



Stage 7 Yarrimbah Heights, Bullsbrook

Qube Property Group

Bushfire Management Plan Compliance & Condition Clearance Report

177,328 | 72306

17 July 2026



We acknowledge the Traditional Custodians of Country throughout Australia and their connections to land, sea and community.

We pay respect to Elders past and present and in the spirit of reconciliation, we commit to working together for our shared future.



Table of Contents

1. Introduction	4
1.1 Site/development summary	4
1.2 Purpose of report	4
1.3 Subdivision conditions	6
2. Bushfire Management Plan compliance audit.....	11
3. Bushfire assessment results	27
3.1 Assessment inputs	27
3.1.1 Vegetation classification.....	27
3.1.2 Effective slope.....	28
3.1.3 Summary of inputs.....	28
3.2 Assessment outputs.....	54
3.2.1 BAL contour assessment results	54
4. Conclusion and recommendations	80
5. Limitations	81
6. References	82

List of Tables

Table 1: Site/development summary	4
Table 2: Bushfire Conditions and Advice Notes under WAPC Ref. 201629	6
Table 3: Audit against requirements of the JBS&G (2025) BMP	11
Table 4: Audit against requirements of the Emerge Associates (2021) peer review	17
Table 5: Audit against requirements of the Ecosystem Solutions (2022) peer review.....	21
Table 6: Summary of vegetation classifications, exclusions and effective slope.....	29
Table 7: BAL contour assessment results.....	55
Table 8: Range of potential BAL ratings that could be achieved within each proposed building envelope	63

List of Figures

Figure 1: Vegetation classifications and site photos (overall site map).....	37
Figure 2: Vegetation classification and effective slope (Lot 76)	38
Figure 3: Vegetation classification and effective slope (Lot 77)	39
Figure 4: Vegetation classification and effective slope (Lot 78)	40
Figure 5: Vegetation classification and effective slope (Lot 79)	41
Figure 6: Vegetation classification and effective slope (Lot 80)	42
Figure 7: Vegetation classification and effective slope (Lot 81)	43
Figure 8: Vegetation classification and effective slope (Lot 82)	44
Figure 9: Vegetation classification and effective slope (Lot 83)	45
Figure 10: Vegetation classification and effective slope (Lot 84)	46
Figure 11: Vegetation classification and effective slope (Lot 85)	47
Figure 12: Vegetation classification and effective slope (Lot 86)	48

Figure 13: Vegetation classification and effective slope (Lot 87)	49
Figure 14: Vegetation classification and effective slope (Lot 88)	50
Figure 15: Vegetation classification and effective slope (Lot 89)	51
Figure 16: Vegetation classification and effective slope (Lot 90)	52
Figure 17: Vegetation classification and effective slope (Lot 91)	53
Figure 18: BAL contour map (Lot 76)	64
Figure 19: BAL contour map (Lot 77)	65
Figure 20: BAL contour map (Lot 78)	66
Figure 21: BAL contour map (Lot 79)	67
Figure 22: BAL contour map (Lot 80)	68
Figure 23: BAL contour map (Lot 81)	69
Figure 24: BAL contour map (Lot 82)	70
Figure 25: BAL contour map (Lot 83)	71
Figure 26: BAL contour map (Lot 84)	72
Figure 27: BAL contour map (Lot 85)	73
Figure 28: BAL contour map (Lot 86)	74
Figure 29: BAL contour map (Lot 87)	75
Figure 30: BAL contour map (Lot 88)	76
Figure 31: BAL contour map (Lot 89)	77
Figure 32: BAL contour map (Lot 90)	78
Figure 33: BAL contour map (Lot 91)	79

Appendices

Appendix A	Vegetation plot photos and descriptions (as per Figure 1)
Appendix B	Esme Crescent civil roadworks plan
Appendix C	Water tank civil plan and specifications
Appendix D	Approved firebreak variations
Appendix E	Confirmation from DWER re: APZ implementation at DA/building stage

1. Introduction

1.1 Site/development summary

Table 1 provides a summary of the site and proposed development. The development layout and subject lots are shown in Figure 1.

Table 1: Site/development summary

Site details	
Address details	16 proposed rural-residential lots within Stage 7 Yarrimbah Heights, Bullsbrook, WA 6084
Local government area	City of Swan
Description of building works	Construction of a single residential dwelling (Class 1a building) and associated Class 10a structure/s within each proposed lot

1.2 Purpose of report

This Bushfire Management Plan (BMP) compliance and condition clearance report has been prepared for 16 proposed rural-residential lots within Stage 7 Yarrimbah Heights, Bullsbrook (the project area). The project area is subject to WAPC subdivision approval (Ref. 201629), including the bushfire-related Conditions and Advice Notes outlined in Table 2.

This report provides documentary evidence to address the relevant Conditions/Advice Notes under WAPC Ref. 201629, including information to demonstrate that the relevant management actions from the approved subdivision stage BMP (JBS&G 2025) have been implemented throughout the duration of subdivisional works to facilitate subdivision clearances and creation of title for all proposed lots. This report also provides a post-subdivisional works update of the Bushfire Attack Level (BAL) ratings for individual building envelopes within each proposed lot for the benefit of the developer, future lot purchasers and decision makers.

All proposed lots within the project area are designated bushfire prone (refer to Plate 1; OBRM 2025) and will therefore require bushfire management consideration and BAL assessment as part of the ongoing planning (i.e. Development Application; DA) and building approval processes. BAL contour assessments have been undertaken for each proposed lot to depict:

- current BAL impacts to proposed building envelopes
- maximum Asset Protection Zone (APZ) requirements (noting APZs are currently depicted around building envelopes and will likely be reduced to occur around individual dwellings once building locations are confirmed)
- any APZ setbacks that will need to be considered as part of the future DA planning and building approvals stage.

BAL certificates cannot be issued until the location of proposed buildings within each building envelope is known (i.e. at the DA or building approval stage).

The BAL assessment outlined in this report is the most up to date assessment from JBS&G relating to the project area and has been prepared in consideration of the previous BAL contour assessment documented in the subdivision stage BMP (JBS&G 2025). The approach for preparation of this BMP compliance and condition clearance report is consistent with Section 5.3 and Appendix A.3.4 of *Planning for Bushfire Guidelines* (the Guidelines; WAPC 2024), which the BMP was prepared to address and this bushfire compliance audit is being measured against.

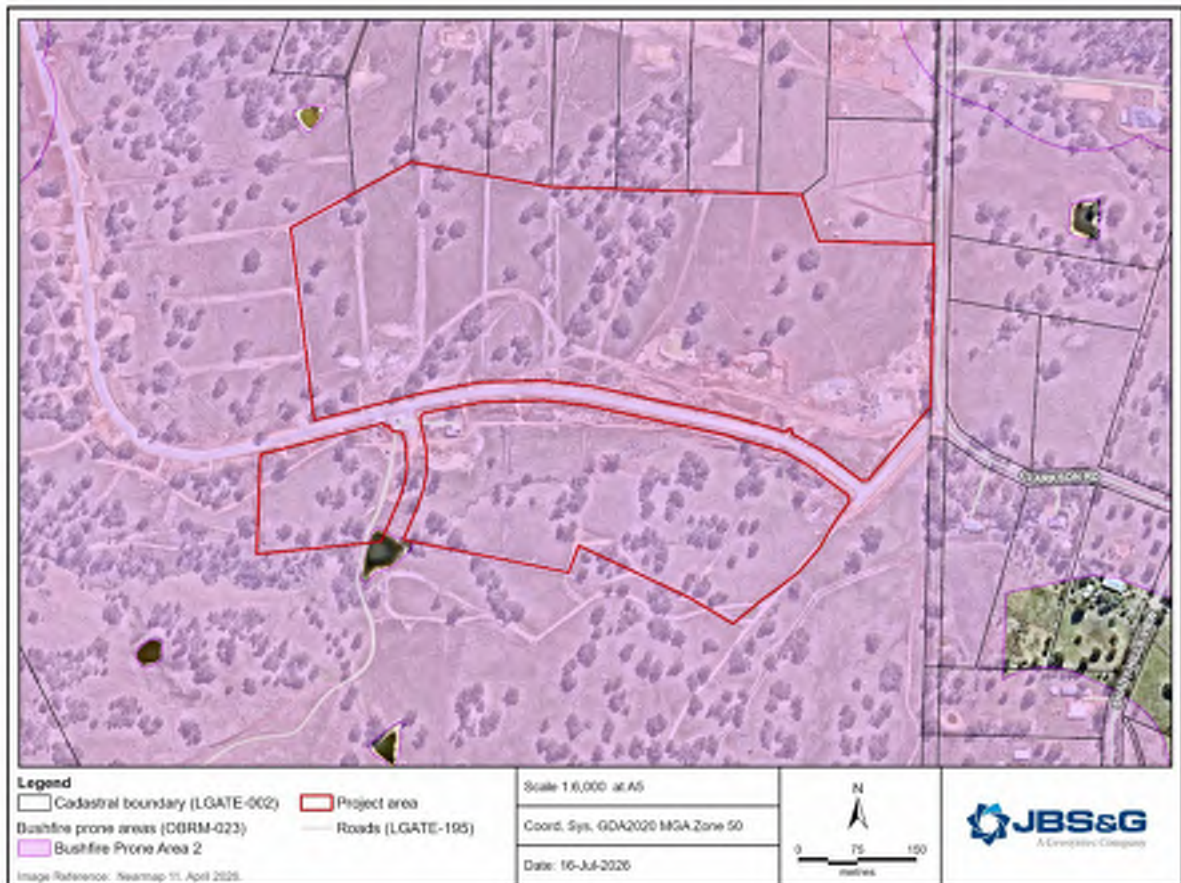


Plate 1: Designated bushfire prone status of the project area (OBRM 2025)

1.3 Subdivision conditions

The bushfire-related subdivision Conditions and Advice Notes relevant to the project area, as documented in the WAPC subdivision approval (Ref. 201629) are outlined in Table 2.

Table 2: Bushfire Conditions and Advice Notes under WAPC Ref. 201629

Condition/Advice Note	Description	Clearance comments
Condition 2b	The subdivision plan dated 6 August 2025 being modified as follows: b) Modify lot boundaries and/or building envelopes, where necessary, to ensure all asset protection zones are contained within individual lot boundaries.	Lot boundaries and building envelopes for the project area lots have been designed to ensure all APZs are contained within individual lot boundaries (refer to Figure 1 and the Deposited Plan [DP]).
Condition 3	Easement(s) in accordance with Section 195 of the <i>Land Administration Act 1997</i> specifying access rights for emergency fire purposes in favour of the Local Government are to be placed on the certificate(s) of title of proposed Lots 117 to 125 and the deed(s) of easement to specify care and management of the easement area is by the Local Government. Notice of this easement(s) is to be included on the diagram or plan of survey (deposited plan). The easement(s) are to state as follows: "10 metre wide permanent emergency access way for vehicles is to be provided as per the indicative Fire Service Access Routes depicted on the approved plan of subdivision."	Not applicable. Lots 117–125 and the Fire Service Access Route (FSAR) are not included within the project area.

Condition/Advice Note	Description	Clearance comments
Condition 6	Engineering drawings and specifications are to be submitted, approved and subdivisional works undertaken in accordance with the approved plan of subdivision, engineering drawings and specifications, for the provision of Fire Service Access Routes compliant with the criteria for Fire Service Access Routes set out within the Planning for Bushfire Guidelines. Fire Service Access Routes shall have a maximum grade of 1:10, unless sections with grades greater than 1:10 are sealed. Turn around areas for type 3.4 fire appliances shall be provided every 500m, if applicable.	Not applicable. The FSAR is not included within the project area.
Condition 15	A notification, pursuant to Section 165 of the <i>Planning and Development Act 2005</i>, is to be placed on the certificate(s) of title of the proposed lot(s) with a Bushfire Attack Level (BAL) rating of 12.5 or above, advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows: "This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and is subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land".	The appropriate bushfire notification on title has been applied to all proposed lots within the project area, as per the DP.

Condition/Advice Note	Description	Clearance comments
Condition 21	Prior to commencement of subdivisional works, a detailed plan identifying building envelopes on all lots on the approved plan of subdivision is to be prepared in consultation with the local government to ensure the appropriate siting of development. Building envelope locations shall address and respond to the following issues (but not limited to): • Sited so as to achieve a maximum BAL-29 rating; • Sited to minimise the presence of significant trees within asset protection zones; • Sited outside of strategic development setbacks.	Building envelopes within the project area have been sited to achieve a maximum BAL-29 rating and minimise the presence of significant trees within APZs, as depicted in Figure 1. The 50 m wide strategic development setback to the clay quarry is not applicable to the project area.
Condition 24	Engineering drawings and specifications are to be submitted, approved and works undertaken in accordance with the approved plan of subdivision, engineering drawings and specifications, for the siting of 3 x 100kL water tanks to be provided within the road reserve locations depicted in the Bushfire Management Plan and to the following specifications: • 2 outlets with a 100mm gate and a 50mm butterfly protected by a mesh cage; • Concrete slash apron; • Inlet at top tank with BIC coupling; • Overflow outlet; and • A water level gauge.	The civil engineering plan and specifications for 1 x 100 kL fire water tank located within the Esme Crescent road reserve, as per the BMP, is provided within this report (see Appendix C), along with site photos demonstrating construction (Plate 2 and Plate 3).

Condition/Advice Note	Description	Clearance comments
Condition 26	An updated Bushfire Management Plan is to be provided to the City of Swan for approval for each stage of subdivision which includes a Bushfire Attack Level contour map for each individual lot for which a certification of title is being sought. It shall be demonstrated that the building envelope for each lot can be accommodated within an area of BAL-29 or below.	This report and the assessments documented in Section 3 provide the updated BMP documentation and individual lot BAL contour mapping to demonstrate delivery of BAL-29 or lower for all proposed building envelopes. The final building stage BAL assessment and certification for each lot will be undertaken at the future DA/building stage.
Condition 27	Information is to be provided to demonstrate that the relevant measures contained in Table 3: Responsibilities for implementation and management of the bushfire measures contained in the 'Bushfire Management Plan Addendum' prepared by JBS&G dated 14 April 2025 (Reference: 68709/166,751, Rev 0), or any subsequent Bushfire Management Plan approved by the City, have been implemented during subdivisional works. This information should include a completed Certification by Bushfire Consultant from the bushfire management plan.	This report (refer specifically to Table 3) provides the necessary evidence to demonstrate that the bushfire management measures documented within the subdivision stage BMP (JBS&G 2025) have been suitably implemented on site throughout the duration of subdivisional works.
Advice Note 3	The fire service access routes shall be designed and constructed to avoid habitat trees where possible.	Not applicable. The FSAR is not included within the project area.
Advice Note 4	In regard to Condition 27, particular attention be given to the recommendations listed in table 2 of the peer review prepared by Emerge Associates, dated June 2021 and the summary table within the level 3 peer review report prepared by Ecosystem Solutions, dated 7 September 2022.	This report addresses the relevant recommendations of both peer reviews undertaken by Emerge Associates (2021) and Ecosystem Solutions (2022), as outlined in Table 4 and Table 5 respectively.
Advice Note 7	Building envelopes for proposed Lots 14,15,16, 55, 56, 57, 59, 61, 63, 65, 67, 69 and 71 should be located as close as possible to the street boundary.	Not applicable. The nominated lots are not situated within the project area.

Condition/Advice Note	Description	Clearance comments
Advice Note 8	In regard to Condition 27, details of the strategic firebreak for proposed Lots 55,56, 57, 59, 61, 63, 65, 67, 69 and 71 should be included in the Bushfire Management Plan. The strategic firebreak to be 6m in width or a lesser amount as agreed by the local government.	Details and alignment of the 6 m wide strategic firebreak for Lot 76 (as per the BMP) are included in the approved firebreak variation (Appendix D). Construction of the 6 m wide strategic firebreak for this lot is evidenced in aerial imagery on Figure 1.

2. Bushfire Management Plan compliance audit

The subdivision stage BMP (JBS&G 2025) and two peer reviews (Emerge Associates 2021 and Ecosystem Solutions 2022) list the bushfire management measures and recommendations required to be implemented by the developer prior to issue of titles. An on-site audit was undertaken on 11 March 2026 to confirm that all relevant works from the subdivision stage BMP and subsequent peer reviews have been implemented in relation to the project area. The relevant bushfire management requirements, associated evidence of compliance and certification by bushfire consultant are documented in Table 3 for the JBS&G (2025) BMP, Table 4 for the Emerge Associates (2021) peer review and Table 5 for the Ecosystem Solutions (2022) peer review.

