 2: The area and current VI score for vegetation zones

Vegetation community / PCT	Condition class	Area (ha) within study area	VIS score	SAI
PCT 835 (AW) ¹	Intact	6.33	67	No
	Scattered trees	0.19	29.8 ²	
PCT 724 (SGTF)	Scattered trees	3.69	20	No
	DNS	14.22	33.1	
	DNG	28.81	14.8	
PCT 849 (SPW) ³	Scattered trees	0.4	19.9*	SAII
Artificial wetlands	-	1.89	-	No
Exotic vegetation	-	69.92	-	
Total	-	125.45	-	-

¹ River-flat Eucalypt Forest EEC under the NSW BC Act; ² VI Scores calculated using plot data from plot in a separate PCT; ³ Cumberland Plain Woodland CEEC, under the NSW BC Act (not the Commonwealth EPBC Act)

Threatened species

Within the study area, field survey confirmed the presence of three threatened flora species and two fauna species have previously been recorded, namely:

- *Dillwynia tenuifolia*
- *Grevillea juniperina* subsp. *juniperina* (Juniper-leaved Grevillea)
- *Pultenaea parviflora*
- Eastern Coastal Free-tailed Bat (*Micronomus norfolkensis*)
- Latham's Snipe (*Gallinago hardwickii*)

The three threatened flora species were restricted to the southern portions of the study area (Lot [REDACTED] although were widespread within this area, they are found in vegetation mapped as DNS and DNG, with VI Scores of 33.1 and 14.8/100 respectively. These scores indicate highly modified and disturbed forms of the vegetation community.

Based upon the habitat values within the study area, a suite of fauna species are likely to use the study area for foraging purposes. A number of fauna species may also utilise the more intact areas of habitat, generally those areas in association with the un-named drainage line in the north-west, for breeding purposes. The habitat features relevant to each fauna group are identified in **Table 3**.

A number of threatened fauna species are likely to use the resources available within the study area. in accordance with the BAM, two 'species credit' species were identified to have a 'moderate' potential to utilise the study area, although neither have previously been recorded:

- Southern Myotis (*Myotis macropus*)
- Cumberland Plain Land Snail (*Meridolum corneovirens*)

Of these threatened fauna, the habitat for Southern Myotis is largely avoided in the creekline in the north-west of the study area, which is identified as intact PCT 835 and proposed for E-zoning in the Draft Masterplan. The Cumberland Plain Land Snail is associated with Cumberland Plain Woodland (PCT 849), and only a small amount of this vegetation is present on the site in a highly modified and fragmented condition in the north-east of the property.

Riparian corridors

Desktop survey and field assessment identified watercourses within the study area. While development in accordance with the Draft Masterplan would avoid waterfront land in association with the un-named fourth order stream in the north-west of the study area, waterfront land associated with an un-named first order stream in the central west of the study area would be impacted. Therefore, future works may be within 40 m from the top of bank of a watercourse and a controlled activity approval may be required in accordance with WM Act. Several farm dams are present within the study area and any removal of these dams would require the preparation of a dam de-watering plan.

Conservation significance

The entire study area has been subject to historical disturbance, including vegetation clearing for agricultural land uses, with the vast majority now supporting exotic vegetation with low ecological value. The area identified as potential conservation under the CPCP has a very low VI Score in accordance with the BAM (14.8-33.3; see **Table 3**). It does not meet condition criteria to be considered a Matter of National Environmental Significance under the EPBC Act

Whilst the area identified as ‘avoided for biodiversity’ (**Figure 8**) does retain additional conservation constraints due to the presence of threatened flora or ‘species credits’ in accordance with the BAM, it would require significant restoration effort and funding. The BAM predicts that the area ‘avoided for biodiversity’ would only achieve a small gain in VI Score if managed as a BSA (PCT 724 – DNG = 14.8/100 to 38.8/100 and PCT 724 – DNS = 33.1/100 to 37.2/100. By contrast, the area avoided under the Draft Masterplan in the north west, which is PCT 835 – ‘intact’, currently has a VI Score of 67/100, and with no management will still remain at 66.2/100 (see **Table 3**).

In accordance with the BAM, a higher level of improvement is achievable applying Active Restoration and Management Actions (ARMA), with a trade off being higher input or management costs. With ARMA applied to the area identified as ‘avoidance for biodiversity’, this gain is only predicted to achieve a VI Score of 38.8 (PCT 724 – DNG) and 52.2 (PCT 724 – DNS), which would require significant additional funds to be achieved

This area is also relatively small in terms of a BSA, with most cost effective BSAs on the Cumberland Plain at least twice the size of the area identified by the CPCP in the study area.

