



57355 M003 Stoneville Revised Structure Plan EAR Addendum (Rev 2)

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Modified North Stoneville Local Structure Plan - Environmental Assessment Report Addendum

1. Project Background

The North Stoneville townsite (Structure Plan 34 [SP34]) is an area of undeveloped 'Urban' zoned land north of the existing Stoneville townsite. Satterley Property Group (Satterley) lodged an application to modify SP34 in December 2018. In August 2019, council resolved to recommend the Western Australian Planning Commission (WAPC) reject the proposed modified SP34 for reasons of community safety (inadequate surrounding road network and bushfire risk) lack of public transport and environmental impacts. Subsequently, SP34 was refused by the Statutory Planning Committee, of which Satterley lodged an appeal with the State Administrative Tribunal (SAT). JBS&G understand that the SAT has now invited the WAPC to reconsider its previous refusal of SP34. As part of this process, Satterley are required to revise SP34 (Attachment A) and supporting technical studies for WAPC's consideration including the Environmental Assessment Report (EAR; Strategen 2018a) prepared by then Strategen (now JBS&G).

The purpose of this memorandum is to review the key findings and conclusions made in the original EAR (Strategen 2018a) in consideration of the revised SP34 and to demonstrate whether all environmental values and potential impacts associated with development of the site can continue to be managed as per the management and mitigation measures proposed in the 2018 EAR and in accordance with contemporary legislative and policy requirements.

2. Key findings from 2018 Environmental Assessment Report

The EAR (Strategen 2018a) developed for the original SP34 determined that the site was relatively unconstrained with the exception of vegetation and fauna habitat and the presence of Aboriginal heritage sites. Consideration was also given to the hydrological values and bushfire risk of the site however neither factor were considered to be a significant constraint to development of the site. Specifically, the key findings from the 2018 EAR were as follows:

- The site contains several drainage lines and man-made dams which required consideration in development design and ongoing management. These drainage lines have predominantly been retained in the development design through the strategic placement of public open space (POS) along creek-line corridors and landscaping where possible to improve both the ecological and hydrological value. A Local Water Management Strategy (LWMS; Emerge Associates 2018) was prepared to support development of the site, which details how stormwater across the site would be managed to ensure that hydrological features were not negatively impacted;
- Vegetation present within the site was found to be regionally well represented and does not resemble any known Threatened or Priority Ecological Communities, nor were any Threatened or Priority flora species recorded during 2016 and 2017 Spring field surveys (Strategen 2017);
- A number of conservation significant fauna were considered to potentially utilise the site as habitat. Site investigations conducted by then Strategen (2017) identified potential black



cockatoo foraging, breeding and roosting habitat evenly distributed within vegetation across the site, as well as vegetation suitable for use by Chuditch and Brush-tailed Phascogale;

- The retention of a large (approximately 90 ha) patch of remnant vegetation in the northern portion of the site within a 100 ha Conservation POS was proposed to contribute to the longterm conservation of the pre-European vegetation complexes and associations as well as providing foraging, roosting and potential breeding habitat for native fauna. Additionally, trees were proposed to be retained and planted in areas of POS and streetscaping to maintain and enhance the ecological value of the site;
- A Bushfire Management Plan (BMP; Strategen 2018b) was prepared to support the structure plan which detailed how the development will achieve compliance with the requirements of State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7) and the Guidelines for Planning in Bushfire Prone Areas, and importantly manage the bushfire risk to future residents;
- The use of historical aerial photography available from Landgate (from 1965 to 2016) was used to consider the historical land uses within the site. The current and historical land use of extensive agriculture (predominantly grazing) is not identified as a potentially contaminating industry, activity or land use. There is the potential that isolated areas of contamination may occur due to current or historical asbestos and chemical use/storage on the site. However, such areas are not considered to present a constraint to development and can be managed through investigation and remediation if required at the subdivision stage; and
- Six registered Aboriginal Heritage Sites were identified within the site boundary. An application was submitted in 1998 pursuant to Section 18 of the *Aboriginal Heritage Act 1972* to use the land for residential subdivision and was approved subject to a number of conditions set out by the Minister Development of the site will be in accordance with the prescribed conditions and in accordance with the *Aboriginal Heritage Due Diligence Guidelines* (DAA 2013).

The EAR concluded that any potential environmental impacts could appropriately mitigated, managed or offset through the State planning process and through assessment under the Commonwealth *Environmental Protection and Biodiversity Act 1999* (EPBC Act).

3. Comparison of original and revised SP34 design

The current concept plan for SP34 (Attachment A) is located across Lot 48 Stoneville Road, Stoneville (Attachment B) and comprises the same land uses as proposed in the original SP34, including the following:

- Urban land use;
- Natural living land use;
- Two school sites;
- Recycled wastewater infrastructure;
- Internal road network;
- Area of Public Open Space (POS), including conservation of Aboriginal heritage values, and drainage; and
- 193.2 ha Conservation Area.



The design of this revised SP34 differs from the original SP34 in that Lot 1 Roland Road, Stoneville has been excluded from the structure plan area as the land zoning is not compatible for urban development. The total structure plan area has therefore reduced from 555.0 ha to 534.6 ha. Furthermore, the new SP34 concept plan expands the Conservation Area to a total area of 193.2 ha (previously approximately 100 ha), of which comprises 138.25 ha of native vegetation (previously approximately 90 ha) and includes 4 trees with hollows suitable for breeding by black cockatoos.