Table 3: Audit against requirements of the JBS&G (2025) BMP

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 3 Item 1-1	Construct (or have works bonded) the public roads to the standards stated in this BMP addendum, including any temporary staged access requirements (e.g. temporary compliant no-through roads/EAWs).	Construction of the rural link road (i.e. Yarrimbah Drive) between Clarkson Road and Lage Road as part of Stage 1 works is complete and the road is open for use by the public. Construction of Esme Crescent, linking with Yarrimbah Drive in the north and Clarkson Road in the east is currently being constructed and bonded to the City in accordance with the civil roadworks plan (see Appendix B), which aligns with the technical provisions stated within the BMP and the Guidelines. All proposed lots within the project area have frontage to Esme Crescent. Yarrimbah Drive provides public through access to Great Northern Highway to the west via Lage Road, which in turn provides broader access to suitable destinations in Bullsbrook to the north and Upper Swan to the south. Yarrimbah Drive and Esme Crescent also provide public through access to Chittering Road to the east/northeast via Clarkson Road, Taylor Road and Smith Road, which in turn provide broader access to suitable destinations in Bullsbrook to the west and Muchea to the northwest. On this basis, the project area is compliant with vehicular access provisions of the Guidelines and the BMP. No temporary cul-de-sacs or EAWs are required for the project area since all proposed lots have frontage to Esme Crescent, which is a through road.	Zac Cockerill (Level 2 BPAD37803) 

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 3 Item 1-2	Construct the FSARs at the relevant stages of development to the standards stated in this BMP addendum.	Not applicable. The FSAR is not included within the project area.	N/A
Table 3 Item 1-3	Construct (or have works bonded) the three remaining 100 kL water tanks at the relevant stages of development to the standards and locations specified in this BMP addendum.	The civil engineering plan and specifications for 1 x 100 kL fire water tank located within the Esme Crescent road reserve, as per the BMP, is provided within this report (see Appendix C), along with site photos demonstrating construction (Plate 2 and Plate 3).	Zac Cockerill (Level 2 BPAD37803) 
Table 3 Item 1-4	Establish all non-vegetated and low threat managed areas (i.e. proposed building envelopes, APZs if required, roads, firebreaks, FSARs, firebreak notice provisions, etc) to the standards stated in this BMP addendum.	All building envelopes and required slashing within the project area have been established to achieve exclusion under Clauses 2.2.3.2 (e) and (f) through clearing and site slashing, as evidenced in on-ground site photos in Appendix A, with photo locations depicted in Figure 1 (refer to Plot 3 site photos). Establishment of APZs for each proposed building envelope has been deferred to the DA/building stage to avoid unnecessary clearing of native vegetation, as endorsed by Department of Water and Environment Regulation (DWER) and City of Swan (refer to associated correspondence in Appendix E). The final width and alignment of APZs and their establishment will be the responsibility of future landowners once individual building locations have been confirmed.	Zac Cockerill (Level 2 BPAD37803) 
Table 3 Item 1-5	Undertake individual lot BAL contour assessment based on final detailed lot and building envelope design.	Individual lot BAL contour assessments for the project area are contained in Section 3 of this report.	Zac Cockerill (Level 2 BPAD37803) 

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 3 Item 1-6	Prepare individual lot Detailed Bushfire Design Guides to inform future landowners of their individual lot bushfire management requirements to comply with their legal bushfire management obligations.	Detailed Bushfire Design Guides have been prepared for the project area lots as per specifications of the BMP and will be provided to prospective landowners by the developer.	Zac Cockerill (Level 2 BPAD37803) 

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 3 Item 1-7	Add a restrictive covenant on the title for all proposed lots stating the following: • NOT TO allow vegetation and bushfire fuel loads to exceed Asset Protection Zone standards throughout the designated Asset Protection Zone, as per the Detailed Bushfire Design Guide • NOT TO allow vegetation and bushfire fuel loads to exceed requirements of the City of Swan annual firebreak notice for land outside of the designated Asset Protection Zone, as per the Detailed Bushfire Design Guide • NOT TO allow less than a 10 kilolitre reserve of water dedicated for firefighting purposes within domestic water supply tanks, to be provided within 3 metres of the driveway on the Lot, signposted and couplings to the City of Swan's specifications, as per the Detailed Bushfire Design Guide • NOT TO be non-compliant with all other provisions of the Detailed Bushfire Design Guide • NOT TO construct habitable buildings in areas subject to BAL-40 and BAL-Flame Zone.	The restrictive covenants on title have been applied to the project area lots as per the DP.	Zac Cockerill (Level 2 BPAD37803) 

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 3 Item 1-8	Comply with relevant provisions of the City of Swan annual firebreak notice, as amended.	All relevant requirements from the City of Swan annual firebreak notice have been implemented for the project area. This includes: • installation of 3 m wide, 4 m high lot boundary firebreaks, incorporating minor adjustments to navigate around trees, rocky outcrops and water courses where required, as per Figure 1 and on-ground site photos in Appendix A (refer to Plot 3 site photos) • approved firebreak variations for Lots 76–79, 81–82 and 89–90 to account for provision of the 6 m wide strategic firebreak and/or lot boundary firebreak deviations greater than 10 m off the lot boundary (see Appendix D) • maintenance of grass to a height of less than 10 cm for all proposed lots (i.e. on land between 0.5–2.5 ha), as per on-ground site photos in Appendix A, with photo locations depicted in Figure 1 (refer to Plot 3 site photos) • compliance with BMP requirements (as outlined in this report).	Zac Cockerill (Level 2 BPAD37803) 
Table 3 Item 1-9	Comply with the recommended actions outlined in the Section 6 summary table of the Ecosystem Solutions (2022) Level 3 Peer Review.	Refer to detailed compliance comments in Table 5.	Zac Cockerill (Level 2 BPAD37803) 
Table 3 Item 1-10	Comply with the relevant review comments outlined in Table 2 of the Emerge (2021) Level 3 Peer Review.	Refer to detailed compliance comments in Table 4.	Zac Cockerill (Level 2 BPAD37803) 

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 3 Item 1-11	Undertake a BMP compliance assessment on a staged basis to demonstrate that all relevant requirements of this BMP addendum have been implemented throughout the duration of subdivisional works.	This report provides a compliance assessment for the project area against relevant requirements of the BMP addendum and demonstrates that all relevant bushfire management actions have been implemented on site throughout the duration of subdivisional works.	Zac Cockerill (Level 2 BPAD37803) 

Table 4: Audit against requirements of the Emerge Associates (2021) peer review

Item	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 2 (No. 1)	The provision of the rural link road between Clarkson Road and Lage Road as part of Stage 1. (Acknowledged)	As previously stated under Table 3 Item 1-1.	Zac Cockerill (Level 2 BPAD37803) 
Table 2 (No. 2)	Construct (or have works bonded) any temporary cul-de-sacs/EAWs as required during staging to the dimensions and standards stated in this BMP. (Should address the turn around provided not to exceed 200 m for the north links)	N/A No temporary cul-de-sacs or EAWs are required for the project area.	N/A
Table 2 (No. 3)	Install 50kL water tanks as specified in this BMP for the relevant stages of development, or on advice/consultation from City of Swan. (Ensure clearance to avoid obstruction to the through road when the tank is being used. Tanks to be ceded to the City of Swan)	As previously stated under Table 3 Item 1-3. Sufficient clearance and turnaround capacity has been provided to avoid obstruction to Esme Crescent. The water tank has been ceded to the City.	Zac Cockerill (Level 2 BPAD37803) 
Table 2 (No. 4)	Establish all proposed building envelopes and APZs in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS3959 and Schedule 1 APZ standards of the Guidelines, including slashing/mowing of grassland and weeds to height of less than 10cm (Define building envelope location and determine individual APZ extent and BAL prior to clearance)	As previously stated under Table 3 Item 1-4. All building envelopes, maximum APZ extents and BALs have been defined prior to clearance, as per Figure 1. BAL assessment results are contained in Section 3.2.	Zac Cockerill (Level 2 BPAD37803) 

Item	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 2 (No. 5)	Establish road verges for each relevant stage to achieve no greater than a Class G grassland vegetation classification (not including Stock Road reserve), or to a state that incurs no material change in the compliance of BALs/APZs for individual lots. (Acknowledged)	The Esme Crescent road reserve has been completely modified to a non-vegetated/low threat managed state through clearing, earthworks and construction and will incur no material impact on individual lot BAL/APZ compliance.	Zac Cockerill (Level 2 BPAD37803) 
Table 2 (No. 6)	Comply with the City of Swan annual firebreak notice as amended and apply firebreak variations as required and where practical in consultation with the City. (Acknowledged)	As previously stated under Table 3 Item 1-8.	Zac Cockerill (Level 2 BPAD37803) 
Table 2 (No. 7)	Place a notification on title of all lots subject to BAL-12.5 or higher to ensure landowners/proponents and prospective purchasers are aware that their lot is subject to an approved BMP and BAL assessment. (Include WAPC model condition F2)	Bushfire notification on title has been applied to all lots within the project area, as per the DP.	Zac Cockerill (Level 2 BPAD37803) 
Table 2 (No. 8)	Cede the proposed fire station site to the relevant authority at the relevant stage of development. (Acknowledged)	N/A The proposed fire station lot is not included within the project area.	N/A

Item	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 2 (No. 9)	Add a restrictive covenant on the title of all proposed lots, stating the following: • maintain all APZs as per detailed Design Guides (Include WAPC model condition F3 restricting habitable buildings from placement in areas greater than BAL 29) • maintain background vegetation conditions across the site as per detailed Design Guides (Include a landscape plan guidance to clarify expectations for the landowner, Exclude the retained forest at lots, outside of their APZ extent) • maintain a reserve of 10kL of water dedicated for firefighting purposes within domestic water supply tanks (To be provided within 3 m of the driveway, signposted and couplings to the City's specifications) • comply with all other provisions of the individual lot detailed Design Guides (Acknowledged) • maintain 50m and 100m development setbacks for relevant lots (Acknowledged to apply to relevant lots)	As previously stated under Table 3 Item 1-7.	Zac Cockerill (Level 2 BPAD37803) 

Item	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 2 (No. 10)	Construct the FSARs at the relevant stages of development to the standards stated in this BMP (Include WAPC model condition F4 provision of easement, to be maintained by the landowner)	N/A The FSAR is not included within the project area.	N/A
Table 2 (No. 11)	Undertake BMP compliance audit and reporting to confirm relevant requirements of the BMP have been implemented as intended to achieve compliance with all relevant bushfire protection criteria and BMP provisions (to be undertaken by the bushfire practitioner) (As per WAPC model condition F1)	As previously stated under Table 3 Item 1-11.	Zac Cockerill (Level 2 BPAD37803) 
Table 2 (No. 12)	Prepare detailed Design Guides on a staged basis for each individual lot, as per specifications of this BMP (To be reference to the restrictive covenant)	As previously stated under Table 3 Item 1-6.	Zac Cockerill (Level 2 BPAD37803) 
Table 2 (No. 13)	Prepare detailed BAL contour assessment reports for the 160 low and moderate risk lots on a staged basis (To be prepared prior to title clearance link with condition 11)	This report contains the required detailed BAL contour assessments for individual lots (as per BAL assessment results contained in Section 3.2).	Zac Cockerill (Level 2 BPAD37803) 

Table 5: Audit against requirements of the Ecosystem Solutions (2022) peer review

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 6 (Condition 1a Advice Note 1 (i) Lot 117-125 and 175-190)	Engineering advice confirms that the grade is within the limits prescribed in the policy (SPP3.7). The local government has requested areas to be sealed and developer accepts these conditions. Ecosystem Solutions would consider these elements are compliant with SPP 3.7 Element 3 Access requirements.	N/A The specified lots are not within the project area.	N/A
Table 6 (Condition 1c Advice Note 1 (ii) Lot 19,20,21)	Habitable structures can only achieve BAL-29 if centrally located within the proposed Building Envelope. The Building Envelope should be reduced or other legal/planning instruments to specify the exact location of the footprint of a proposed structure should be implemented to ensure houses are built in this location.	N/A The specified lots are not within the project area.	N/A
Table 6 (Condition 1d Advice Note 1 (iii) Lot 14)	Relocate the building envelope to the southwest of the Lot, with a separation distance of 12m to the lot boundaries, to ensure BAL-29 can be achieved from the Class G Grassland within the road reserve. This will reduce the amount of vegetation modification required to implement an APZ to achieve BAL-29, should a habitable building occur in the north eastern corner of the Building Envelope.	N/A The specified lot is not within the project area.	N/A
Table 6 (Condition 1d Advice Note 1 (iii) Lot 16)	Habitable structures can only achieve BAL-29 if specifically located within the proposed Building Envelope. The Building Envelope should be reduced or other legal/planning instruments to specify the exact location of the footprint of a proposed structure should be implemented to ensure houses are built in this location	N/A The specified lot is not within the project area.	N/A

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 6 (Condition 1d Advice Note 1 (iii) Lot 18)	Habitable structures can only achieve BAL-29 if centrally located within the proposed Building Envelope. The Building Envelope should be reduced or other legal/planning instruments to specify the exact location of the footprint of a proposed structure should be implemented to ensure houses are built in this location	N/A The specified lot is not within the project area.	N/A
Table 6 (Condition 1d Advice Note 1 (iii) Lot 22)	No recommendations - The amended building envelope is in a suitable location for the entire Building Envelope to achieve a BAL-29 or lower rating, with no vegetation modification required.	N/A The specified lot is not within the project area.	N/A
Table 6 (Condition 1e Advice Note 1 (iv) Lot 55)	Relocate the building envelope to the north eastern of the Lot, with a separation distance of 9m to the northern lot boundary and 8m from the eastern lot boundary. This will result the entire Building Envelope being able to achieve a Bal-29 or lower rating, with no modification of remnant vegetation required.	N/A The specified lot is not within the project area.	N/A The specified lot is not within the project area.
Table 6 (Condition 1e Advice Note 1 (iv) Lot 56)	Slightly relocate the Building Envelope to the west, to have separation of 8m from the eastern lot boundary. This will result the entire Building Envelope being able to achieve a BAL-29 or lower rating, with no modification of remnant vegetation required.	N/A The specified lot is not within the project area.	N/A The specified lot is not within the project area.
Table 6 (Condition 1e Advice Note 1 (iv) Lot 57)	Slightly relocate the Building Envelope to the west, to have separation of 8m from the eastern lot boundary. This will result the entire Building Envelope being able to achieve a BAL-29 or lower rating, with no modification of remnant vegetation required.	N/A The specified lot is not within the project area.	N/A The specified lot is not within the project area.