Species credit generation in this area is also extremely low 1-3/ha, as it is tied to the VI Score for these zones. It is notable that the species credits do not increase with ARMA. Trading for species credits, in particular threatened flora has been in the order of [REDACTED] per credit under the former Biobanking scheme (<http://www.environment.nsw.gov.au/bimsprapp/biobankingpr.aspx>), and predicted prices under the NSW Biodiversity Offsets Payment Calculator (BOPC) [REDACTED] for flora, and

[REDACTED] for Myotis. This would equate to a total return if all ‘species credits’ generated in the ‘area avoided for biodiversity’ to with a total of [REDACTED]. This return would not recover the input cost for generating the credits, let alone managing the site in perpetuity.

If a BSA was to be placed over the ‘area avoided for biodiversity’ and fully restored through the application of ARMA for ecosystem credits, it is estimated that a Total Trust Fund Deposit (TFD) in the order of [REDACTED] would be required. This means the effective cost of restoration would affect a Part A or ‘management only’ cost per credit of [REDACTED]. Without ARMA, it would be [REDACTED]. This price point is prohibitive when land value or Part B / ‘opportunity costs’ are considered. As such, without a significant funding commitment the area proposed as ‘avoid for biodiversity’ will remain in a highly degraded state with low VI Score and cost prohibitive BSA options to the landholder.

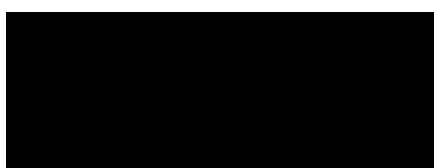
Conclusions and recommendation

In conclusion, whilst the area is identified under the BAM as a modified state of Shale Gravel Transition Forest (PCT 724), due to the low VI Score it is not a viable or desirable location for a BSA as credits would not provide a competitive market option for credit sales. Therefore, the site would be highly unlikely to ever achieve a full TFD or Part A component, therefore the assumed ‘averted loss’ in VI is more likely in the long term (see **Table 3**).

The alternative to this scenario is for the proponent to enter the NSW Biodiversity Offsets Scheme (BOS) and purchase offsets on a site where a more likely long term conservation measure is attainable. i.e. a larger site that is not fragmented by a significant transport corridor and industrial land use. By contrast the area of avoided vegetation in the Draft Masterplan, PCT 835, in the north-west already has a high VI Score and has a lower ‘averted loss’ without management intervention. This is coupled with the requirement to restore the riparian corridor association with this area of avoided vegetation under the WM Act.

Due to the study area already being the subject of an active Planning Proposal, the low VI Score, and cost prohibitive restoration resulting in a low likelihood of any generated credits also being saleable, a conservation outcome at the site is high risk, and a preferable approach may be to enter the BOS, with the development proposed in the Draft Masterplan allowing for a more certain and low risk conservation outcome offsite.

Yours sincerely,



Lucas McKinnon
Director and Principal Ecologist | BScEnv (Hons), GCert. Ornithology
Accredited Biobanking Assessor (Acc# 76) | BAM Assessor (#17012)

Table 3: Predicted VI Scores and ecosystem credit generation under a conservation management scenario.

PCT	Condition class	Area (ha)	Current VI score	Predicted VI Score (no manag.)	Predicted VI Score (default manag.)#	No. of credits (default manag.)#	Credits/ha (default manag.)#	Predicted VI Score (active manag.)	No. of credits (active manag.)#	Credits/ha (active manag.)#
North										
PCT 835 (AW)	Intact	0.34	67	66.2	67.8	1	3	76.5	1	3
	Artificial Wetland*	0.13	14.8	14.5	18.4	1	1	38.8	1	5
	Exotic grassland*	0.6	14.8	14.5	18.4	1	1	38.8	4	6
South										
PCT 724 (SGTF)	DNS	7.03	33.1	32.8	37.2	8	1	52.3	34	5
	DNG	9.2	14.8	14.5	18.4	9	1	38.8	56	6

*Plot data was taken from the vegetation zone with the lowest VI scores as plots were not collected, #rounding errors apply

Table 4: Predicted candidate species credit generation under a conservation management scenario.