A comparison map of the original and revised structure plan between clearing and retention areas is demonstrated in Attachment C.

A summary of the revised SP34 boundaries is provided in Table 1.

Table 1 Summary of prevised SP34 boundaries

Components	Revised SP34
SP34	534.6 ha
Conservation Area (total)	193.2 ha
Development footprint (total)	340.7 ha
Native vegetation within SP 34 (total)	296.8 ha
Native vegetation in Conservation Area (total)	138.3 ha
Native vegetation to be cleared in development footprint	158.5 ha
Native vegetation clearing required in Conservation Area for bushfire requirements	Approximately 5.3 ha
Total clearing (clearing for development + bushfire requirements in Conservation Area)	163.8 ha
Total native vegetation retained in Conservation Area (total native vegetation in	132.9 ha
conservation area – clearing for bushfire requirements)	

4. Comparison of potential environmental impacts, mitigation and management measures

A summary table has been provided overleaf (Table 2) detailing the potential environmental impacts, mitigation and management measures proposed in the original SP34 EAR (Strategen 2018a) and any changes resulting from the revised SP34. The key environmental aspects considered as part of this review include:

- Hydrology;
- Vegetation and flora; and
- Fauna habitat.

With respect to site contamination, an updated search of the contaminated sites DWER (2022) database was undertaken confirming there are no registered contaminated sites within 2 km of the site. As reported in the 2018 EAR, across the site there is no evidence to suggest there have been any historic land uses that may cause contamination. There is the potential that isolated areas of contamination may occur due to current or historical asbestos and chemical use/storage on the site. However, such areas are not considered to present a constraint to development and can be managed through investigation and remediation if required at the subdivision stage. There are no changes considered relevant to these finding based on the revised SP34.

At the time of the original SP34 lodgement, it was proposed that Aboriginal heritage would be managed through the existing Section 18 approval. However, the *Aboriginal Heritage Act 1972* is now superseded by the *Aboriginal Cultural Heritage Act 2021* (ACH Act). JBS&G understand that Satterley have engaged a Heritage consultant to provide advice on this matter and therefore this will not be reviewed further in this memorandum.

The BMP (Strategen 2018b) developed to support the original SP34 lodgement is being updated in accordance with the revised concept plan and to ensure compliance with SPP3.7. This revised BMP



will be submitted as part of the revised structure plan package and will also not be addressed further in this memorandum.



Table 2 Original and revised SP34 comparison proposed environmental impacts, management and mitigation measures

Potential Impacts		Proposed management and mitigation measures	
Original SP34	Revised SP34	Original SP34	Revised SP34
Hydrology			
Without appropriate consideration and management, the development has the potential to impact upon the predevelopment hydrological cycle and water quality, including: • moisture in the shallow soil profile over the largely impermeable site; • surface water flow characteristics; and • surface water quality.	The revised SP34 does not pose any new or increased potential hydrological impacts to those described in the EAR (Strategen 2018a).	 Proposed management of the site's predevelopment hydrological characteristics, including these hydrological features is detailed in the LWMS prepared by Emerge Associates (2018). Onsite wastewater treatment and recycling is proposed. The recycled water will be used to irrigate POS and potentially larger lots, dependent on demand and availability. A Recycled Water Plant (RWP) and approximately 70 – 90 ML of storage dams will be required to support the treatment and recycling of water. The recycled water collection, treatment and reuse scheme is proposed to be constructed by Satterley and Water West and managed by Water West in perpetuity. There will be no offsite discharge of recycled water from site, as all recycled water generated within the site will be used to meet irrigation requirements 	There are no proposed changes and/or additions to the management and mitigation measures as described in the EAR (Strategen 2018).
Vegetation and Flora			
Potential direct impacts: clearing of approximately 181 ha of native vegetation (including fuel reduction clearing for bush fire risk); Potential indirect impacts: potential impacts to Local Natural Areas (LNAs) and ecological linkage if not factored into design of development;	The revised SP34 will result in a reduction of the amount of native vegetation proposed to be cleared and an increase in the amount of native vegetation to be retained (see Attachment D), as follows: • clearing of approximately 163.8 ha native vegetation for purposes of urban development and fuel reduction clearing for bush fire risk; and	Vegetation retention development strategically located to ensure that vegetation of greater quality is retained within conservation POS in the northern part of the site, and urban areas are concentrated in parts of the site which are predominantly 'Completely Degraded' (see Attachment E);	Vegetation retention the revised SP34 design remains responsive to the condition of vegetation on the site with the greater quality vegetation retained within the large Conservation Area and the urban areas concentrated in parts of the site predominately in a 'Completely degraded' condition (see Attachment E);