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 6 (Condition 1e Advice Note 1 (iv) Lot 59)	Slightly relocate the Building Envelope to the west, to have separation of 8m from the eastern lot boundary. This will result the entire Building Envelope being able to achieve a BAL-29 or lower rating, with no modification of remnant vegetation required.	N/A The specified lot is not within the project area.	N/A The specified lot is not within the project area.
Table 6 (Condition 1e Advice Note 1 (iv) Lot 61)	Slightly relocate the Building Envelope to the west, to have separation of 8m from the eastern lot boundary to ensure BAL-40 or BAL-FZ ratings do not encroach into the eastern portion of the building envelope. It is also recommended that the building envelope be rotated to a north south orientation, to further reduce the vegetation modification that would be required to achieve BAL-29.	N/A The specified lot is not within the project area.	N/A The specified lot is not within the project area.
Table 6 (Condition 1e Advice Note 1 (iv) Lot 63)	Slightly relocate the Building Envelope to the west, to have separation of 8m from the eastern lot boundary. This will result the entire Building Envelope being able to achieve a BAL-29 or lower rating, with no modification of remnant vegetation required.	N/A The specified lot is not within the project area.	N/A The specified lot is not within the project area.
Table 6 (Condition 1e Advice Note 1 (iv) Lot 65)	Slightly relocate the Building Envelope to the west, to have separation of 8m from the eastern lot boundary. This will result the entire Building Envelope being able to achieve a BAL-29 or lower rating, with no modification of remnant vegetation required.	N/A The specified lot is not within the project area.	N/A The specified lot is not within the project area.
Table 6 (Condition 1e Advice Note 1 (iv) Lot 67)	No recommendations - The amended building envelope is in a suitable location.	N/A	N/A

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 6 (Condition 1e Advice Note 1 (iv) Lot 69)	No recommendations - The amended building envelope is in a suitable location.	N/A	N/A
Table 6 (Condition 1e Advice Note 1 (iv) Lot 71)	No recommendations - The amended building envelope is in a suitable location.	N/A	N/A
Table 6 (Strategic Fire Break)	The BMP outlines a 3m wide break, the City of Swan prescribes a 6m break, this needs to be addressed. Ideally this Strategic Fire Break would connect or continue onto public roads within the development, however if this cannot be achieved due to engineering constrained, then the terminating point for the Strategic Fire Break should be engineered with a turning circle or turning tee suitable for a 3.4 fire appliance.	The strategic firebreak servicing Lot 76 has been constructed to a width of 6 m and ties in with the individual lot boundary firebreak, which in turn ties in with the constructed driveway crossover with Esme Crescent (see Appendix D). This provides uninhibited access around the full firebreak network.	Zac Cockerill (Level 2 BPAD37803) 
Table 6 (Condition 1f Advice Note 1 (v) Lot 31)	Relocate the Building Envelope to the north west, to achieve separation of 8m from the eastern lot boundary and 10m from the southern lot boundary. This will result the entire Building Envelope being able to achieve a Bal-29 or lower rating, with minor modification of remnant vegetation required to implement the APZ	N/A The specified lot is not within the project area.	N/A
Table 6 (Condition 1f Advice Note 1 (v) Lot 32)	Relocate the Building Envelope to the north east, to achieve a separation of 8m from the western lot boundary and 10m from the southern lot boundary. The building envelope should be reduced in size, to ensure a BAL-29 rating is achievable in its entirety.	N/A The specified lot is not within the project area.	N/A

BMP Reference	Action	Evidence of completion/clearance comments	Certification by bushfire consultant
Table 6 (Condition 1f Advice Note 1 (v) Lot 149)	Relocate the Building Envelope to the east, to achieve a separation of 8m from the western lot boundary. This will result the entire Building Envelope being able to achieve a BAL-29 or lower rating, with modification to remnant vegetation. It is also recommended that the Building Envelope be reduced in size to avoid any impact to the water course from an APZ, should a habitable building occur in the north eastern corner of the Building Envelope.	N/A The specified lot is not within the project area.	N/A
Table 6 (Condition 1f Advice Note 1 (v) Lot 150)	Relocate the Building Envelope to the east, to achieve a separation of 10m from the western lot boundary. It is also recommended that the Building Envelope be reduced in size to ensure an APZ to achieve BAL-29 can be achieved within the Lot boundaries.	N/A The specified lot is not within the project area.	N/A
Table 6 (Condition 1f Advice Note 1 (v) Lot 151)	No modification required.	N/A The specified lot is not within the project area.	N/A
Table 6 (Condition 1f Advice Note 1 (v) Lot 156)	Relocate the Building Envelope to the west, to have separation of 10m from the eastern lot boundary, the size and/or shape of the building envelope should also be adjusted to ensure at the entire building envelope can achieve a BAL-29 or lower rating, without vegetation modification within Plot 1.	N/A The specified lot is not within the project area.	N/A
Table 6 (Condition 1f Advice Note 1 (v) Lot 157)	Relocate the Building Envelope to the west, to achieve separation of 10m from the eastern lot boundary, the size and/or shape of the building envelope should also be adjusted to ensure at the entire building envelope can achieve a BAL-29 or lower rating, without vegetation modification within Plot 1.	N/A The specified lot is not within the project area.	N/A

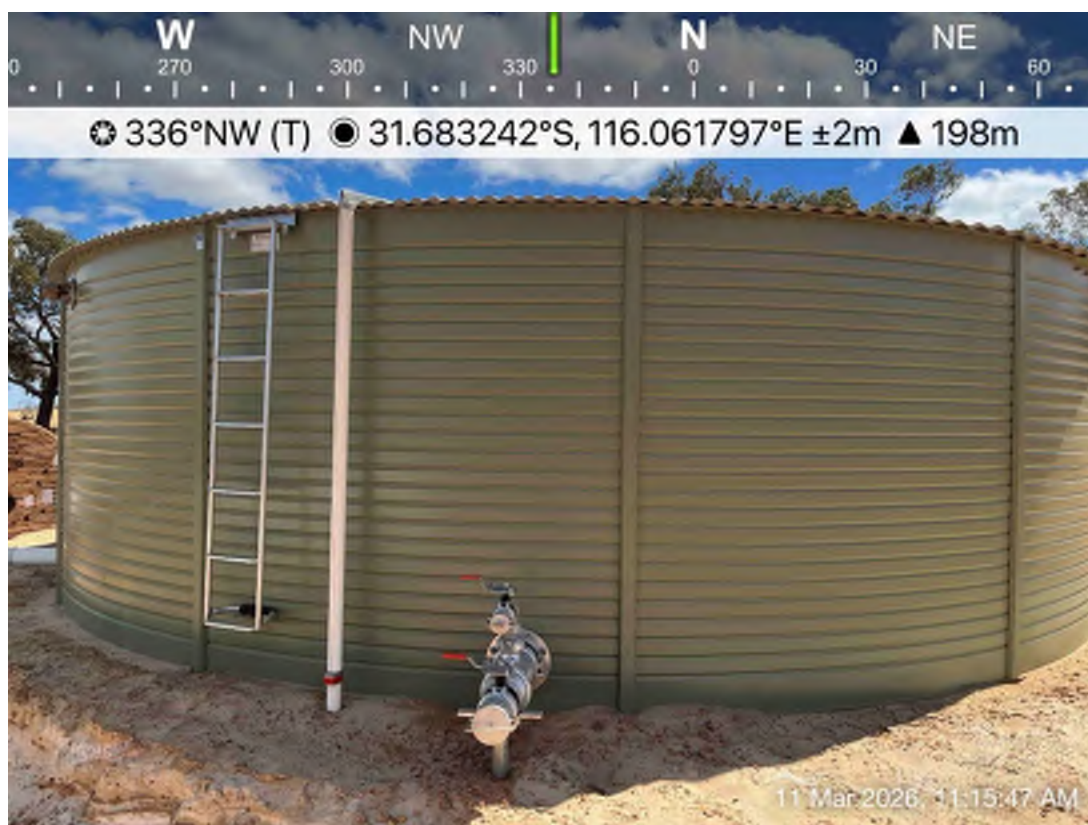


Plate 2: Compliant 100 kL fire water tank within Esme Crescent road reserve (facing north)



Plate 3: Compliant 100 kL fire water tank within Esme Crescent road reserve (facing south)

3. Bushfire assessment results

3.1 Assessment inputs

A Bushfire Attack Level (BAL) contour assessment has been undertaken for each proposed lot within the project area in accordance with Method 1 of AS3959—2018 *Construction of Buildings in Bushfire-Prone Areas* (AS3959; SA 2018). The Method 1 procedure incorporates the following factors:

- state-adopted FDI 80 rating
- vegetation classification
- effective slope
- distance maintained between proposed development areas and the classified vegetation.

The BAL contours are based on the current on-ground site conditions and take into consideration the bushfire management measures that have been implemented on site, as listed in Section 2. This includes consideration of the future establishment of maximum width APZs.

3.1.1 Vegetation classification

Classified vegetation and exclusions were assessed for each proposed lot within the project area and the adjoining 150 m (the assessment area) through on-ground verification initially on 11 March 2026 in accordance with AS3959 and the *Visual Guide for Bushfire Risk Assessment in Western Australia* (DoP 2016). Georeferenced site photos and a description of the vegetation classifications and exclusions for the overall project area are contained in Appendix A and depicted in Figure 1. Detailed vegetation classification mapping has also been undertaken on an individual lot basis, as depicted in Figure 2 through to Figure 17. A summary of the vegetation classifications and exclusions is contained in Table 6.

Site observations indicate that the vegetation classifications and exclusions align with the post-development vegetation classifications determined by the original subdivision stage BMP (Strategen-JBS&G 2021), including:

- Class B woodland situated throughout small, isolated pockets across the landscape comprising a sparse eucalyptus canopy over unmanaged grass
- Class G grassland situated throughout cleared, unmanaged areas of the landscape comprising pasture grass and weeds greater than 100 mm in height at maturity.

Exclusions within the project area and adjacent 150 m are in accordance with Clauses 2.2.3.2 (e) and (f), as follows:

- non-vegetated areas such as dams, buildings, cleared building envelopes, roads, tracks, firebreaks and land cleared/earthworked for construction
- low threat managed vegetation such as grazed/slashed grasslands less than 100 mm in height, with ongoing enforcement via the City's annual firebreak notice.

As previously stated, establishment of APZs for each proposed building envelope has been deferred to the DA/building stage to avoid unnecessary clearing of native vegetation in advance of knowing final building locations, noting APZs are currently depicted around building envelopes and will likely be reduced to occur around individual dwellings once final building locations are confirmed. This approach, including confirmation of clearing approval for the APZs at the DA/building stage, has been endorsed by DWER and City of Swan (refer to associated correspondence in Appendix E). The final width and alignment of APZs and their establishment will be the responsibility of future landowners once individual building locations have been confirmed.

3.1.2 Effective slope

Effective slope under classified vegetation was assessed within the assessment area through on-ground verification initially on 11 March 2026 in accordance with AS3959. Results were cross-referenced with DPIRD 2m and are depicted for individual lots in Figure 2 to Figure 17. A summary of effective slope results is contained in Table 6.

Site observations indicate that effective slope under classified vegetation aligns with the effective slopes identified within the original subdivision stage BMP (Strategen-JBS&G 2021), which identifies slopes ranging from flat/up-slope (i.e. 0 degrees) to downslope (>5–10 degrees) across the undulating landscape. Where effective slope under the same vegetation plot influences adjacent building envelopes differently, this has created the need to prepare separate vegetation classification and effective slope maps for individual lots.

3.1.3 Summary of inputs

Figure 2 to Figure 17 illustrate the current vegetation classifications, exclusions and effective slopes observed during site inspection for each individual lot within the project area. The vegetation classifications, exclusions and effective slope are summarised in Table 6.

Table 6: Summary of vegetation classifications, exclusions and effective slope

Lot	Vegetation plot	Vegetation classification	Effective slope	Comments	Figure ref.
76	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 2
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Flat/upslope (0°)		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	
77	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 3
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Flat/upslope (0°)		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	

Lot	Vegetation plot	Vegetation classification	Effective slope	Comments	Figure ref.
78	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 4
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Flat/upslope (0°)		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	
79	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 5
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Flat/upslope (0°)		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	

Lot	Vegetation plot	Vegetation classification	Effective slope	Comments	Figure ref.
80	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 6
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Flat/upslope (0°)		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	
81	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 7
	2	Class B Woodland	Flat/upslope (0°)		
	3	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	

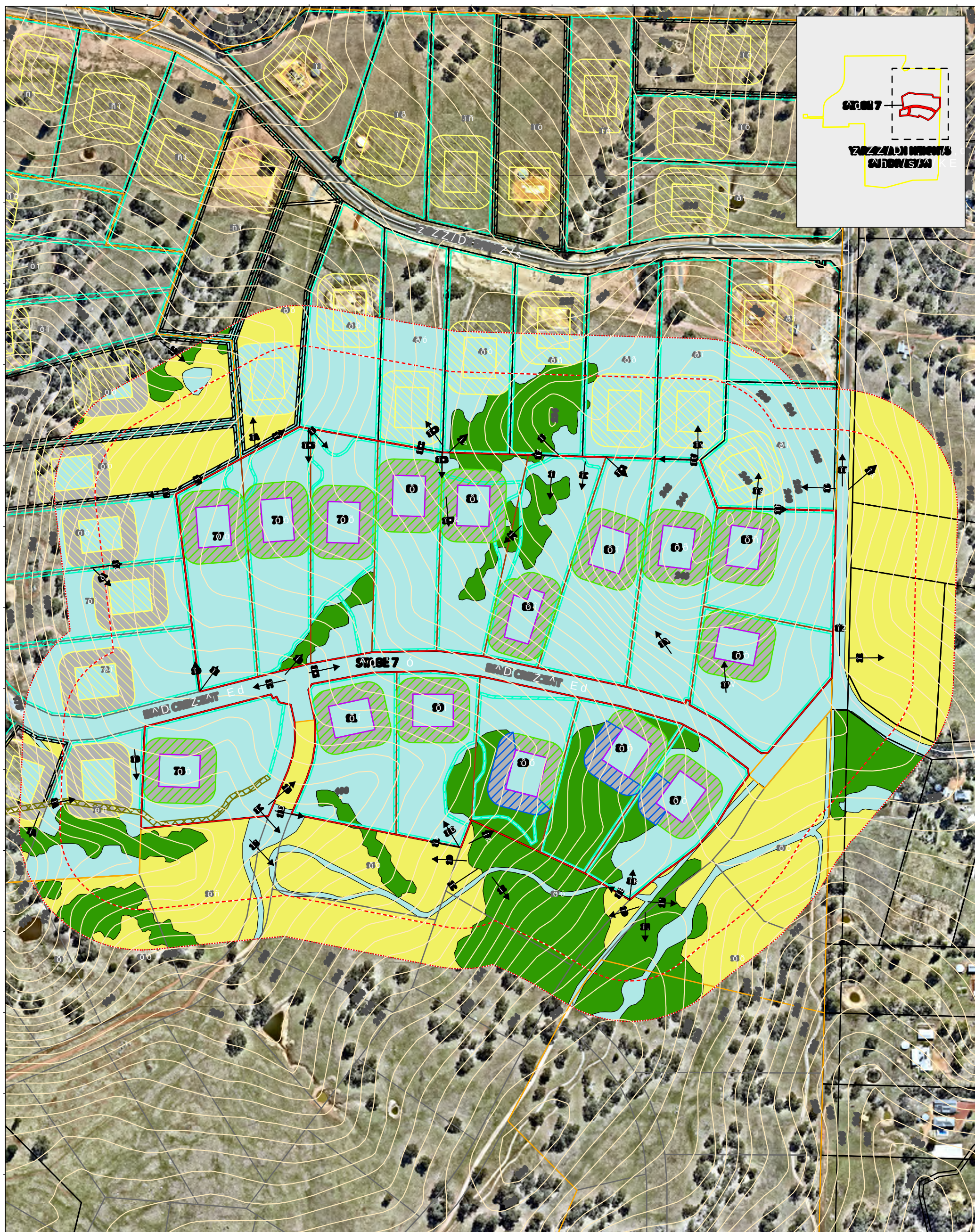
Lot	Vegetation plot	Vegetation classification	Effective slope	Comments	Figure ref.
82	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 8
	2	Class B Woodland	Flat/upslope (0°)		
	3	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	
83	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 9
	2	Class B Woodland	Flat/upslope (0°)		
	3	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	

Lot	Vegetation plot	Vegetation classification	Effective slope	Comments	Figure ref.
84	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 10
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >0–5°	Grassland greater than 100 mm in height at maturity	
	4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	
85	1	Class B Woodland	Downslope >0–5°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 11
	2	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	3	Class G Grassland	Downslope >0–5°		
	4	Class G Grassland	Flat/upslope (0°)		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	