Species credit	PCT	Condition	Area (ha)	No. of credits (default manag.)#	Credits/ha (default manag.)#	No. of credits (active manag.)#	Credits/ha (active manag.)#
<i>Dillwynia tenuifolia</i>	PCT 724 (SGTF)	DNS	7.03	8	1	8	1
		DNG	9.2	9	1	9	1
<i>Grevillea juniperina</i> subsp. <i>juniperina</i> (Juniper-leaved Grevillea)	PCT 724 (SGTF)	DNS	7.03	8	1	8	1
		DNG	9.2	9	1	9	1
<i>Myotis macropus</i> (Southern Myotis)	PCT 835 (AW)1	Intact	0.34	1	3	1	3
<i>Pultenaea parviflora</i>	PCT 724 (SGTF)	DNS	7.03	8	1	8	1
		DNG	9.2	9	1	9	1

rounding errors apply

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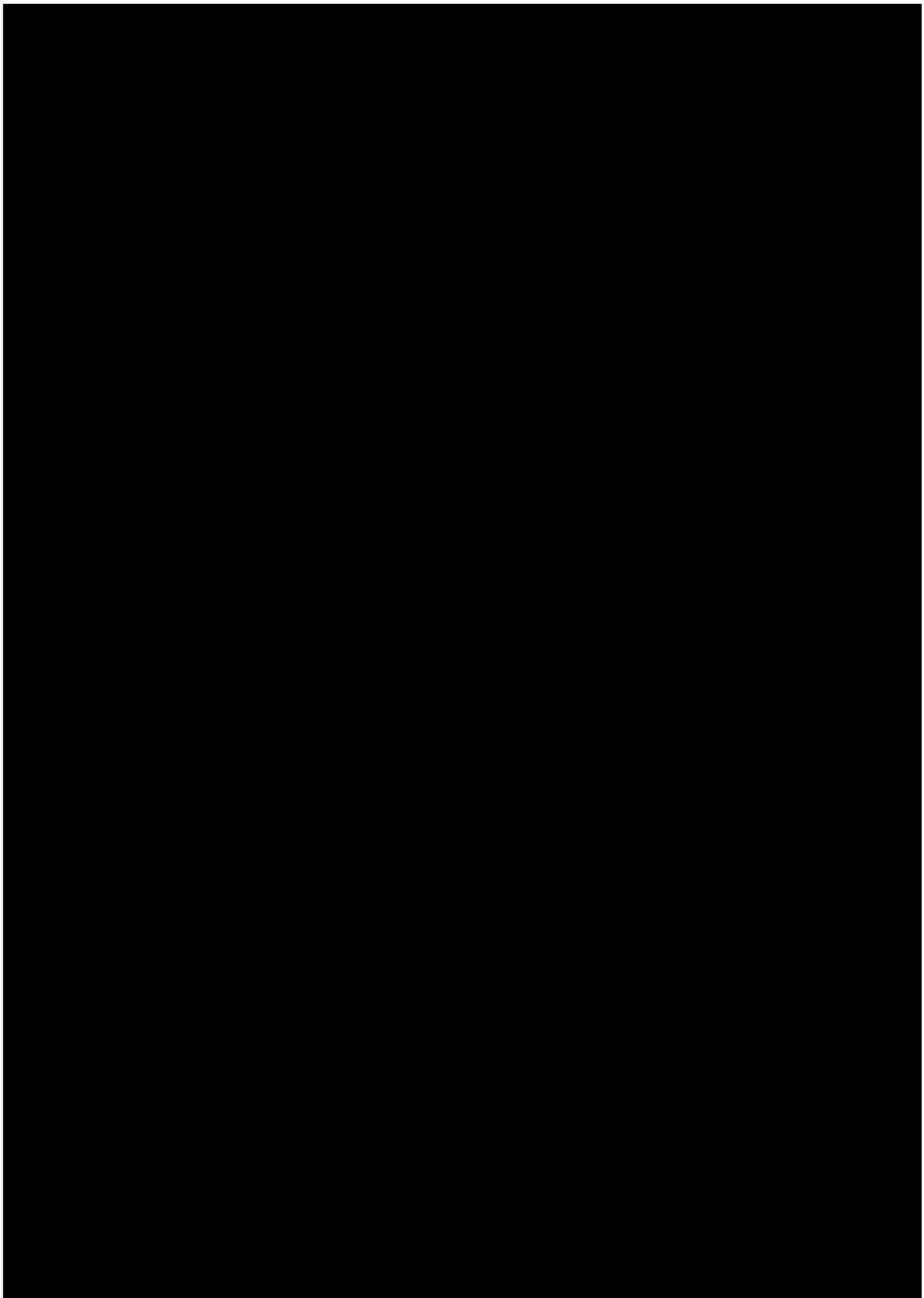