Potential Impacts		Proposed management and mitigation measures	
Original SP34	Revised SP34	Original SP34	Revised SP34
 potential for the introduction and/or spread of <i>Phytophthora cinnamomi</i> (Dieback) to retained vegetation and vegetation in areas adjacent to the site; and clearing practices may also result in accidental clearing of vegetation and trees proposed for retention. 	retention of 132.9 ha of native vegetation within Conservation Area. The revised SP34 does not pose any new or increased potential indirect impacts to those described in the EAR (Strategen 2018).	 a Conservation Area of approximately 100 ha will protect approximately 90 ha of the highest quality vegetation on the site (see Attachment E). The Conservation area will also provide the opportunity for both rehabilitation of vegetation and recreation pursuits. approximately 45 ha of POS in the design which provides opportunity for the retention of vegetation and trees, where engineering and bushfire constraints permit; rehabilitation of the north-south drainage corridor (POS), which in addition to the retention of vegetation within conservation POS will contribute to maintaining both an east-west and north-south ecological linkage across the site; and development of a Conservation Management Plan to describe management for areas of retained native vegetation. 	 the Conservation Area has been expanded to include additional areas of native vegetation for retention. The Conservation Area is approximately 193.2 ha of which comprises 138.3 ha of the highest quality vegetation on the site (see Attachment E). Of the 138.3 ha of native vegetation, approximately 5.3 ha will be partially cleared for bushfire requirements. The Conservation Area will also provide the opportunity for both rehabilitation of vegetation and recreation pursuits. To support the EPBC assessment and to define rehabilitation efforts, a Conservation Area Management Plan (CAMP; JBS&G 2024b) has been developed. The objectives of the CAMP include: provide measures to physically delineate areas that will be retained; define the nature of access to and within the Conservation Area; identify appropriate access, weed, dieback, waste, fauna, and bushfire management measures; identify suitable locations for revegetation and provide the methodology by which revegetation will be undertaken; develop an environmental monitoring program; outline trigger criteria for the implementation of contingency actions; Establish roles and responsibilities; and



Potential Impacts		Proposed management and mitigation mea	Proposed management and mitigation measures	
Original SP34	Revised SP34	Original SP34	Revised SP34	
		Dieback management There are several potential pathways for dieback to be introduced or spread throughout the site and potentially to retained or adjacent vegetation. Management of these pathways should be a consideration at future planning stages to ensure mitigating the potentia introduction and spread of dieback and particularly to protect vegetation within the conservation POS. Management measures can include methods such as establishing 'clean on entry' points durin construction.	developed to support the EPBC assessment which details dieback management measures including the following actions: • all vehicles and machinery must be cleaned down of all soil and vegetation material prior to arriving on site; • all construction vehicles and machinery must be inspected for soil and vegetative material prior to arriving at the work site; • imported landscaping soil, or other	



Potential Impacts		Proposed management and mitigation measures	
Original SP34	Revised SP34	Original SP34	Revised SP34
		Clearing of vegetation will be subject to general construction management practices, to be determined at future planning stages. Clearing of vegetation will be subject to general construction management practices, to be determined at future planning stages.	Clearing controls The CEMP (Strategen-JBS&G 2020) details clearing controls measures which include: • provide GPS co-ordinates of areas approved to be cleared and retained to the contractor to ensure no unapproved clearing is undertaken; • clearing boundaries must be clearly delineated prior to undertaking clearing activities; • vegetation to be retained will be clearly marked with flagging tape at minimum and communicated to clearing personnel prior to the commencement of clearing. Following clearing activities temporary fencing will be erected to clearly mark, and restrict access to, retained vegetation; • install appropriate temporary signage where appropriate to restrict unauthorised access to retention areas (once defined); • temporary drainage to be constructed away from retained or adjacent vegetation such that altered surface water flows do not impact vegetation; and • no machinery, equipment or laydown areas to be located within areas of native vegetation to be retained.
Fauna habitat			
Potential impacts:	The revised SP34 does not pose any new or increased impacts to fauna habitat than those described in the EAR (Strategen 2018). Rather, the revised SP34 will result in a reduction of the amount of fauna habitat proposed to be cleared and an increase in the	the retention the retention of approximately 90 ha of vegetation within the 100 ha Conservation Area in the north of the site, which will allow the continuation of ecological linkages for mobile fauna in	the revised SP34 design remains responsive to the fauna habitat on the site with 138.3 ha of the highest quality vegetation on the site retained in the proposed Conservation Area (see