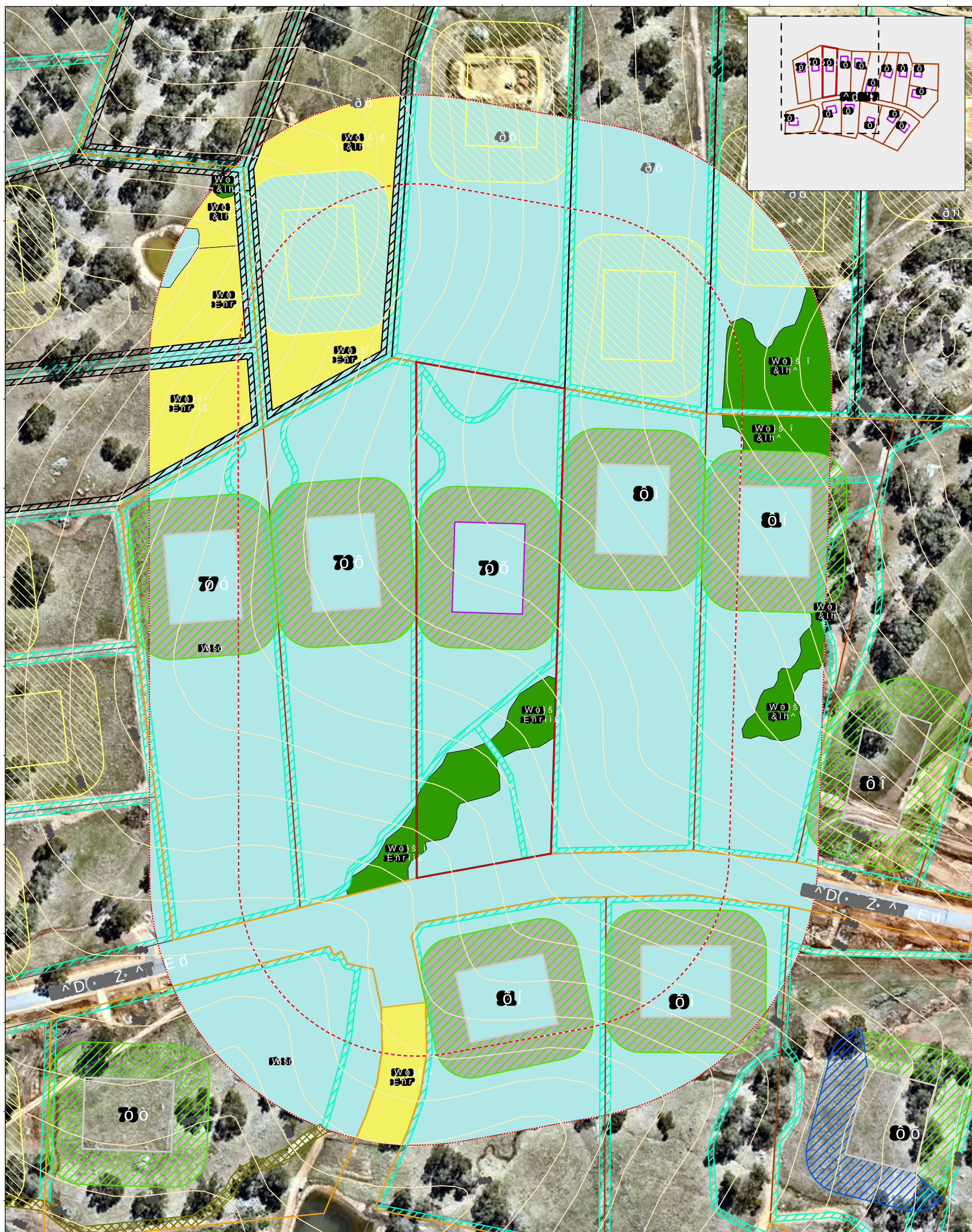
Lot	Vegetation plot	Vegetation classification	Effective slope	Comments	Figure ref.
86	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 12
	2	Class B Woodland	Downslope >0–5°		
	3	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Downslope >0–5°		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	
87	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 13
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Downslope >0–5°		
	5	Class G Grassland	Flat/upslope (0°)		
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	7	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	

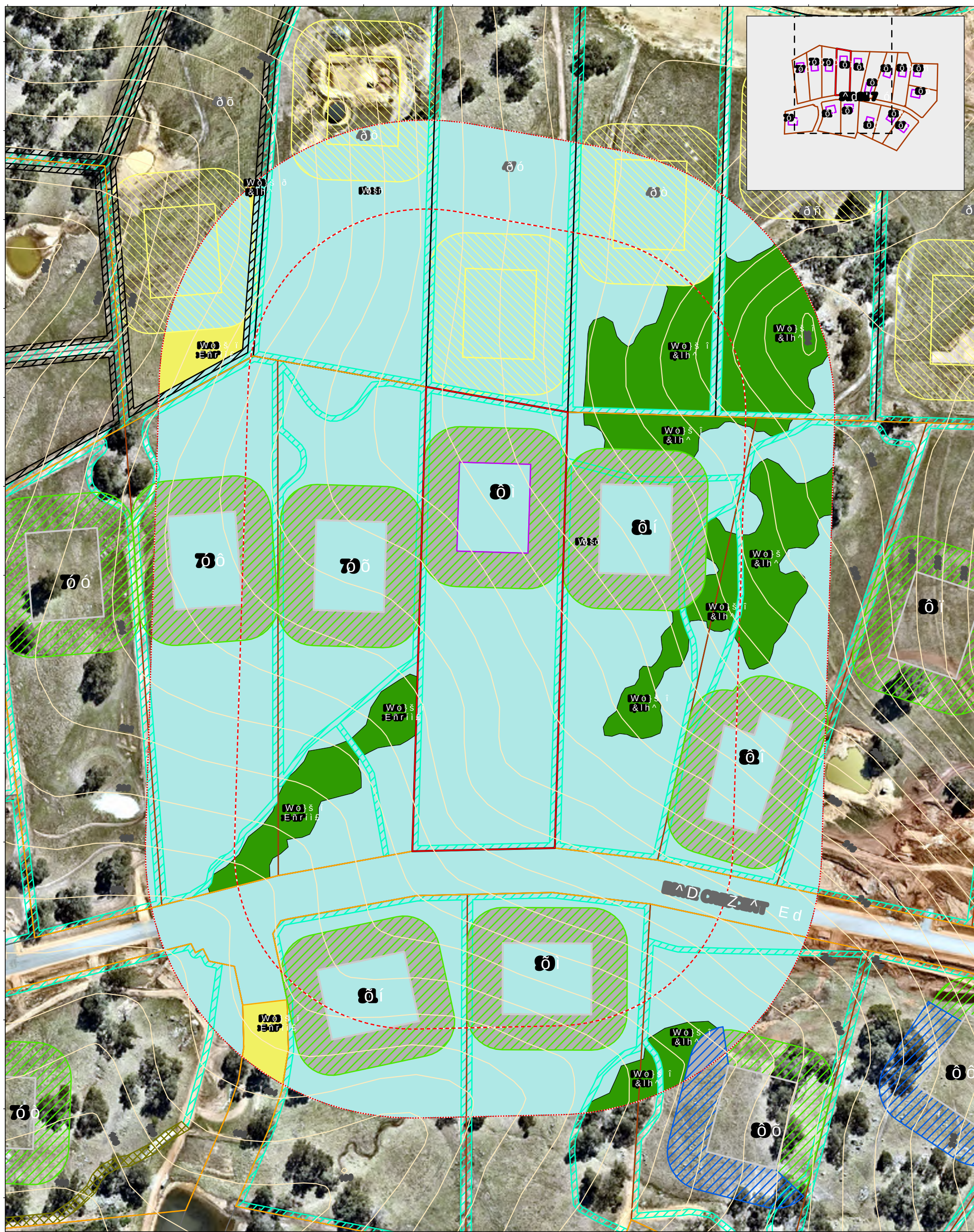
Lot	Vegetation plot	Vegetation classification	Effective slope	Comments	Figure ref.
88	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 14
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >0–5°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Flat/upslope (0°)		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	
89	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 15
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Flat/upslope (0°)	Grassland greater than 100 mm in height at maturity	
	4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	

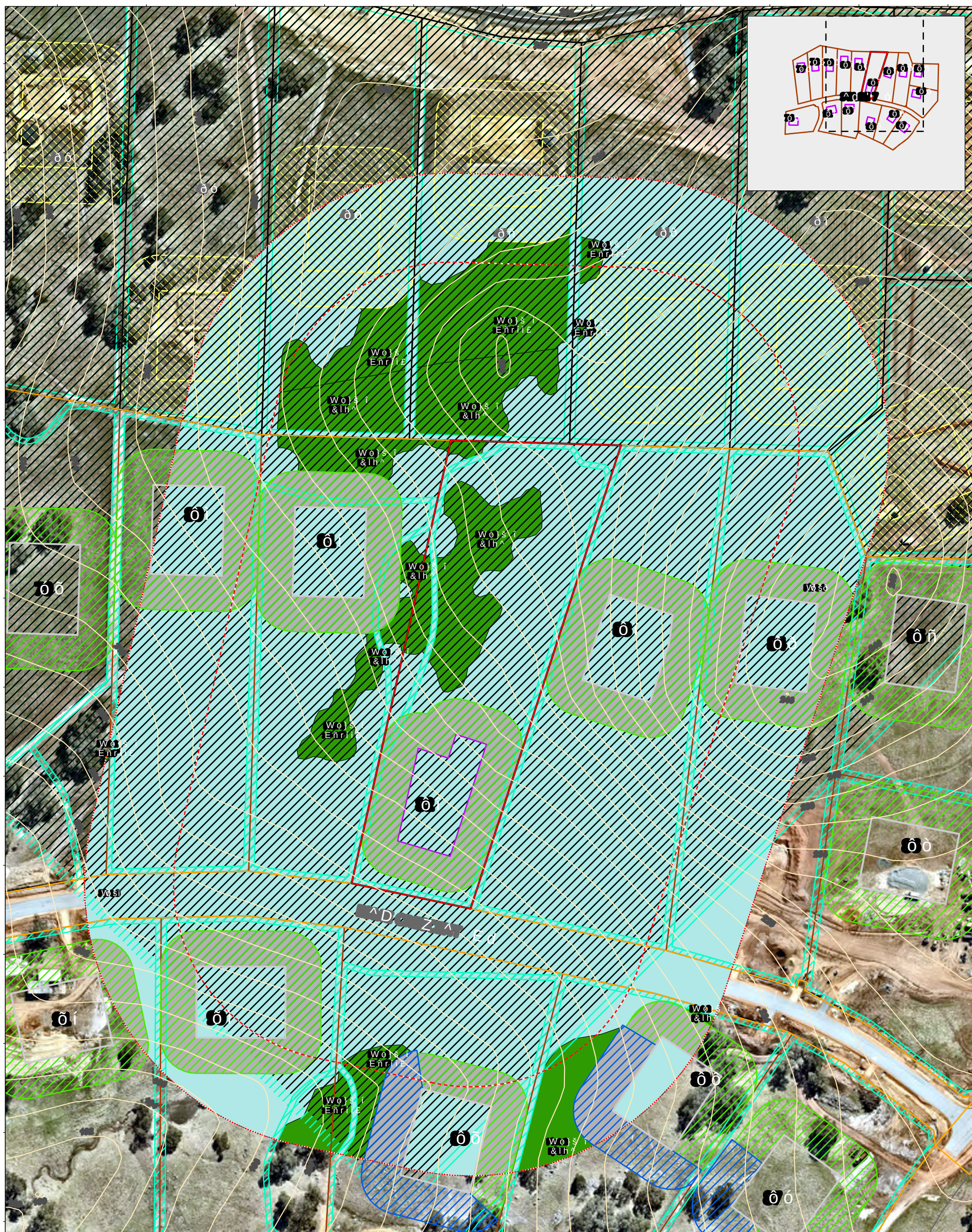
Lot	Vegetation plot	Vegetation classification	Effective slope	Comments	Figure ref.
90	1	Class B Woodland	Flat/upslope (0°)	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 16
	2	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	3	Class G Grassland	Flat/upslope (0°)		
	4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	
91	1	Class B Woodland	Downslope >5–10°	Trees 2–30 m high at maturity, dominated by sparse eucalypts with a grassy understorey (lacks shrubby middle layer and deep surface litter)	Figure 17
	2	Class B Woodland	Flat/upslope (0°)		
	3	Class G Grassland	Downslope >5–10°	Grassland greater than 100 mm in height at maturity	
	4	Class G Grassland	Flat/upslope (0°)		
	5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	Non-vegetated areas such as watercourses, dams, buildings, cleared building envelopes, roads, tracks, firebreaks and earthworked land; and low threat managed vegetation such as managed grassland	
	6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	APZs to be modified to a non-vegetated/low threat managed state at the DA/building stage once final building locations have been confirmed	



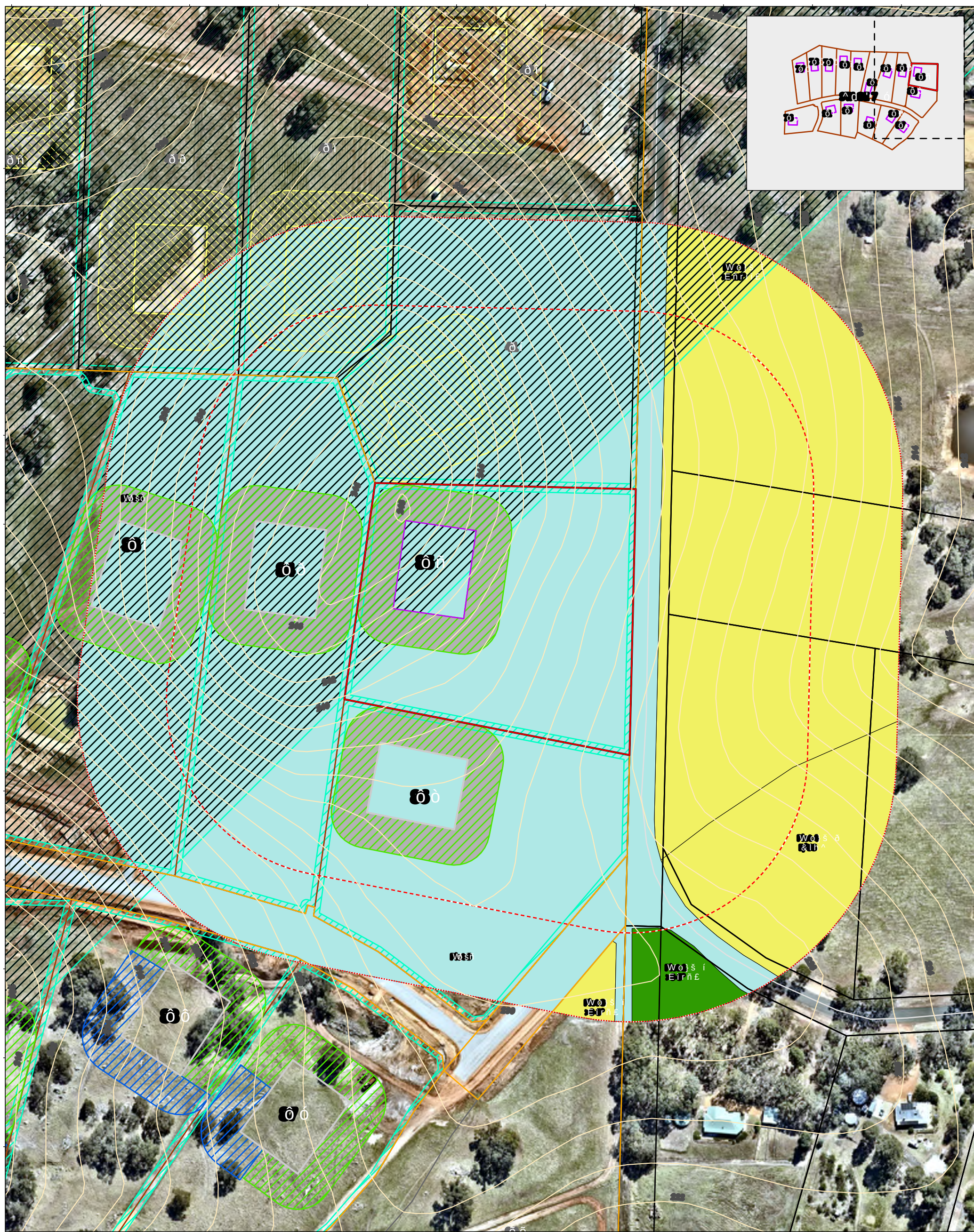
/HJHQG  3URMHFW DUHD  P DVVHVVP HQW DUHD  P DVVHVVP HQW DUHD  &DGDVWUDO ERXQG  %XLOGLQJ HQYHORSH  3URSRVHG ORVV  ,QGLFDWLYH IXWXUH  DGMDFHQW VWDJHV  7RSRJUDSKLF FRQRXUV			 P ZLGH ILUHEUHDN  P ZLGH VODVKHG  SHU ILUHEUHDN QR  P ZLGH VWUDWHJL  P ZLGH \$3=  P ZLGH \$3=  6WDJH  GHYHORSHQW  6WDJH ERXQGDULHV			 JBS&G  PHWUHV  3KRWR SRLQW  3KRWR SRLQW  3KRWR SRLQW  3KRWR SRLQW  3KRWR SRLQW  3KRWR SRLQW			6WDJH <DUULPEDK +HLJKWV %XOOVEURRN :\$ 9(*(\$7\$,21 &/\$66,))&\$7,216 \$1' 6,7(3+2726 29(5\$// 6,7(0\$3 DW \$9 &RRUG 6IV *'\$ 0*\$ =RQH 9HUVLRQ 5HVS -XO),*85('RFXPHQW 3DWK & ?8VHVU?MFUXWH?-%6 * \$XVWUDOLD?'&6 ,QWHUQDO 9 ?3URMHFWV?48%(? <DUULPEDK 6WDJH %03?*,6? B0DS3URMHFWV? <DUULPEDK 6WDJH %03B5 ,PDJH 5HIHQHFH ZZZ QHUPDS FRP< ,PDJHU\ 'DWH \$SULO /D\RXW BS 3B B9HJ FODVV DOO /RWV		
---	--	--	--	--	--	---	--	--	--	--	--