Figure 1: The study area

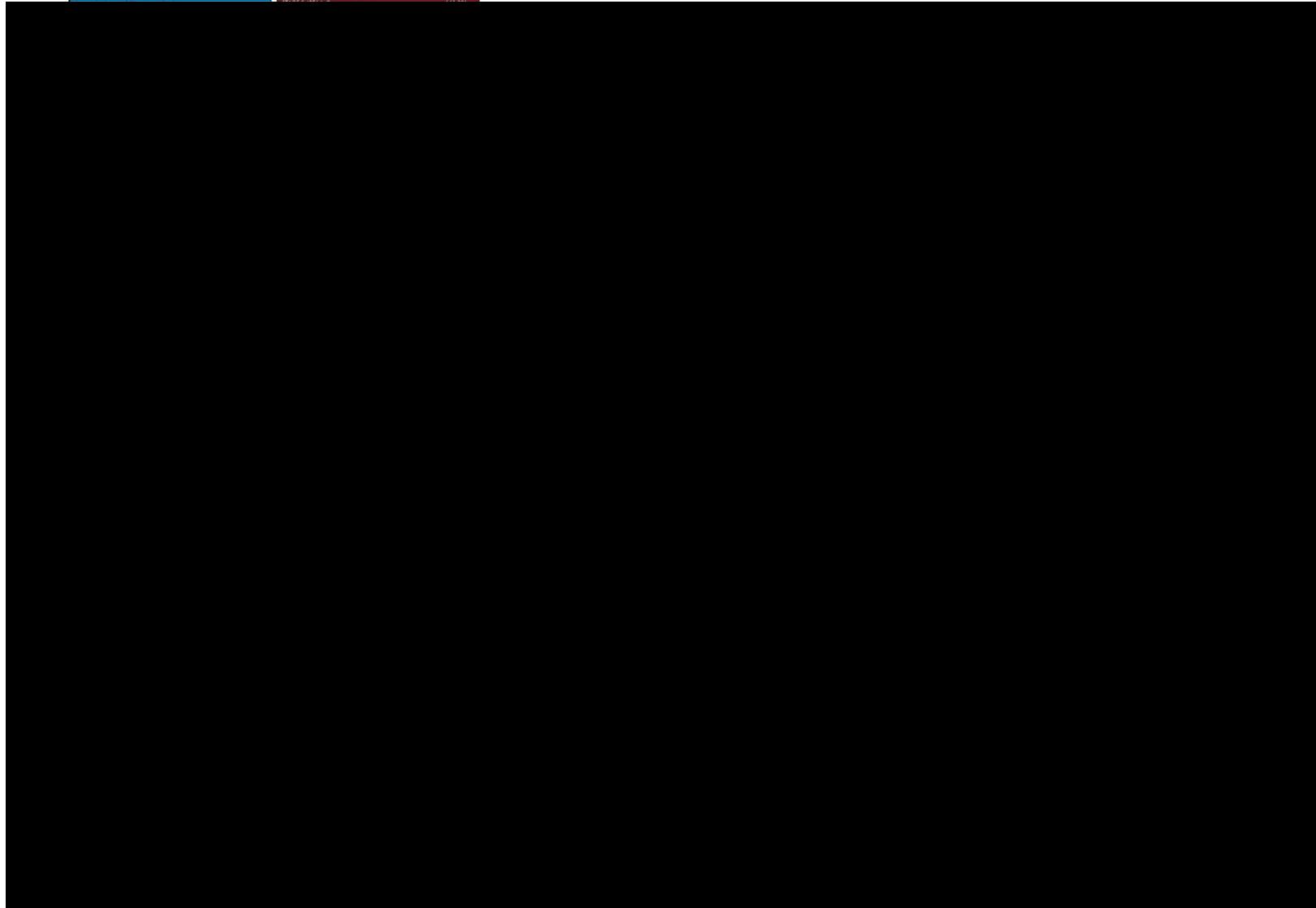


Figure 2: Draft Masterplan