Potential Impacts		Proposed management and mitigation measures	
Original SP34	Revised SP34	Original SP34	Revised SP34
 Black Cockatoos (Carnaby's cockatoo, Baudin's cockatoo and Forest redtailed black cockatoo); Chuditch/ Western Quoll (Dasyurus geoffroii); Brush-tailed Phascogale (Phascogale tapoatafa); Carter's Freshwater Mussel (Westralunio carteri); Quenda/ southwestern brown bandicoot (Isoodon fusciventer); Blue-billed duck (Oxyura australis); and Peregrine Falcon (Falco peregrinus). a large resident population of Western Grey Kangaroos within the site which will require consideration during clearing and development of the site to minimise vehicle strikes and ensure that the species can naturally disperse to the conservation POS and surrounding areas; and Whilst the site will remain within the home range of the Wedge Tailed Eagles, it is understood that the increased use of the site by people is ultimately likely to cause the cessation of the utilisation of the site for breeding purposes. At least of one the known nesting sites on the property will be retained in the 100 ha Conservation area, however, as the site 		accordance with the objectives of the Shire of Mundaring Local Biodiversity Strategy 2009 and Wildlife Corridor Strategy 2000; concentrating urban lots and public roads in the degraded portions of the site; the retention of vegetation and black cockatoo habitat trees within POS and road reserves, and within APZs where this can be achieved in accordance with Schedule 1 of the Guidelines for Planning in Bushfire Prone Areas (up to 15% canopy cover); planting of habitat trees and landscaping within POS and creek-line corridors, with species that provide habitat for conservation significant fauna (noting that the creek-line corridors are currently highly devoid of vegetation);	Attachment E). Note, of the 138.3 ha of native vegetation, approximately 5.34 ha will be partially cleared for bushfire requirements. Of this native vegetation, all is considered suitable Chuditch habitat and represents the highest quality Black Cockatoo foraging habitat (Attachment G): Excellent quality: 96.4 ha Good quality: 20.7 ha Moderate quality: 15.9 ha. retention and rehabilitation of additional vegetation within the proposed Conservation Area will contribute to maintaining both an east-west and north-south ecological linkage across the site which will allow the continuation of ecological linkages for mobile fauna in accordance with the objectives of the Shire of Mundaring Draft Local Biodiversity Strategy 2022 and Wildlife Corridor Strategy 2000 (see Attachment F); As mentioned in the EAR, planting of habitat trees and landscaping within POS and creek-line corridors, with species that provide habitat for conservation significant fauna. This is further detailed in the CAMP prepared for the project (JBS&G 2024b).
becomes increasingly developed over a		Clearing controls	Clearing controls
10 to 15 year period, the presence of		pre-clearing inspections for native fauna	Management measures proposed in the
human activity is likely to cause the		of conservation significance including	original EAR will continue to be implemented with the addition of those identified in the
breeding pair currently using the site to utilise their alternative breeding sites		black cockatoo habitat trees and potential	CEMP (JBS&G 2024a) which include:
within the home range such as John		nesting hollows, as well as any suitable den logs and den sites for the Chuditch;	vehicle speed limits are to be clearly
Forest National Park.		denings and denisites for the chaditer,	signposted throughout the site;



Potential Impacts		Proposed management and mitigation mea	Proposed management and mitigation measures	
Original SP34	Revised SP34	Original SP34	Revised SP34	
		clearing protocols including clearing toward areas of vegetation/ habitat for fauna species to allow them to naturally disperse into the surrounding area; relocation of logs providing potentially suitable den habitat for the Chuditch into vegetation retention areas within the project area erection of 'wildlife crossing' signage along proposed roads to prevent vehicle strikes particularly for Western Grey Kangaroos.	 a fauna interaction register is to be maintained to capture observations and interactions with fauna. 	



Potential Impacts		Proposed management and mitigation meas	Proposed management and mitigation measures	
Original SP34	Revised SP34	Original SP34	Revised SP34	
		EPBC Act Referral	provide habitat to native fauna. This will be done to the extent that no degradation to the environment occurs within the Conservation Area, and no impediment is made to revegetation, recreation, or fire management activities. EPBC Act Referral	
		As part of the approvals process for the		
		As part of the approvals process for the development, a referral will be submitted to the Department of Environment and Energy for impacts to matters of national environmental significance (MNES). As part of this process the proponent will be required to mitigate or offset these impacts to the satisfaction of DEE which will include retention of conservation POS on site and will likely include additional offset requirements.	anticipated impacts to Matters of National Environmental Significance (MNES), namely: Carnaby's Black Cockatoo (Calyptorhynchus latirostris) – Endangered; Baudin's Black Cockatoo (Calyptorhynchus Baudinii) – Endangered; Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso) – Vulnerable; and Chuditch (Dasyurus geoffroii) – Vulnerable. On 5 April 2019, a delegate of the Minister for	
			the Environment determined that the proposed action is a controlled action and will be assessed by preliminary documentation	
			under the EPBC Act (EPBC 2018/8382). The preliminary documentation for EPBC 2018/8382 has been submitted and currently,	
			responses to the Commonwealth information requests are being prepared to support the assessment. An Offset Strategy has been	
			prepared as part of the EPBC assessment to	



Potential Impacts		Proposed management and mitigation measures	
Original SP34	Revised SP34	Original SP34	Revised SP34
			ensure significant residual impacts to MNES
			are counterbalanced.



5. Conclusion

The revised SP34 does not pose any new or increased environmental impacts to those described in the EAR in relation to the following aspects:

- Contamination;
- Hydrology;
- · Vegetation and flora; and
- Fauna habitat.

The revised SP34 includes a larger Conservation Area of 193.2 ha in size of which will retain four trees with hollows suitable for breeding by black cockatoos and 138.3 ha of native vegetation providing quality habitat for numerous conservation significant species. Of the 138.3 ha of native vegetation, approximately 5.3 ha will be partially cleared for bushfire requirements. Furthermore, approximately 21 ha has been removed from the structure plan area, resulting in reduced clearing of native vegetation.

Since the lodgement of the original SP34 and supporting EAR (Strategen 2018a), the proposed development was referred under the EPBC Act and determined to be a controlled action to be assessed via preliminary documentation. To support the EPBC 2018/8382 assessment, a CEMP and CAMP have been prepared of which provide additional mitigation and management measures for key environmental factors identified in the original EAR.