[illegible]

[illegible]



/HJHQG  3URMHFW DUHD  P DVVHVVPHQW DQHD  P DVVHVVPHQW DQHD  &DGDVWUDO ERXQGDU  %XLOGLQJ HQYHORSH  %XLOGLQJ HQYHORSHV WR WKLV DVVHVVPHQW  3URSRVHG ORWV  ,QGLFDWLYH IXWXUH VXEGLYLVLRQV RQ DGMDFHQW VWDJHV	 P ZLGH \$3=  P ZLGH \$3=  6WDJH ERXQGDU &DGDVWUDO ERXQGDU 7RSRJUDSKLF FRQW /*\$7(%XLOGLQJ HQYHORSH %XLOGLQJ HQYHORSHV QRW VXEMHFW WR WKLV DVVHVVPHQW 3URSRVHG ORWV ,QGLFDWLYH IXWXUH VXEGLYLVLRQV RQ DGMDFHQW VWDJHV	9HJHWDWLRQ FODVVIL FDWLRQ  &ODVV % :RRGODQ  &ODXVH H  5RDGV /*\$7( 0LQRU URDG		 PHWUHV	6WDJH <DUULPEDK +HLJKWV %XOOVEURN :\$ 9(*(\$7\$,21 &/\$66,)&\$7,21 \$1' ())((\$7,9(6/23(/27
			&OLHQW 4XE 3URSHUW\ *URX SFDQH DW \$9		
			'UDZQ %\ MFUXWH	&RRUG 6\V **\$ 0*\$ =RQH	
			&KHFNHG %\ =&RFNHULOO	9HUVLRQ 5HWDW	-XO),*85(



/HJHQG  3URMHFW DUHD  P DVVHVVPHQW DQHD  P DVVHVVPHQW DQHD  &DGDVWUDO ERXQGDU  %XLOGLQJ H QYHORSH  %XLOGLQJ H QYHORSHV  3URSRVHG ORWV  ,QGLFDWLYH IXWXUH  DGMDFHQW VWDJHV	 P ZLGH \$3=  P ZLGH \$3=  6WDJH ERXQGDULY  7RSRJUDSKLF FRQW  %XLOGLQJ H QYHORSH  %XLOGLQJ H QYHORSHV  3URSRVHG ORWV  ,QGLFDWLYH IXWXUH  DGMDFHQW VWDJHV	9HJHWDWLRQ FODVVILFDWLRQ  &ODVV % :RRGODQ  &ODVV * *UDVVODQG  &ODVV * *UDVVODQG  SUHD WR EH PRGLILHG  YHJHWDWHG DQG OR  5RDGV /\$7( 0LQRU URDG	  PHWUHV  DW \$9  9HUVLRQ 5HWDW  5HWDW	6WDJH <DUULPEDK +HLJKWV %XOOVEURN :\$ 9*(7\$7.21 &/\$66.),&\$7.21 \$1' ())(7.9(6/23(/27 =RQH),*85(9 23URMHFWV?48%(? <DUULPEDK 6WDJH %03?*,6? B0DSURMHFWV? <DUULPEDK 6WDJH %03B5 D
--	---	---	---	---

3.2 Assessment outputs

3.2.1 BAL contour assessment results

As previously stated, all 16 proposed lots within the project area are situated within designated bushfire prone Area 2 (see Plate 1) and therefore require a BAL assessment to inform future planning and building approvals. JBS&G has undertaken a BAL contour assessment for each proposed lot based on post-subdivisional works conditions (excluding establishment of APZs as previously stated) to demonstrate that each proposed building envelope can sufficiently cater for a dwelling rated at BAL-29 or lower, as required to address BMP/Guideline requirements and subdivision conditions to facilitate creation of title and inform future DA planning and building approvals.

Results of the BAL contour assessment for each proposed lot are illustrated in Figure 18 to Figure 33, with a detailed summary of assessment inputs and outputs provided in Table 7 demonstrating that all proposed building envelopes within each lot are able to contain a future dwelling rated at BAL-29 or lower, subject to establishment of APZs. APZs will be confirmed at the future DA/building stage once final building locations have been confirmed. Future BAL assessment will need to be undertaken at the DA planning/building approval stage to support final BAL certification and APZ establishment around individual dwellings once siting of buildings within each building envelope has been determined. The range of potential BAL ratings that could be achieved within each proposed building envelope based on full implementation of maximum width APZs is summarised in Table 8 to inform final siting of habitable buildings.

The highest BAL rating that impacts each proposed building envelope is shown in bold in Table 7 and Table 8.

Table 7: BAL contour assessment results

Lot	Designated bushfire prone area	Plot	Vegetation classification	Effective slope	Separation (m) to building envelope boundary (inc. APZ)	BAL rating to building envelope boundary	Figure ref.
76	Yes	1	Class B Woodland	Downslope >5–10°	51 m	BAL–12.5	Figure 18
		2	Class B Woodland	Flat/upslope (0°)	>100 m	BAL–Low	
		3	Class G Grassland	Downslope >5–10°	42 m	BAL–12.5	
		4	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
77	Yes	1	Class B Woodland	Downslope >5–10°	>100 m	BAL–Low	Figure 19
		2	Class B Woodland	Flat/upslope (0°)	>100 m	BAL–Low	
		3	Class G Grassland	Downslope >5–10°	32 m	BAL–12.5	
		4	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	

Lot	Designated bushfire prone area	Plot	Vegetation classification	Effective slope	Separation (m) to building envelope boundary (inc. APZ)	BAL rating to building envelope boundary	Figure ref.
78	Yes	1	Class B Woodland	Downslope >5–10°	>100 m	BAL–Low	Figure 20
		2	Class B Woodland	Flat/upslope (0°)	90 m	BAL–12.5	
		3	Class G Grassland	Downslope >5–10°	>50 m	BAL–Low	
		4	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
79	Yes	1	Class B Woodland	Downslope >5–10°	37 m	BAL–19	Figure 21
		2	Class B Woodland	Flat/upslope (0°)	>100 m	BAL–Low	
		3	Class G Grassland	Downslope >5–10°	>50 m	BAL–Low	
		4	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	

Lot	Designated bushfire prone area	Plot	Vegetation classification	Effective slope	Separation (m) to building envelope boundary (inc. APZ)	BAL rating to building envelope boundary	Figure ref.
80	Yes	1	Class B Woodland	Downslope >5–10°	74 m	BAL–12.5	Figure 22
		2	Class B Woodland	Flat/upslope (0°)	37 m	BAL–12.5	
		3	Class G Grassland	Downslope >5–10°	>50 m	BAL–Low	
		4	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
81	Yes	1	Class B Woodland	Downslope >5–10°	28 m	BAL–29	Figure 23
		2	Class B Woodland	Flat/upslope (0°)	20 m	BAL–19	
		3	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
82	Yes	1	Class B Woodland	Downslope >5–10°	34 m	BAL–19	Figure 24
		2	Class B Woodland	Flat/upslope (0°)	24 m	BAL–19	
		3	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	

Lot	Designated bushfire prone area	Plot	Vegetation classification	Effective slope	Separation (m) to building envelope boundary (inc. APZ)	BAL rating to building envelope boundary	Figure ref.
83	Yes	1	Class B Woodland	Downslope >5–10°	53 m	BAL–12.5	Figure 25
		2	Class B Woodland	Flat/upslope (0°)	>100 m	BAL–Low	
		3	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
84	Yes	1	Class B Woodland	Downslope >5–10°	>100 m	BAL–Low	Figure 26
		2	Class B Woodland	Flat/upslope (0°)	>100 m	BAL–Low	
		3	Class G Grassland	Downslope >0–5°	>50 m	BAL–Low	
		4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	

Lot	Designated bushfire prone area	Plot	Vegetation classification	Effective slope	Separation (m) to building envelope boundary (inc. APZ)	BAL rating to building envelope boundary	Figure ref.
85	Yes	1	Class B Woodland	Downslope >0–5°	>100 m	BAL–Low	Figure 27
		2	Class G Grassland	Downslope >5–10°	>50 m	BAL–Low	
		3	Class G Grassland	Downslope >0–5°	>50 m	BAL–Low	
		4	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
86	Yes	1	Class B Woodland	Downslope >5–10°	93 m	BAL–12.5	Figure 28
		2	Class B Woodland	Downslope >0–5°	>100 m	BAL–Low	
		3	Class G Grassland	Downslope >5–10°	>50 m	BAL–Low	
		4	Class G Grassland	Downslope >0–5°	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	

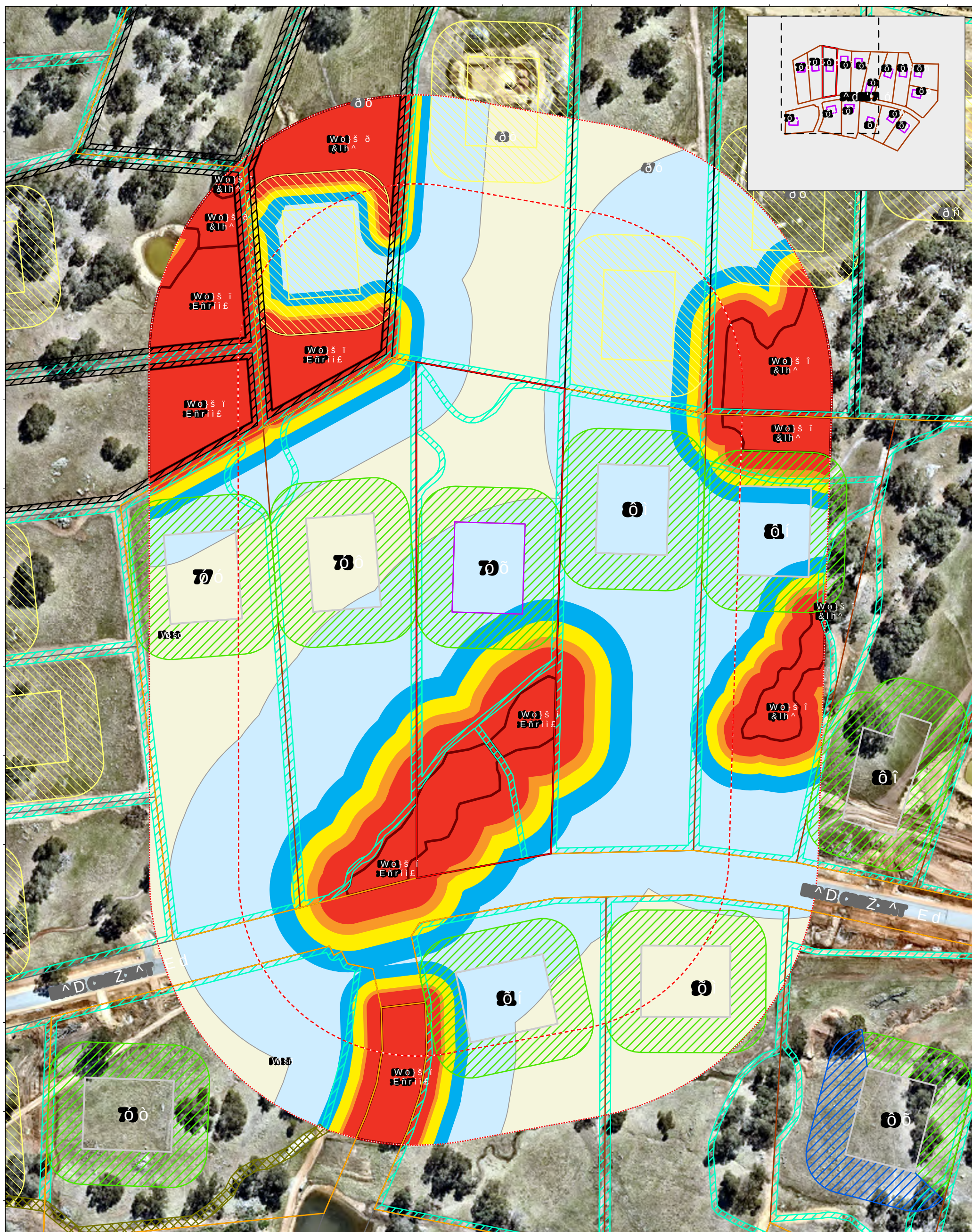
Lot	Designated bushfire prone area	Plot	Vegetation classification	Effective slope	Separation (m) to building envelope boundary (inc. APZ)	BAL rating to building envelope boundary	Figure ref.
87	Yes	1	Class B Woodland	Downslope >5–10°	22 m	BAL–29	Figure 29
		2	Class B Woodland	Flat/upslope (0°)	27 m	BAL–19	
		3	Class G Grassland	Downslope >5–10°	>50 m	BAL–Low	
		4	Class G Grassland	Downslope >0–5°	33 m	BAL–12.5	
		5	Class G Grassland	Flat/upslope (0°)	35 m	BAL–12.5	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		7	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
88	Yes	1	Class B Woodland	Downslope >5–10°	22 m	BAL–29	Figure 30
		2	Class B Woodland	Flat/upslope (0°)	20 m	BAL–19	
		3	Class G Grassland	Downslope >0–5°	>50 m	BAL–Low	
		4	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	

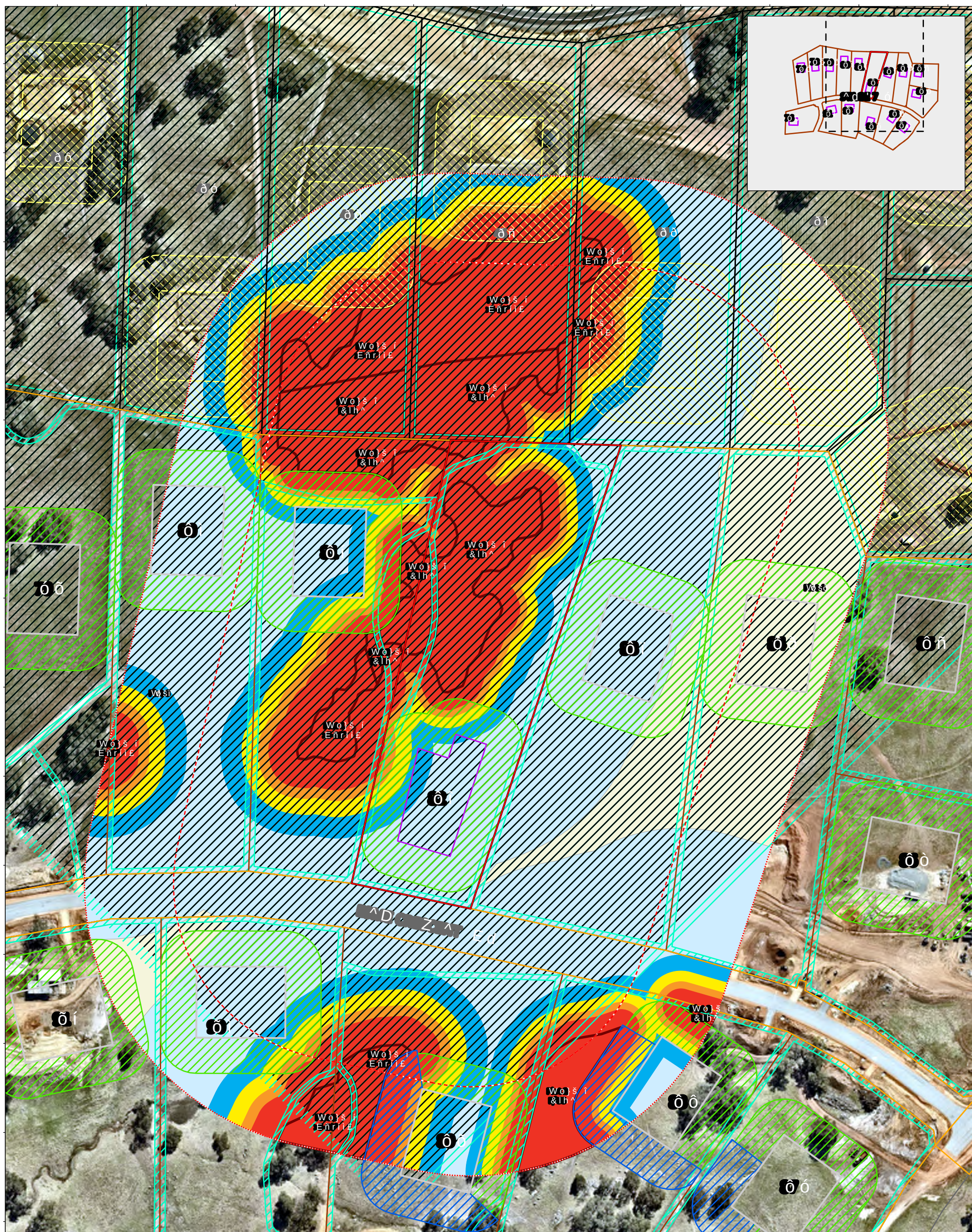
Lot	Designated bushfire prone area	Plot	Vegetation classification	Effective slope	Separation (m) to building envelope boundary (inc. APZ)	BAL rating to building envelope boundary	Figure ref.
89	Yes	1	Class B Woodland	Downslope >5–10°	22 m	BAL–29	Figure 31
		2	Class B Woodland	Flat/upslope (0°)	20 m	BAL–19	
		3	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
90	Yes	1	Class B Woodland	Flat/upslope (0°)	33 m	BAL–12.5	Figure 32
		2	Class G Grassland	Downslope >5–10°	>50 m	BAL–Low	
		3	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		4	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	