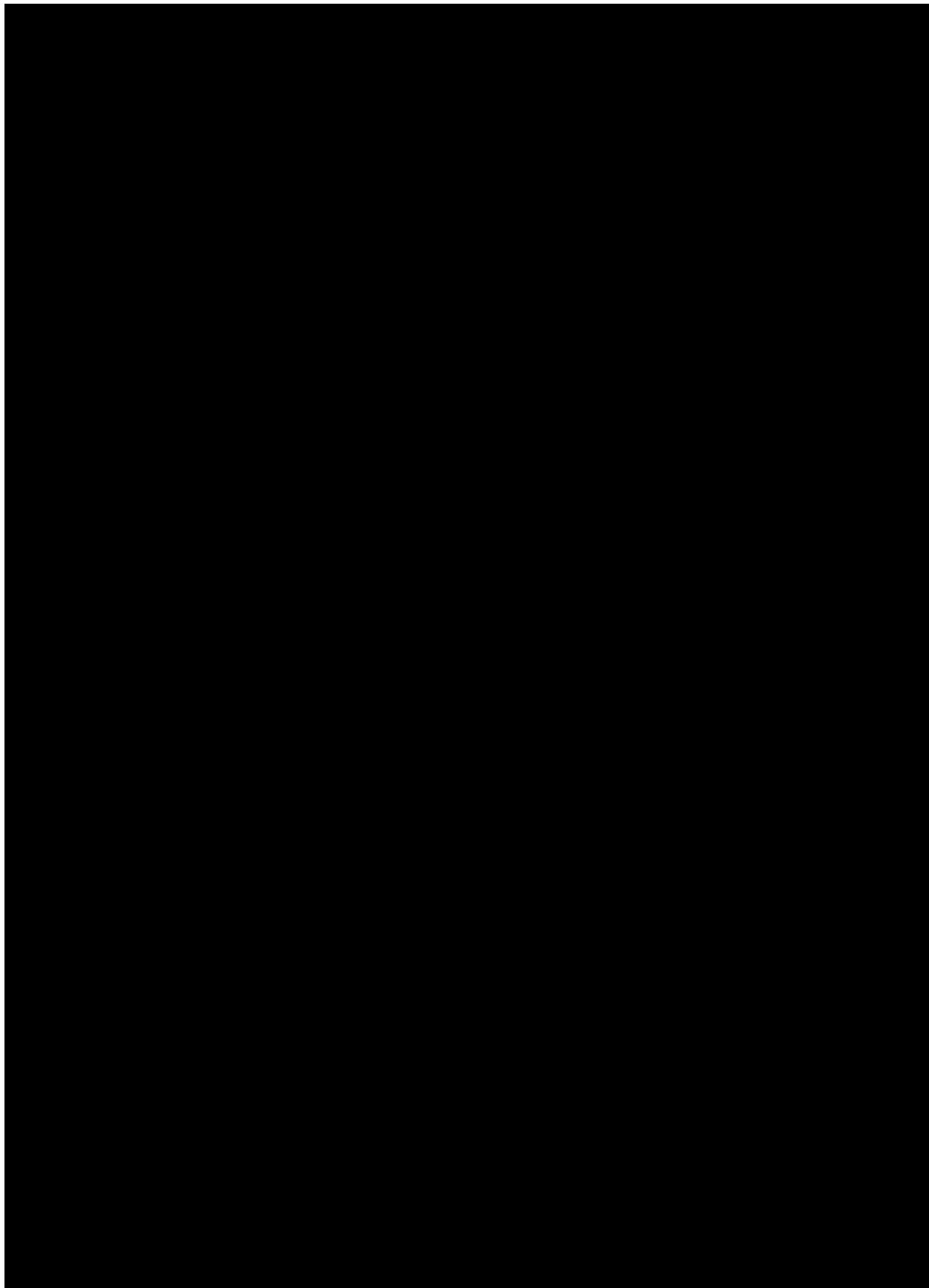


Figure 3: Biodiversity Values and waterfront land within the study area