JBS&G consider that the revised SP34 does not necessitate a revision to the EAR as the environmental context of the site remains unchanged and the revised structure plan design provides a net increase in the protection and enhancement of native vegetation and conservation significant fauna habitat throughout the structure plan area, thus improving environmental outcomes in comparison to the original SP34.

The 2018 EAR concluded that any potential environmental impacts could appropriately mitigated, managed or offset through the State planning process and through assessment under the Commonwealth *Environmental Protection and Biodiversity Act 1999* (EPBC Act). Based on the review of the EAR in consideration of the revised SP34, this conclusion remains accurate.



6. References

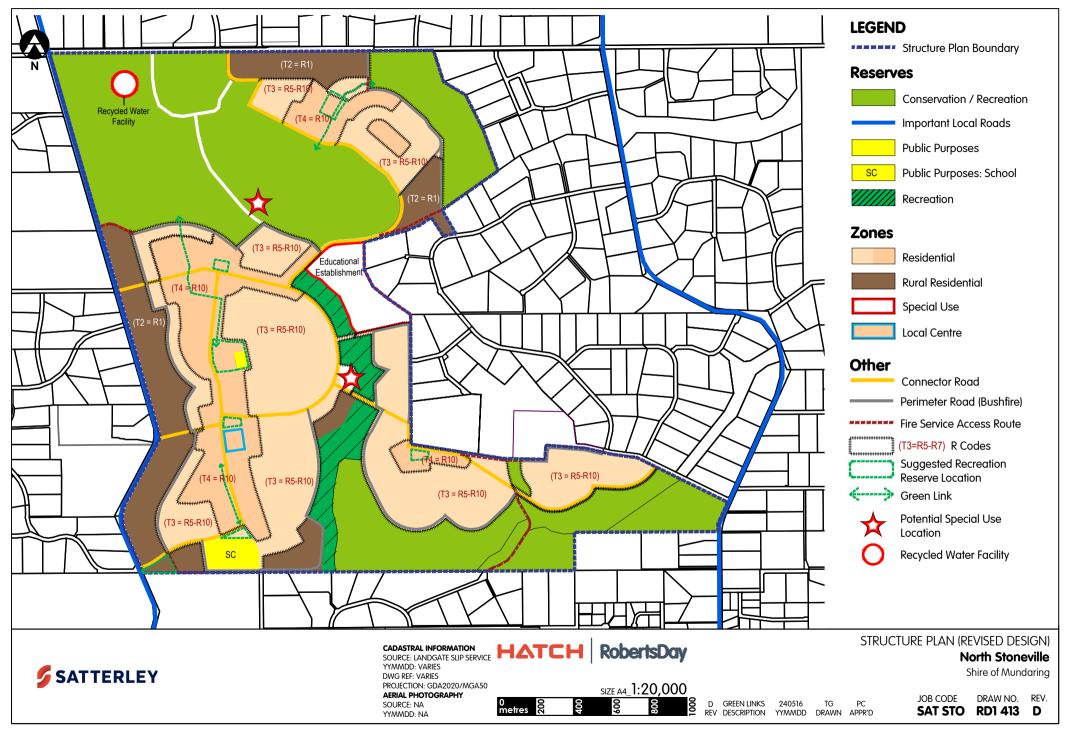
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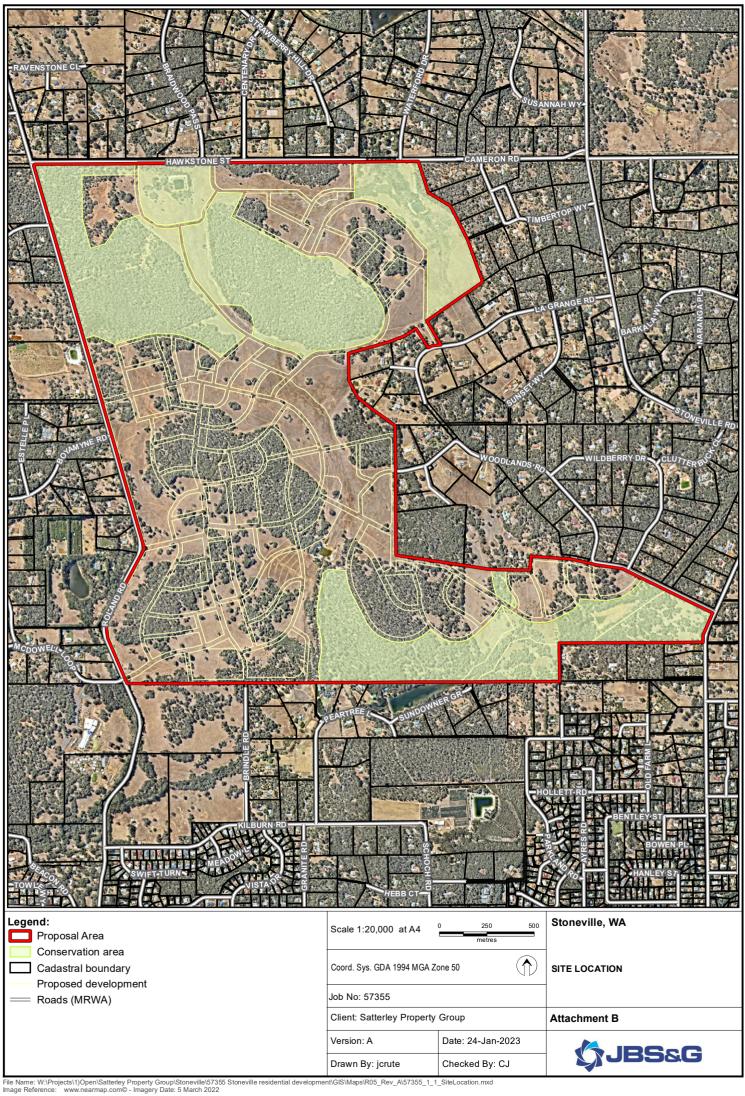