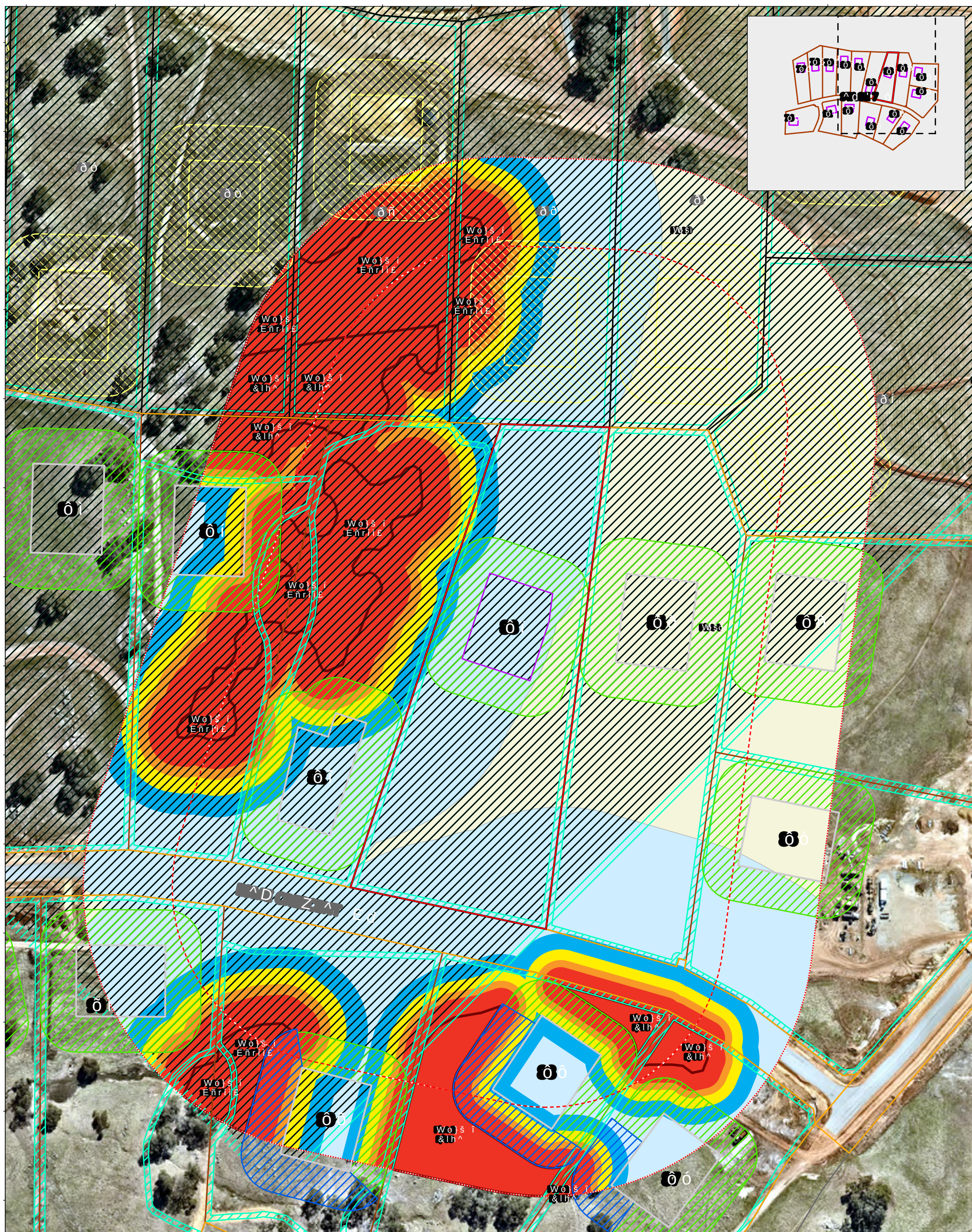
Lot	Designated bushfire prone area	Plot	Vegetation classification	Effective slope	Separation (m) to building envelope boundary (inc. APZ)	BAL rating to building envelope boundary	Figure ref.
91	Yes	1	Class B Woodland	Downslope >5–10°	>100 m	BAL–Low	Figure 33
		2	Class B Woodland	Flat/upslope (0°)	58 m	BAL–12.5	
		3	Class G Grassland	Downslope >5–10°	20 m	BAL–19	
		4	Class G Grassland	Flat/upslope (0°)	>50 m	BAL–Low	
		5	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	
		6	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])	N/A	N/A	N/A	

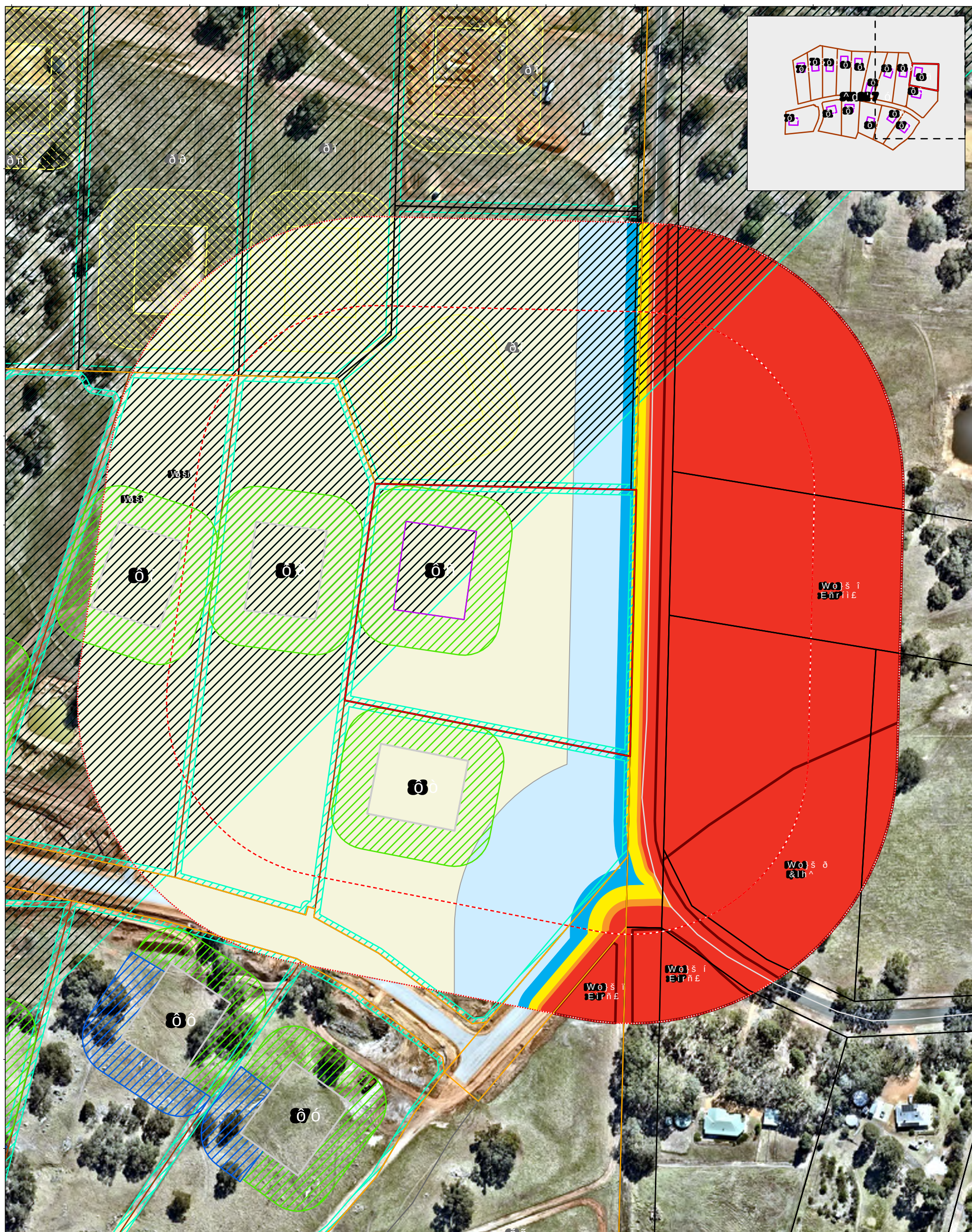
Table 8: Range of potential BAL ratings that could be achieved within each proposed building envelope

Lot	Potential BAL ratings that could be achieved subject to final siting of buildings
76	BAL-12.5
77	BAL-12.5, BAL-Low
78	BAL-12.5, BAL-Low
79	BAL-19, BAL-12.5
80	BAL-12.5
81	BAL-29, BAL-19, BAL-12.5
82	BAL-19, BAL-12.5
83	BAL-12.5
84	BAL-Low
85	BAL-Low
86	BAL-12.5, BAL-Low
87	BAL-29, BAL-19, BAL-12.5
88	BAL-29, BAL-19
89	BAL-29, BAL-19
90	BAL-12.5
91	BAL-19, BAL-12.5

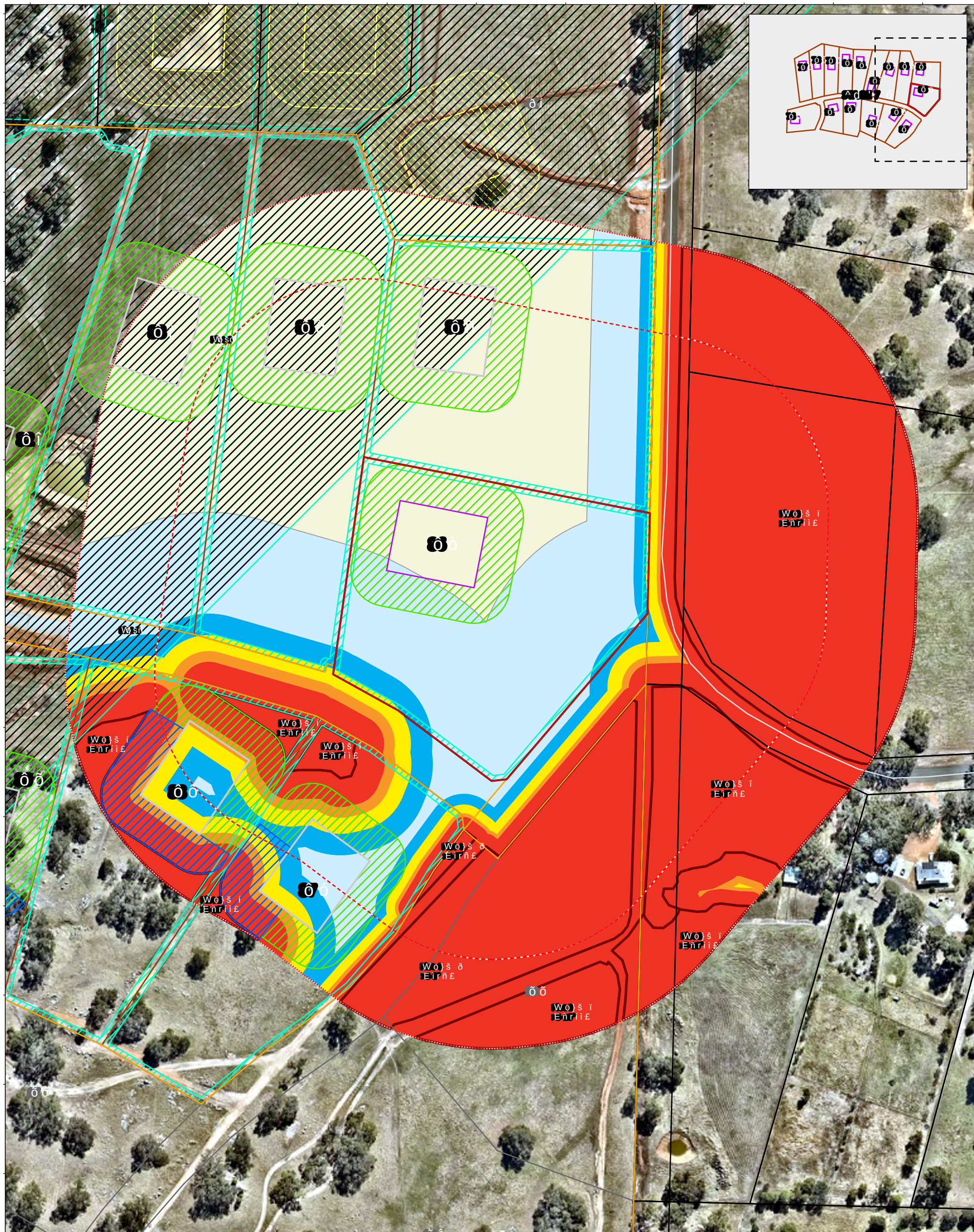
[illegible]

[illegible]

[illegible]

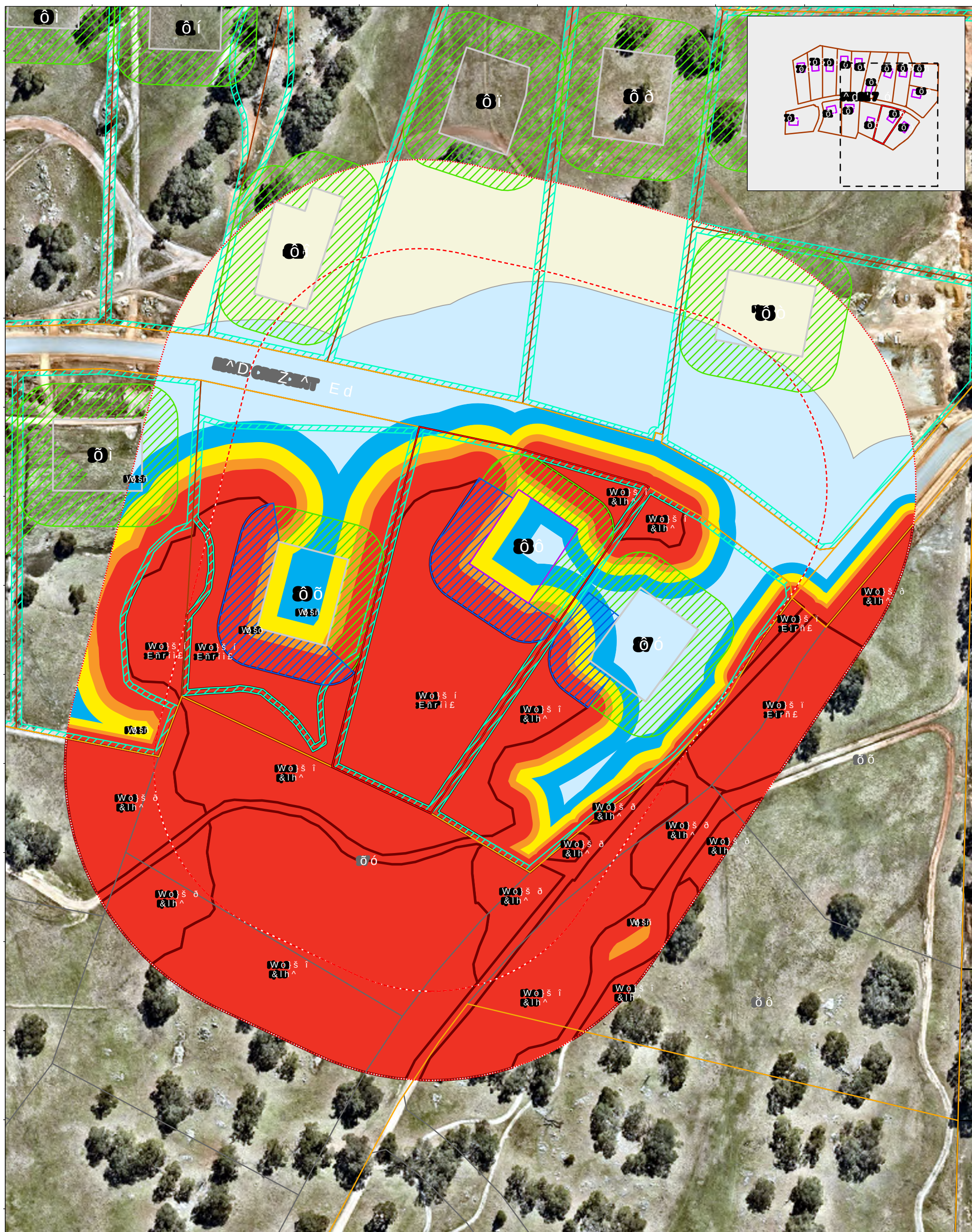


/HJHQG									6WDJH		
	3URMHFW DUHD		P ZLGH \$3=		&ODVVILHG YHJHW				<DUULPEDK +HLJKWV		
	P DVVHVVPHQW D		P ZLGH \$3=		%\$/ FRQWRXUV				%XOOVEURN :\$		
	P DVVHVVPHQW D		6WDJH ERXQGDUHV		%\$/)=						
	&DGDWUDO ERXQGDUHV		/*\$7(		%\$/	-RE 1XPEHU					
	/*\$7(		OLQRU URDG		%\$/				%\$/ &217285 0\$3		
	%XLOGLQJ HQYHORSH				%\$/	&OLHQW 4XE H 3URSHUW\ *URX			DW \$9		
	%XLOGLQJ HQYHORSHV		QRW VXEMHFW		%\$/						
	WR WKLV DVVHVVPHQW				%\$/	'UDZQ %\ MFUXWH			&RRUG 6\V *'\$ 0*\$ =RQH		
	3URSRVHG ORWV				%\$/ /RZ	&KHFNHG %\ =&RFNHULOO			9HUVLRQ 5HVS -XO		
	,QGLFDWL YH IXWXUH VXEGLYLVLRQV		RQ								
	DGMDFHQW VWDJHV										