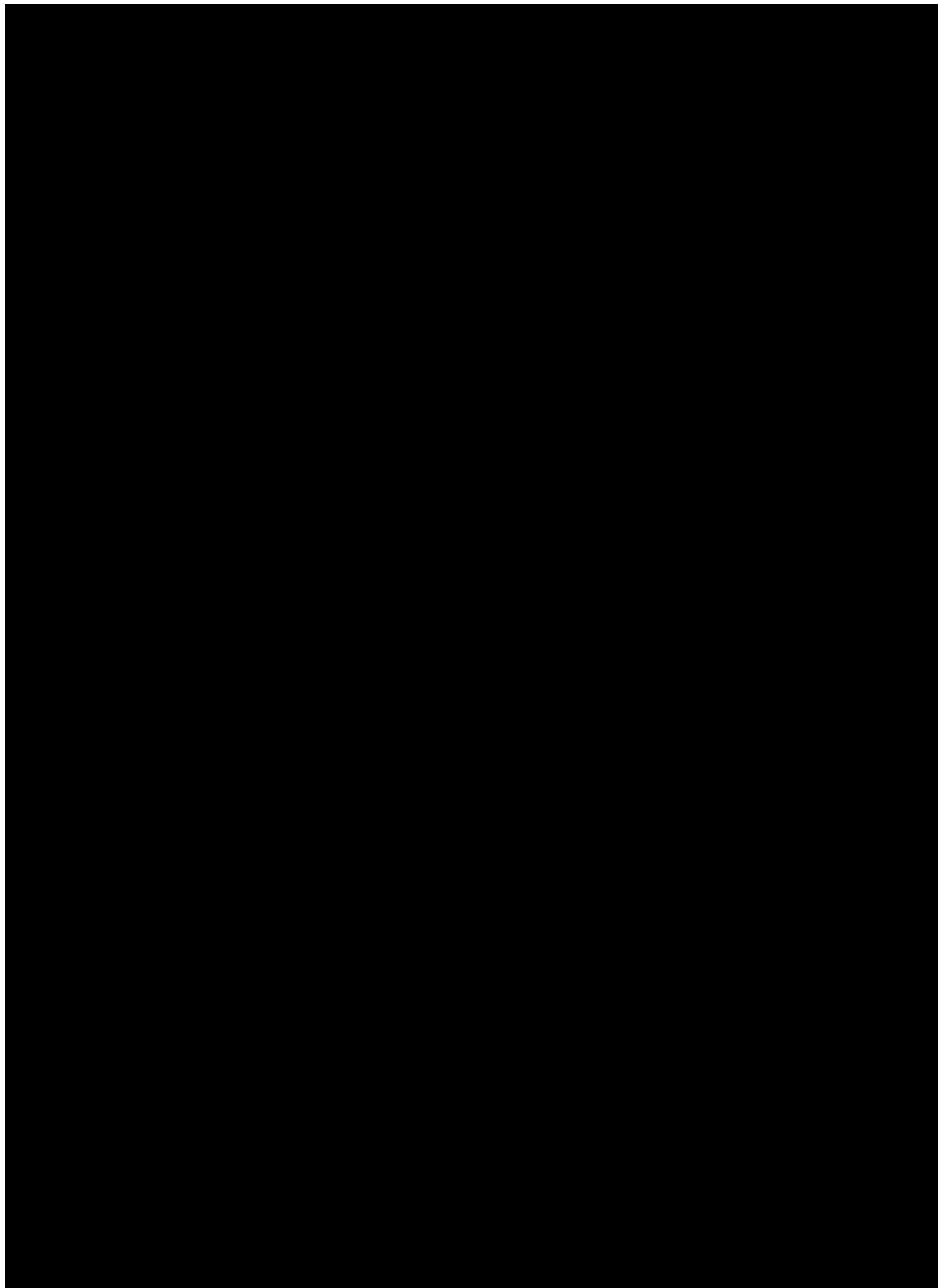


Figure 4: Native vegetation within the locality (OEH 2013)