Attachment A Revised Design of Proposed Structure Plan (SP34)



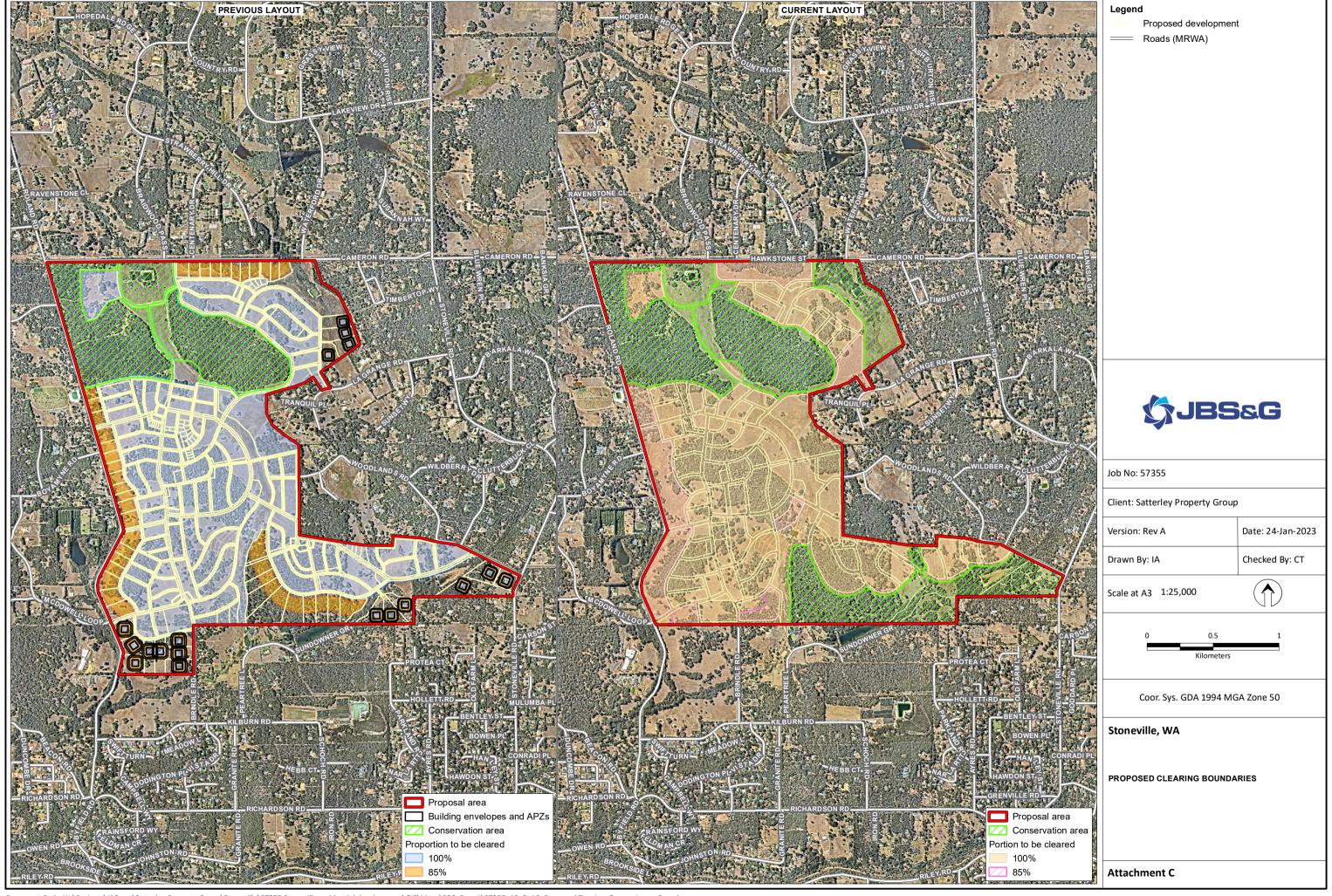


Attachment B Site Location



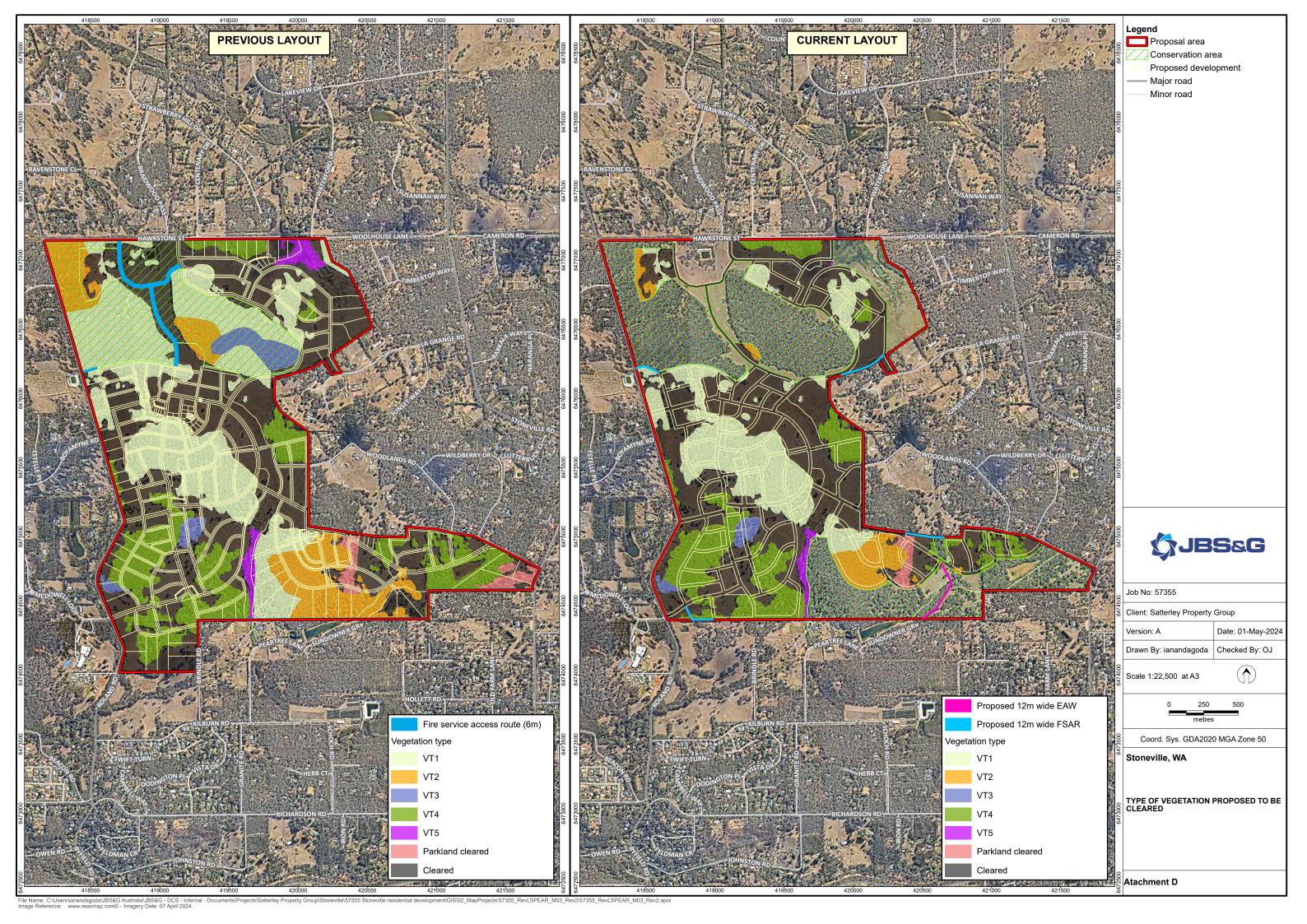