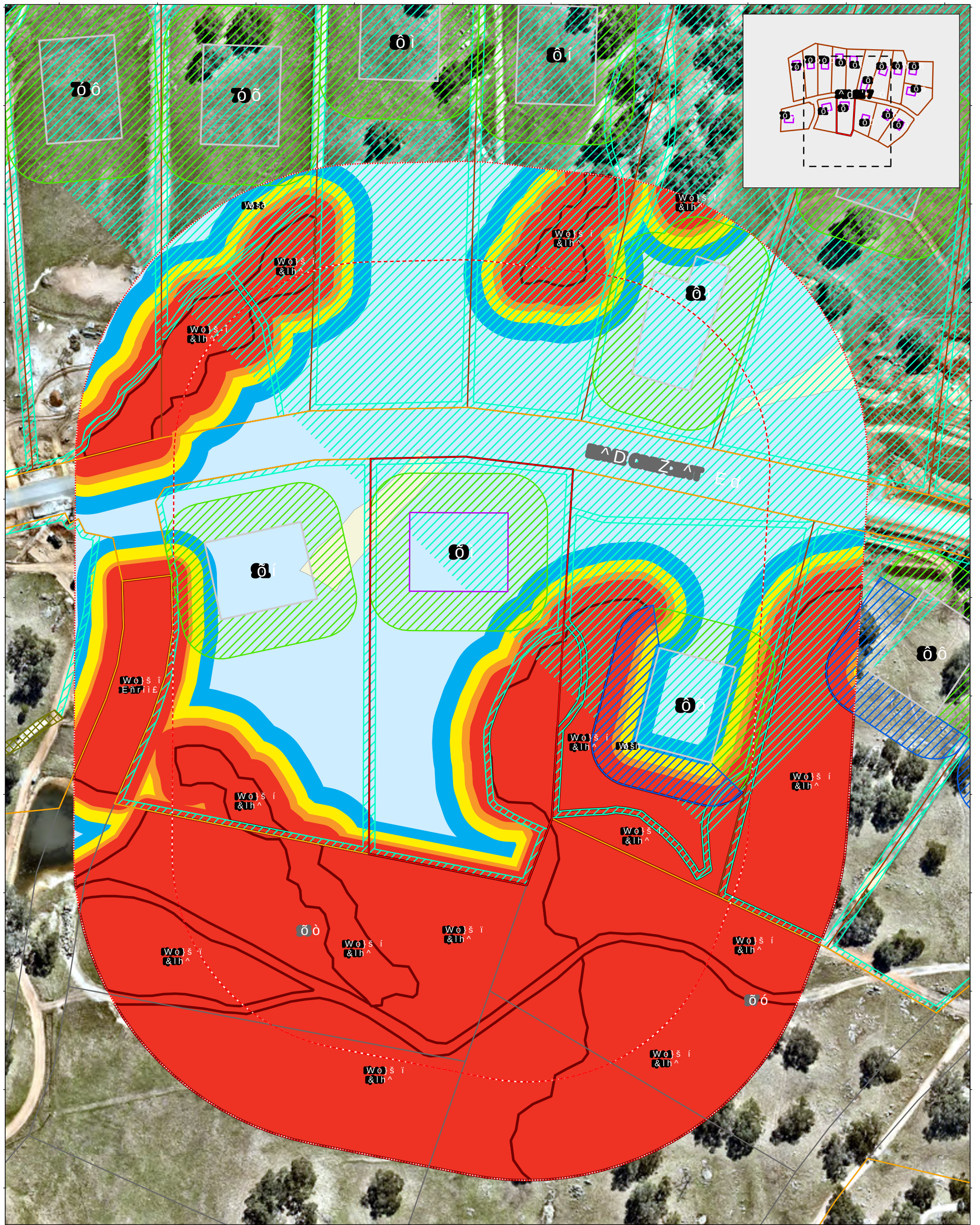


/HJHQG  3URMHFW DUHD  P DVVHVVPHQW DUDH  P DVVHVVPHQW DUDH  &DGDVWUDO ERXQGGRGV  %XLOGLQJ HQYHORSH  %XLOGLQJ HQYHORSHV WR WKLW DVVHVVPHQW 3URSRVHG ORWV ,QGLFDWLH IXWXUH VXEGLYLVLRQV RQ DGMDFHQW VWDJHV	 P ZLGH \$3=  P ZLGH \$3=  6WDJH ERXQGDULH  /*\$7( 0LQRU URDG  %XLOGLQJ HQYHORSHV QRW VXEMHFW 3URSRVHG ORWV ,QGLFDWLH IXWXUH VXEGLYLVLRQV RQ DGMDFHQW VWDJHV	 &ODVVLILHG YHJHW  %\$/ FRQWRXUV  %\$/)=  %\$/  %\$/  %\$/  %\$/  %\$/ /RZ			6WDJH <DUULPEDK +HLJKWV %XOOVEURN :\$ %\$/ &217285 0\$3 /27 RQH
			-RE 1XPEHU		
			&OLHQW 4XE 3URSHUW\ *URX	6FDOH	DW \$9
			'UDZQ %\ MFUXWH	&RRUG 6\W **\$	0*\$ =RQH
			&KHFNHG %\ =&RFNHULOO	9HUVLRQ	5HWWH -XO),*85(

'RFXPQW 3DWK & ?8VHUV?MFUXWH?-%6 * \$XVWUDOLD?&6 ,QWHUQDO 9 ?3URMHFWV?48%(? <DUULPEDK 6WDJH %03?*,6? BODS3URMHFWV? <DUULPEDK 6WDJH %03B
,PDJH 5HIHUQH ZZZ QHDUPDS FRP< ,PDJHU 'DWH \$SULO
/D\RXW B\$ 3B B%\$/V /RW



/HJHQG  3URMHFW DUHD  P ZLGH \$3=  P DVVHVVPHQW DUD P ZLGH \$3=  P DVVHVVPHQW DUD6WDJH ERXQGDU\H  &DGDVWUDO ERXQGDUI /*\$7( %XLOGLQJ HQYHORSH  %XLOGLQJ HQYHORSHV QRW VXEMHFW WR WKLV DVVHVVPHQW  3URSRVHG ORWV  ,QGLFDWL\H IXWXUH VXEGLYLVLRQV RQ DGMDFHQW VWDJHV			 &ODVVLILHG YHJHW %\$/ FRQWRXUV  %\$/)=  %\$/  %\$/  %\$/  %\$/  %\$/ /RZ			  -RE 1XPEHU &OLHQW 4XE H 3URSHUW\ *URX\$FDOH DW \$9 'UDZQ %\ MFUXWH &RRUG 6\V *'\$ 0*\$ =RQH &KHFNHG %\ =&RFNHULOO 9HUVLRQ 5HWH -XO),*85(			6WDJH <DUULPEDK +HLJKWV %XOOVEURN :\$ %\$/ &217285 0\$3 /27		
---	--	--	--	--	--	--	--	--	---	--	--



/HJHQG  3URMHFW DUHD  P DVVHVVPHQW DQHD  P DVVHVVPHQW DUHD  &DGDVWUDO ERXQGDU\ /*\$7( %XLOGLQJ HQYHORSH  %XLOGLQJ HQYHORSHV QRW VxemHFW WR WKLV DVVHVVPHQW  3URSRVHG ORWV  ,QGLFDWLYH IXWXUH VXEGLYLVLRQV RQ DGMDFHQW VWDJHV	 P ZLGH \$3=  P ZLGH \$3=  D6WDJH ERXQGDU\	 &ODVVILHG YHJHW  %\$/ FRQWRXUV  %\$/)=  %\$/  %\$/  %\$/  %\$/  %\$/ /RZ	 -RE 1XPEHU &OLHQW 4XEH 3URSHU\ *URX 'UDZQ %\ MFUXWH &KHFNHG %\ =&RFNHULOO	 &FDOH DW \$9 &RRUG 6\V *'\$ 0*\$ = 9HUVLRQ 5HWWH -XO	6WDJH <DUULPEDK +HLJKWV %XOOVEURN :\$ %\$/ &217285 0\$3 /27 RQH),*85(
---	---	---	---	---	---

4. Conclusion and recommendations

This BMP compliance and condition clearance report has been prepared for 16 proposed rural-residential lots within Stage 7 Yarrimbah Heights to address bushfire-related conditions and advice notes of WAPC Ref. 201629 (as stated in Table 2), including a compliance audit against requirements of the JBS&G (2025) subdivision stage BMP (Table 3), Emerge Associates (2021) peer review (Table 4), Ecosystem Solutions (2022) peer review (Table 5) and the City of Swan annual firebreak notice.

Assessment results are consistent with current on-ground conditions assessed on 11 March 2026. JBS&G can confirm that the BMP over the site has been implemented throughout the duration of subdivisional works for the relevant Stage 7 area and adjacent land to achieve compliance with the intended BAL outcomes and requirements of the BMP, peer reviews and City firebreak notice. On this basis, bushfire-related conditions and advice notes of subdivision approval under WAPC Ref. 201629 have been suitably addressed to facilitate creation of title for the proposed lots.

As previously stated, establishment of APZs for each proposed building envelope has been deferred to the DA/building approval stage to avoid unnecessary clearing of native vegetation in advance of having final building locations confirmed, noting APZs are currently depicted around building envelopes and will likely be reduced to occur around individual dwellings once final building locations are confirmed. This approach, including confirmation of clearing approval for the APZs at the DA/building approval stage, has been endorsed by DWER and City of Swan (refer to associated correspondence in Appendix E). The final width and alignment of APZs and their establishment will be the responsibility of future landowners once individual building locations have been confirmed.

This report also provides a BAL contour assessment for each proposed lot based on current, post-subdivisional work conditions (noting the abovementioned deferment of APZs) to inform siting of future dwellings within nominated building envelopes. The assessment demonstrates that a rating of BAL-29 or lower is achievable for all proposed habitable development within each building envelope (as depicted in Figure 18 to Figure 33 and summarised in Table 7). The range of potential BAL ratings that could be achieved within each proposed building envelope is summarised in Table 8 to inform final siting of development, with the worst case BAL highlighted in bold.

All 16 proposed lots are situated within designated bushfire prone Area 2 (see Plate 1) and will require assessment and certification of the final BAL rating, along with final determination of APZ width and alignment, to support future DA planning approval and/or building approval once final siting of proposed buildings is known.

Ongoing requirements of the current City of Swan annual firebreak notice (as amended) should continue to be implemented as required, particularly with regards to maintenance of firebreaks, slashing of grassland where applicable and ongoing maintenance of background vegetation conditions and fuel loads.

5. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the client and other parties.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

JBS&G accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced without prior approval by the client, or amended in any way without prior approval by JBS&G, and should not be relied upon by other parties, who should make their own enquires.

Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements.

Limited sampling and laboratory analyses were undertaken as part of the investigations undertaken, as described herein. Ground conditions between sampling locations and media may vary, and this should be considered when extrapolating between sampling points. Chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history and which may not be expected at the site.

Changes to the subsurface conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS&G reserves the right to review the report in the context of the additional information.

6. References

- Department of Planning (DoP) 2016, *Visual guide for bushfire risk assessment in Western Australia*, Department of Planning, Perth.
- Ecosystem Solutions 2022, *Level 3 Bushfire Practitioner BMP Review - Lot 302 Lage Road and 301 Stock Road Bullsbrook*, report prepared for Western Australian Planning Commission C/- Dept of Planning, Lands and Heritage, September 2022.
- Emerge Associates 2021, *Bushfire Management Plan Review - Subdivision Application for Lot 301 Stock Road and Lot 302 Lage Road Bullsbrook*, report prepared for McRae Investments, June 2021.
- JBS&G 2025, *Yarrimbah Heights subdivision renewal: Bushfire Management Plan addendum*, report prepared for QUBE Property Group, April 2025.
- Office of Bushfire Risk Management (OBRM) 2025, *Map of Bush Fire Prone Areas*, [Online], Government of Western Australia, available from: <https://maps.slip.wa.gov.au/landgate/bushfireprone/>, [16/07/2026].
- Standards Australia (SA) 2018, *Australian Standard AS 3959–2018 Construction of Buildings in Bushfire-prone Areas*, Standards Australia, Sydney.
- Strategen JBS&G 2021, *Bushfire Management Plan Lot 301 Stock Road and Lot 302 Lage Road Bullsbrook*, report prepared for McRae Investments Pty Ltd, September 2021.
- Western Australian Planning Commission (WAPC) 2024, *Planning for Bushfire Guidelines*, December 2024, Western Australian Planning Commission, Perth.