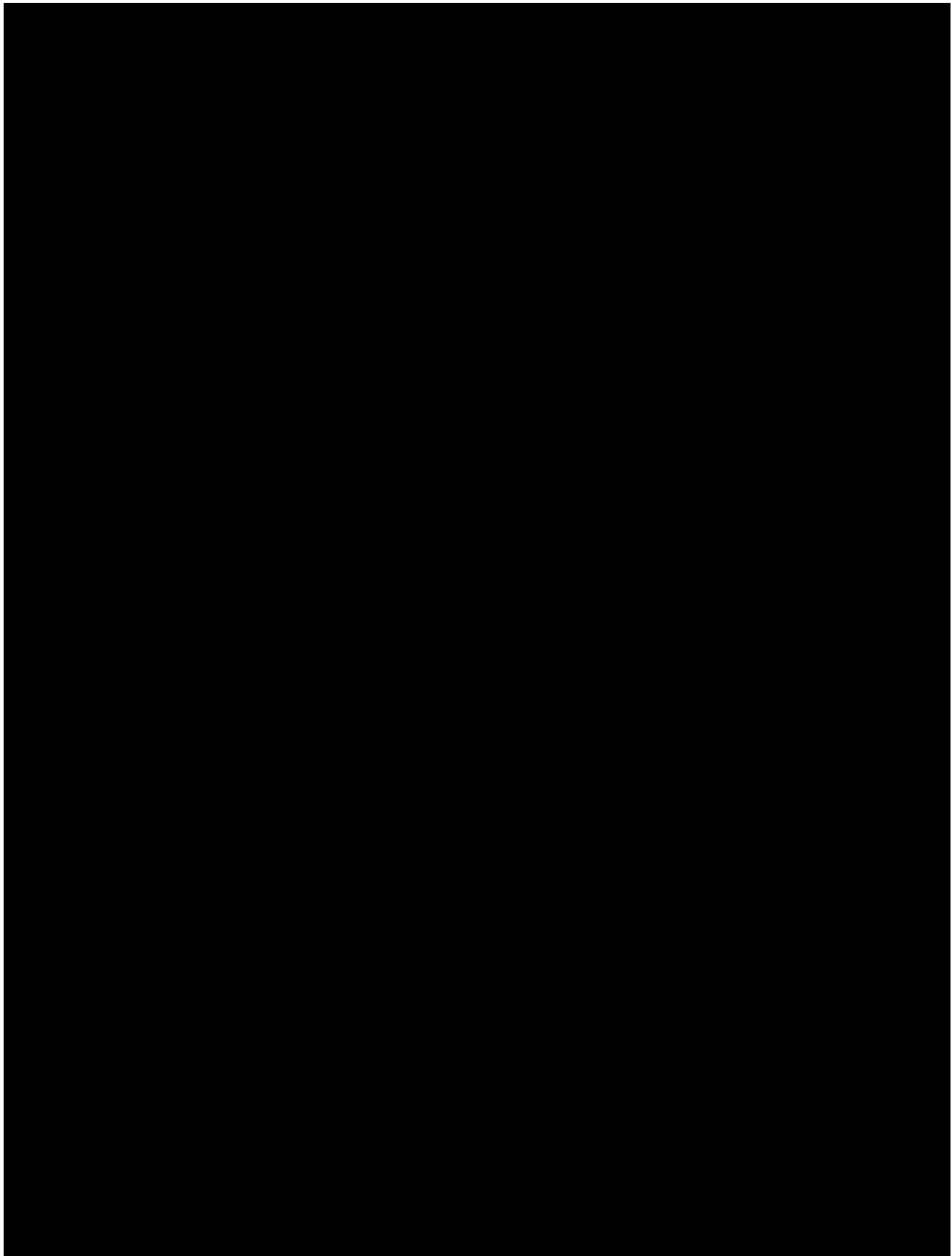


Figure 5: Field validated vegetation mapping

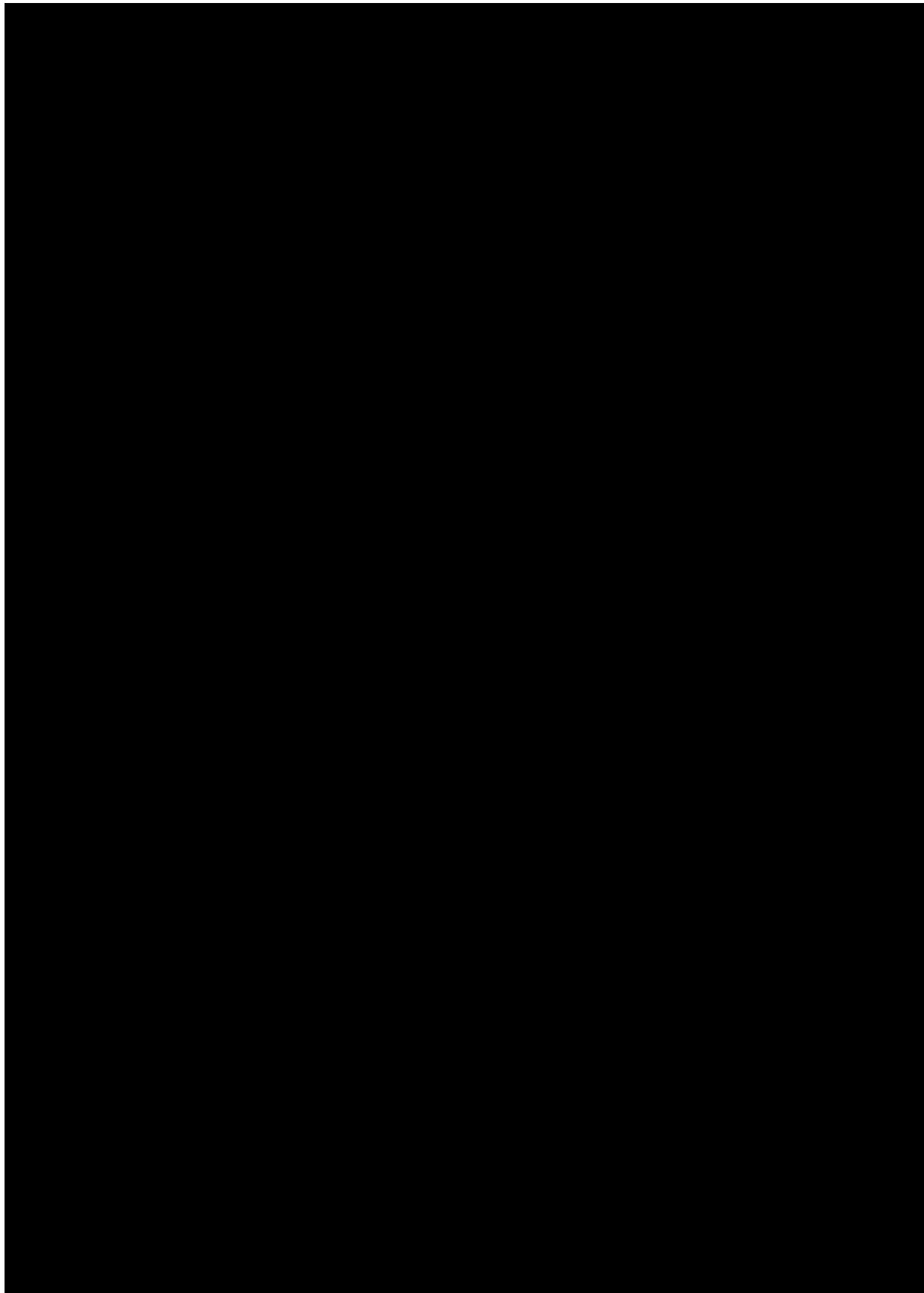


Figure 6: Threatened species records for the locality