Attachment C Proposed Clearing Boundaries



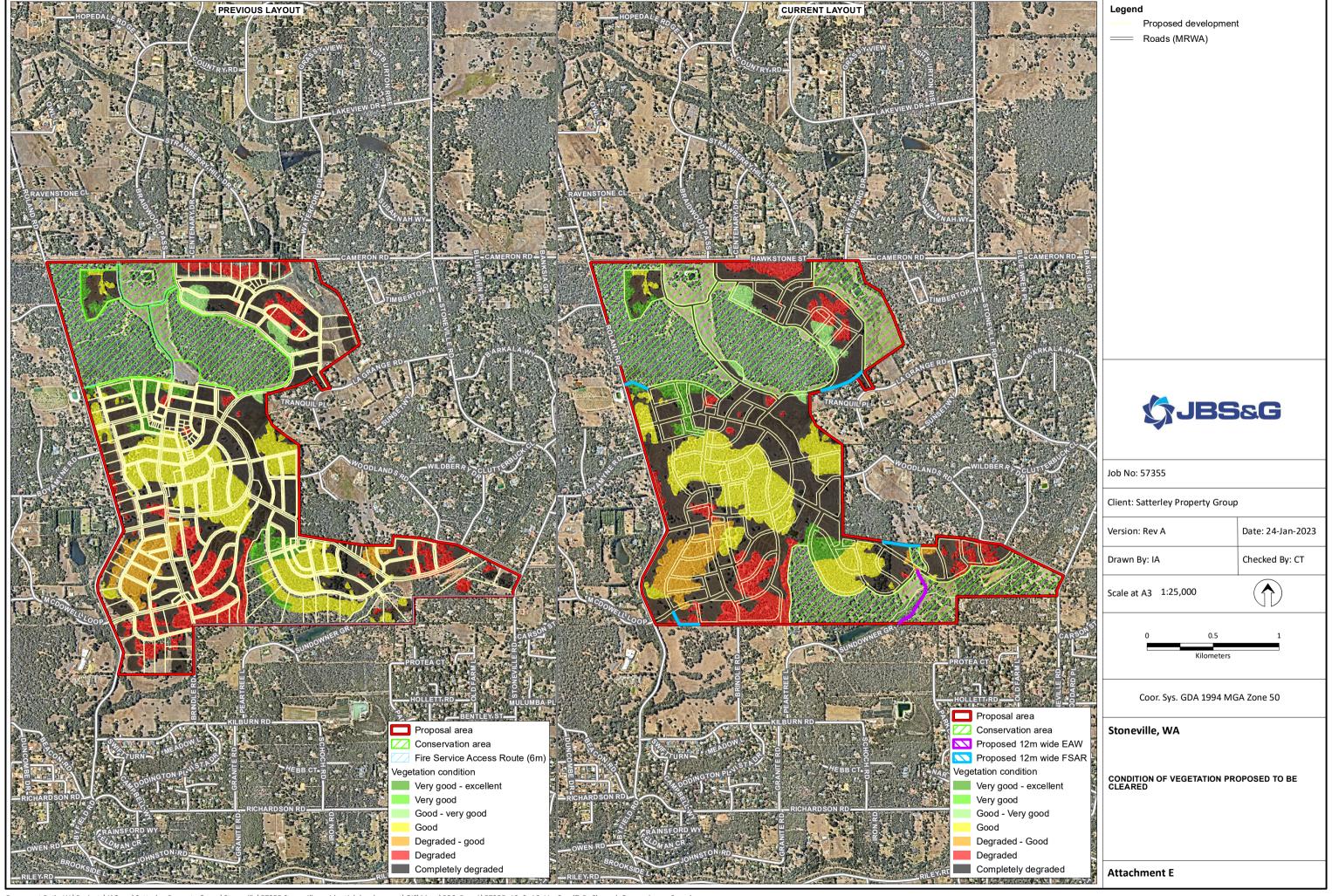


Attachment D Type of Vegetation proposed to be cleared