Figure 7: Ecological constraints within the study area

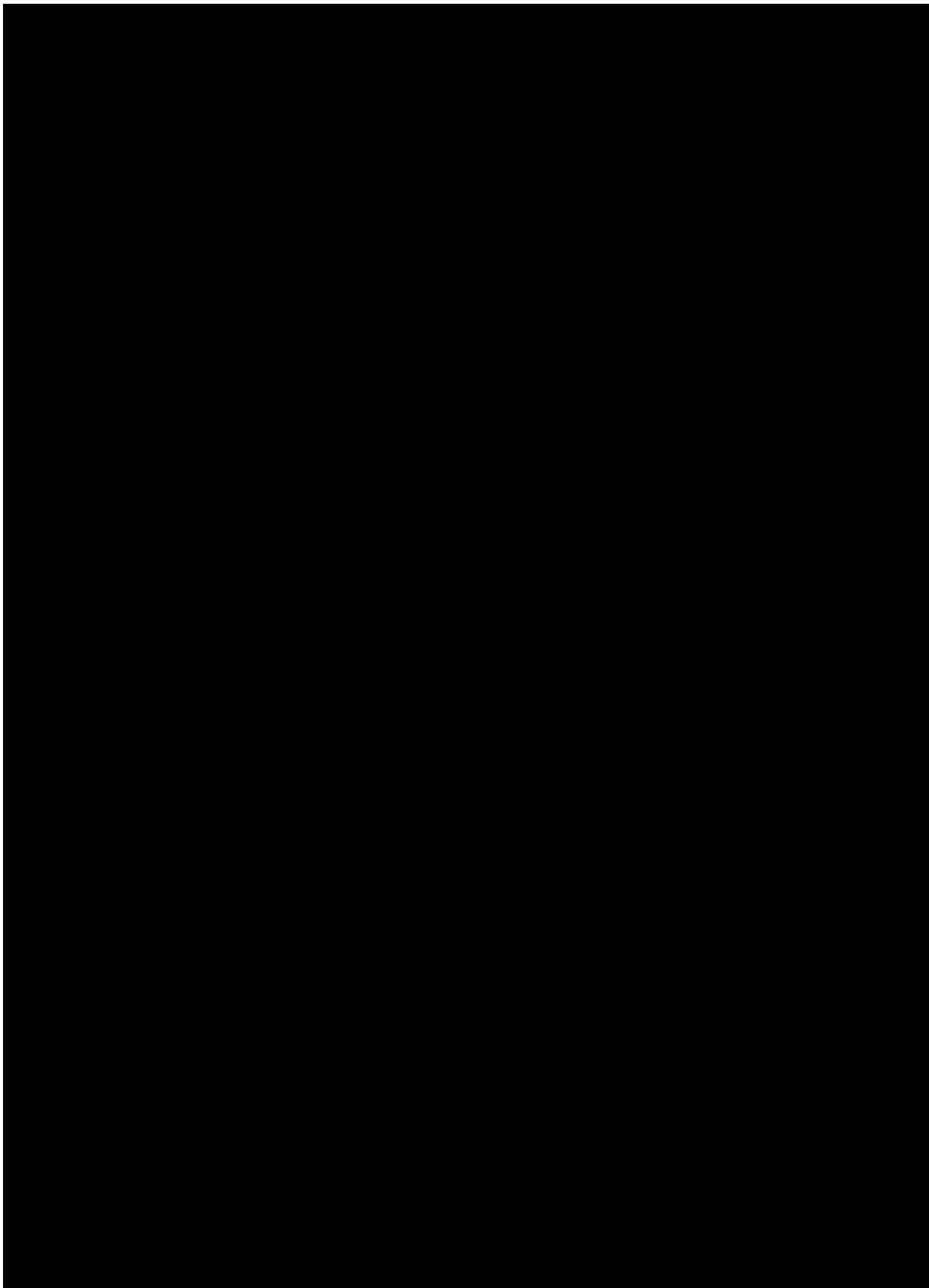


Figure 8: Non-certified land avoided for biodiversity and transport corridor within the study area