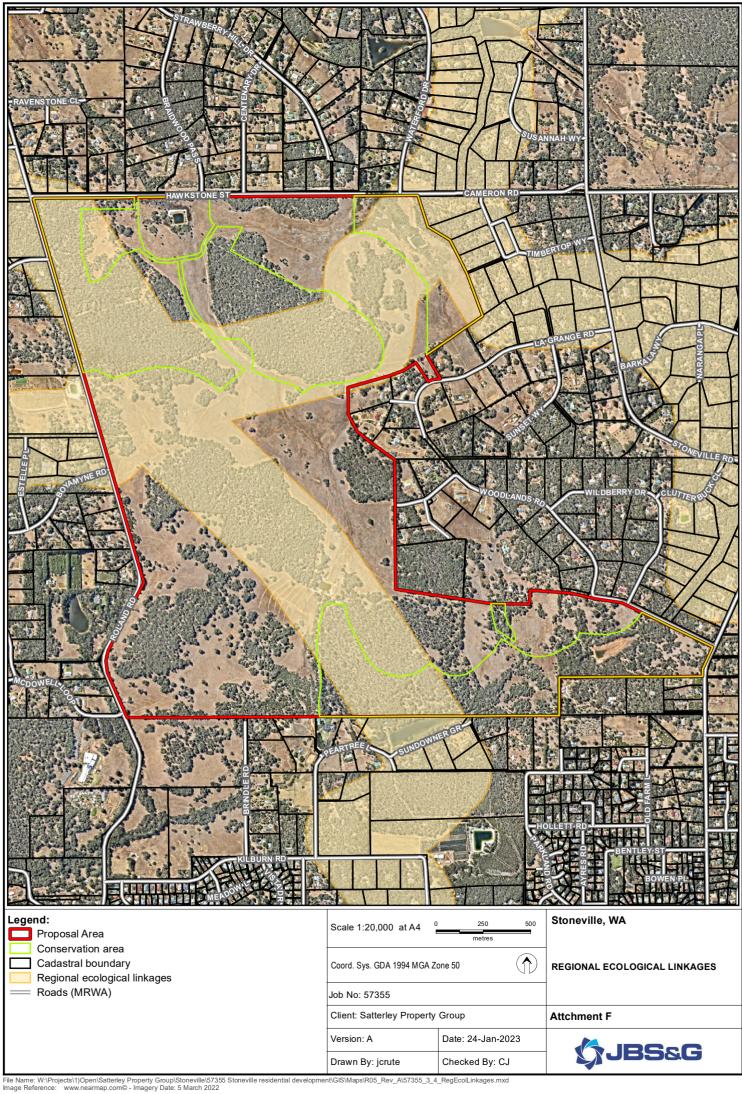


Attachment E Condition of Vegetation proposed to be cleared





Attachment F Regional Ecological Linkages





Attachment G Black Cockatoo habitat