Appendix A Vegetation plot photos and descriptions (as per Figure 1)

Plot 1	
Vegetation classification	Class B Woodland
Description / justification	Trees 2-30 m at maturity, dominated by trees with a grassy understorey (lacks shrubby middle layer and deep surface litter)
 Photo ID: 1a	
 Photo ID: 1b	
 Photo ID: 1c	
 Photo ID: 1d (in background)	
 Photo ID: 1e	
 Photo ID: 1f	

Plot 1



Photo ID: 1g



Photo ID: 1h



Photo ID: 1i



Photo ID: 1j



Photo ID: 1k



Photo ID: 1l

Plot 1



Photo ID: 1m (in background)

Plot 2

Vegetation classification	Class G Grassland
Description / justification	Grassland at maturity, greater than 100 mm in height



Photo ID: 2a



Photo ID: 2b (in background)



Photo ID: 2c



Photo ID: 2d



Photo ID: 2e



Photo ID: 2f

Plot 2



Photo ID: 2g (in background)

Plot 3	
Vegetation classification	Excluded – Non-vegetated and Low threat (Clause 2.2.3.2 [e] and [f])
Description / justification	Low threat cultivated gardens and maintained lawns within surrounding properties and non-vegetated areas including roads, footpaths, driveways and building footprints

 Photo ID: 3a	 Photo ID: 3b
 Photo ID: 3c	 Photo ID: 3d
 Photo ID: 3e	 Photo ID: 3f

Plot 3



Photo ID: 3g



Photo ID: 3h



Photo ID: 3i



Photo ID: 3j



Photo ID: 3k



Photo ID: 3l

Plot 3



Plot 3



Photo ID: 3s



Photo ID: 3t



Photo ID: 3u



Photo ID: 3v



Photo ID: 3w



Photo ID: 3x

Plot 3



Photo ID: 3y



Photo ID: 3z



Photo ID: 3za



Photo ID: 3zb



Photo ID: 3zc



Photo ID: 3zd

Plot 3



Photo ID: 3ze



Photo ID: 3zf



Photo ID: 3zg

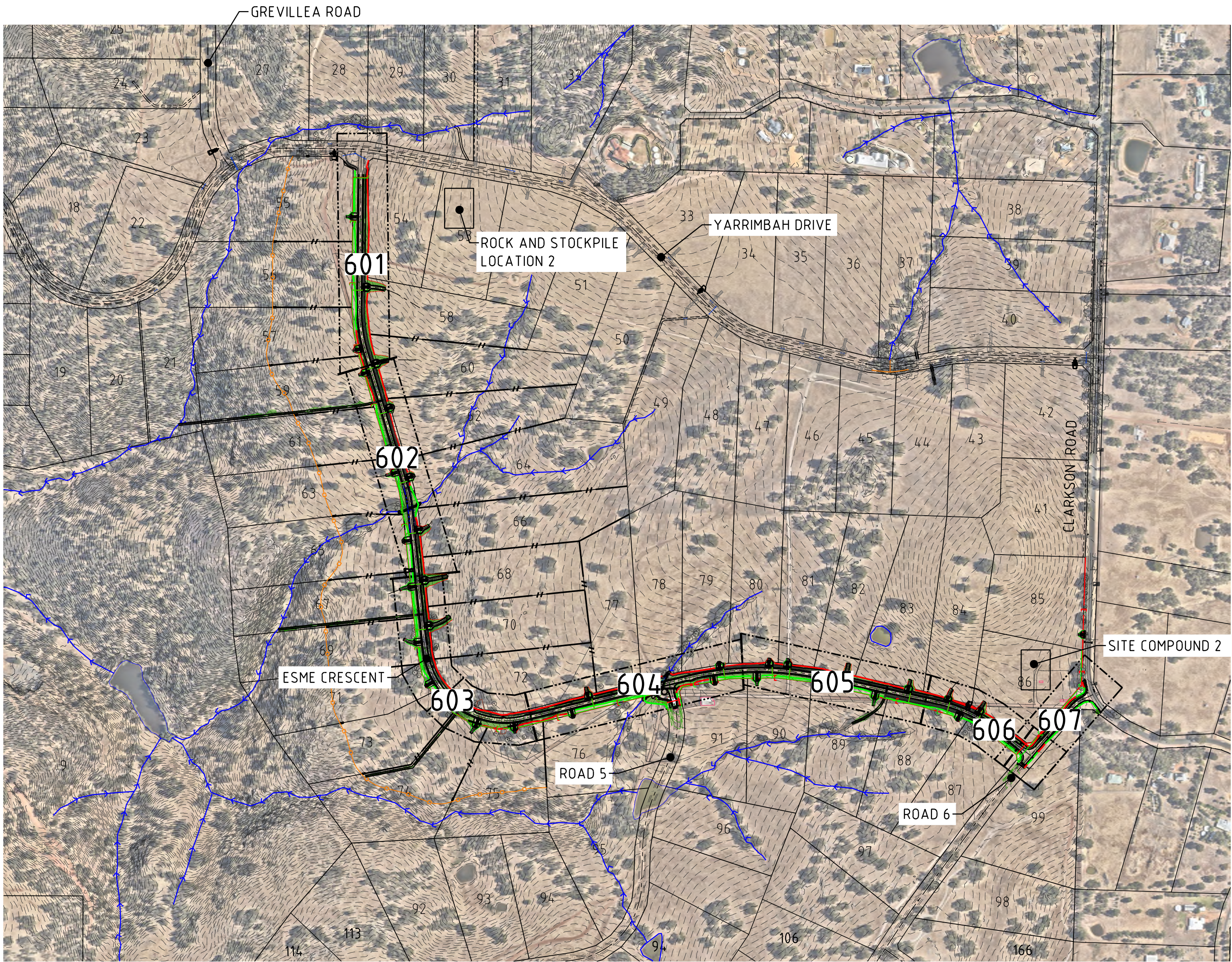
Plot 4	
Vegetation classification	Modified to non-vegetated and/or low threat (Clauses 2.2.3.2 [e] and/or [f])
Description / justification	APZs to be established to a non-vegetated/low threat managed state at the DA/building stage by future landowners



Photo ID: 4a

Appendix B Esme Crescent civil roadworks plan

P:\6480 Bulbinbrook Semi Rural\6480-06\Acad\6480-06-600-607.dwg, 26/09/2025 12:18:16 PM, Iamrv, Digital Signing PDF pc3, 1.1, - CW Reference



LEGEND	
DESCRIPTION	SYMBOL
LIMIT OF WORKS BOUNDARY	— — — — —
PROPOSED ROAD	— — — — —
EXISTING ROAD	— — — — —
FUTURE ROAD	— — — — —
PROPOSED DRAINAGE PIPE	— — — — —
EXISTING DRAINAGE PIPE	— — — — —
FUTURE DRAINAGE PIPE	— — — — —
PROPOSED DRAINAGE PIPE WITH JUNCTION PIT (JP), SIDE ENTRY PIT (SEP), GRATED PIT (GP) AND CIRCULAR GRATED PIT (GPI)	— — — — —
DRAINAGE PIT LABEL	OR LID LEVEL EXISTING FUTURE JP JP JP PIT ID 01 02 03 CHAINAGE OR CO-ORD
DRAINAGE PIT LID NOTATION	★ PROVIDE TEMPORARY LID ● CONVERT EXISTING LID
UPSTREAM INVERT LEVEL	PROPOSED EXISTING FUTURE
PIPE DIAMETER / GRADE	U/S 20.50 U/S 20.50 U/S 20.50
DISTANCE BETWEEN PITS	300/100.0 300/100.0 300/100.0
DOWNSTREAM INVERT LEVEL	50.0 50.0 50.0
TABLE DRAIN	— — — — —
BLACK ASPHALT WEARING COURSE	— — — — —
EXTEND ROAD PAVEMENT 3.0m PAST LIMIT OF ASPHALT AND INSTALL D4-5 CHEVRON BOARD	— — — — —
PROPOSED KERB TRANSITION	— — — — —
POST WITH STREET NAME PLATES	— — — — —
CHEVRON BOARD	— — — — —
PROPOSED STREET LIGHTS	— — — — —
PROPOSED UNDERGROUND POWER	— — — — —
PROPOSED COMMUNICATION CONDUIT	— — — — —
FILL BATTER	— — — — —
CUT BATTER	— — — — —
EXISTING CREEK	— — — — —
"W" BEAM BARRIER	— — — — —
ROCK SPALLS	— — — — —

STANDARD NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATION AND REQUIREMENTS OF THE LOCAL AUTHORITY.
- THE CONTRACTOR SHALL LIAISE WITH ALL PUBLIC UTILITIES PRIOR TO COMMENCING WORK TO LOCATE ALL SERVICES WITHIN THE CONTRACT SITE.
- ALL LEVELS SHALL BE LOCATED FROM ESTABLISHED BENCHMARKS AS ESTABLISHED BY THE PROJECT SURVEYOR.
- ALL CONNECTIONS TO EXISTING WORK SHALL BE SMOOTH AND OF NEAT APPEARANCE.
- REFER INTERSECTION DETAIL DRAWINGS FOR CORNER RADII AT INTERSECTIONS AND CUL-DE-SACS.
- ALL KERBING TO BE SEMI MOUNTABLE TYPE UNLESS NOTED OTHERWISE.
- TRANSITION BETWEEN DIFFERENT KERB TYPES SHALL BE MADE OVER A LENGTH OF 2m.
- WHERE POSSIBLE, STREET SIGNS TO BE STRAPPED TO STREET LIGHT POLES.
- ALL CUTS THROUGH LIMESTONE SHALL BE EXCAVATED TO A DEPTH OF 100mm BELOW SUB-GRADE LEVEL AND 200mm BELOW THE FINISHED LEVEL OF VERGES.
- REFER TO GUARDRAIL DRAWINGS FOR EXTENT AND DETAILS.

STAGE NOTES

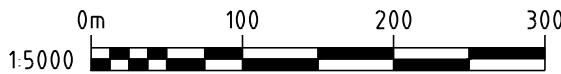
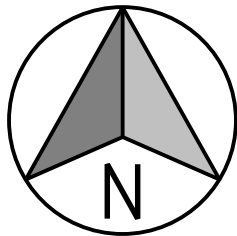
- LOCAL AUTHORITY - CITY OF SWAN
- PROJECT SURVEYOR - MNG
- REFERENCE DRAWINGS:

TRANSFORMER SITE EARTHWORKS 6480-06-250

INTERSECTION DETAILS 6480-06-620-621

DRIVEWAY DETAILS 6480-06-660-671
- STORMWATER PIPES SHALL BE REINFORCED CONCRETE (CLASS 4) R.R.J. MINIMUM Ø375 UNLESS NOTED OTHERWISE.
- CROSSOVERS TO BE IN ACCORDANCE WITH THE LOCAL AUTHORITY DRAWING STD-47-1s FOR RURAL CROSSOVERS. DRAINAGE CROSSING PIPE AND HEADWALL SIZES TO BE DN375 UNLESS INDICATED OTHERWISE.
- TYPICAL BATTERS ARE 1 IN 3 UNLESS OTHERWISE STATED.

0	26/09/25	HVD	SM	م. واليس	ISSUED FOR CONSTRUCTION
B	01/07/25	HVD	SM	M. WALLIS	ISSUED FOR TENDER
A	13/06/25	HVD	SM	M. WALLIS	ISSUED FOR TENDER/APPROVAL
REV	DATE	DRN	CKD	APP	AMENDMENT



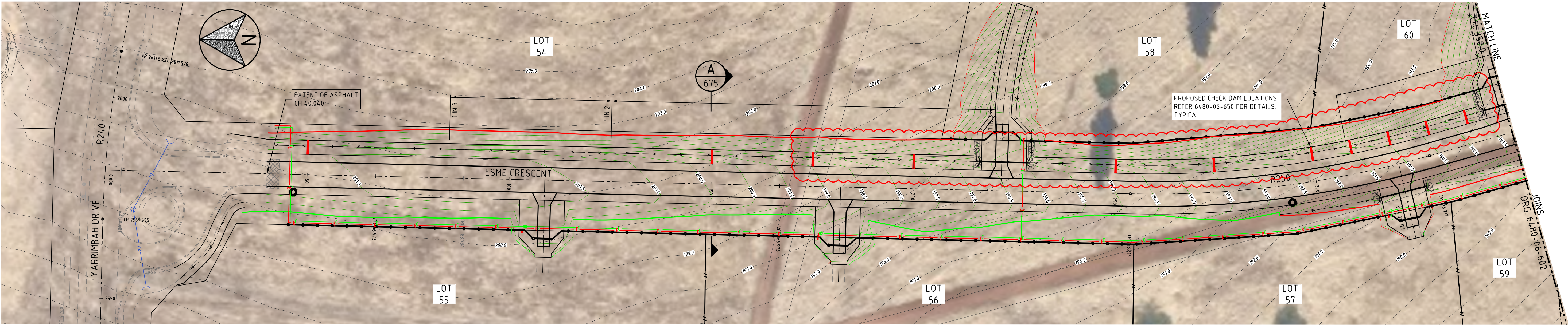
COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction.
This plan is not to be used for construction unless issued as revision 0 or higher.

CW Cossill & Webley
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
Street Address
B12 (Level 2) 431 Roberts Road
Subiaco WA 6008
T (08) 9422 5800 F (08) 9422 5801 E admin@cosweb.com.au

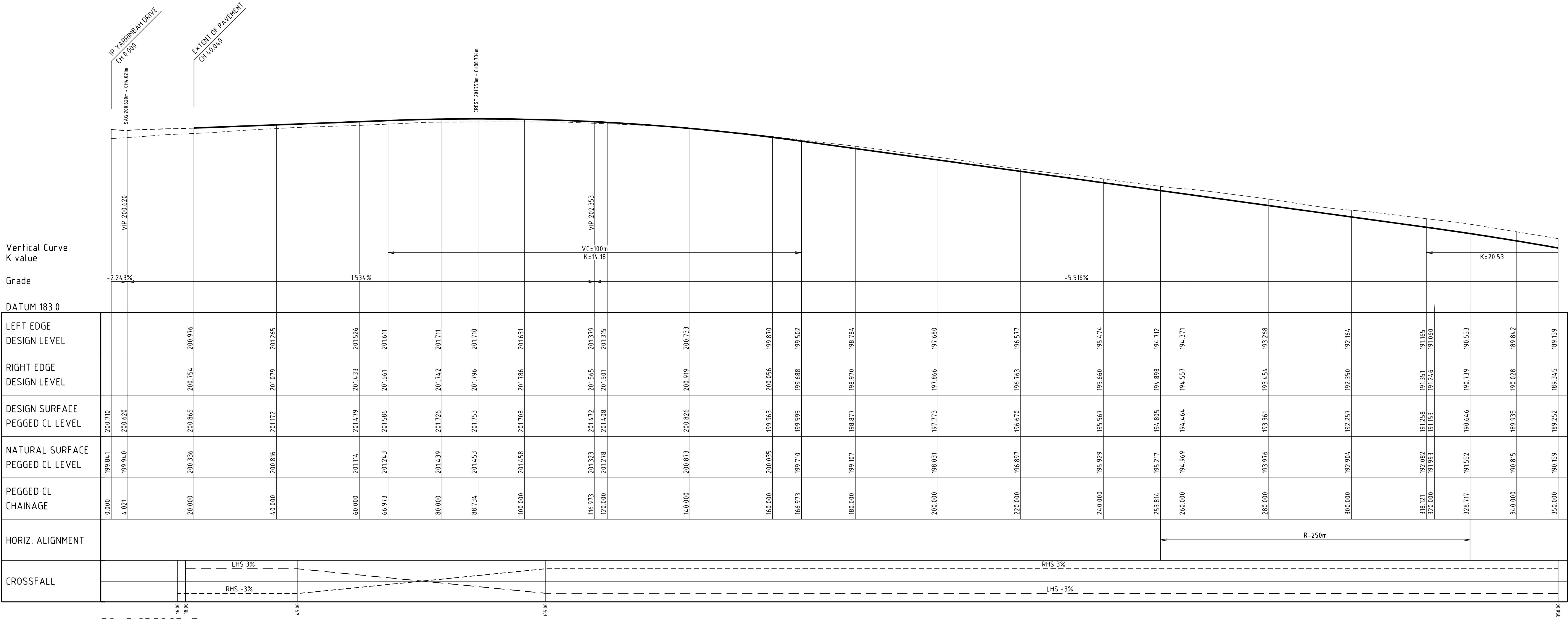
CLIENT
QUBE
APPROVED 30.09.25
DESIGNED ARH
SCALE 1:5000

PROJECT
YARRIMBAH HEIGHTS - STAGE 06
TITLE
ROADWORKS PLAN AND PROFILE
SHEET 1 OF 8
WAPC No. 201629
DRAWING No. 6480-06-600
REVISION 0

ORIGINAL SIZE
A1



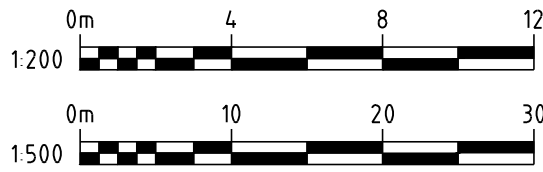
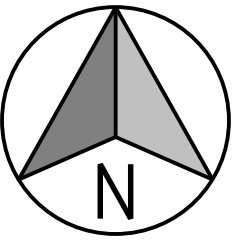
PLAN
1500



ESME CRESCENT
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:200

FOR NOTES AND LEGEND REFER DRAWING 6480-06-600

2	18 12 25	HVD	-		EXTEND OF ROCK SPALLS AMENDED, ADDITIONAL CHECK DAMS
1	29 10 25	HVD	SM	M. WALLIS	VERGE GRADING AMENDED AS SHOWN, DRIVEWAY CROSSOVERS AMENDED
0	26 09 25	HVD	SM	A. THOMSON	ISSUED FOR APPROVAL
B	01 07 25	HVD	SM	M. WALLIS	ISSUED FOR TENDER
A	13 06 25	HVD	SM	M. WALLIS	ISSUED FOR TENDER/APPROVAL
REV	DATE	DRN	CKD	APP	AMENDMENT



COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction.
This plan is not to be used for construction unless issued as revision 0 or higher.

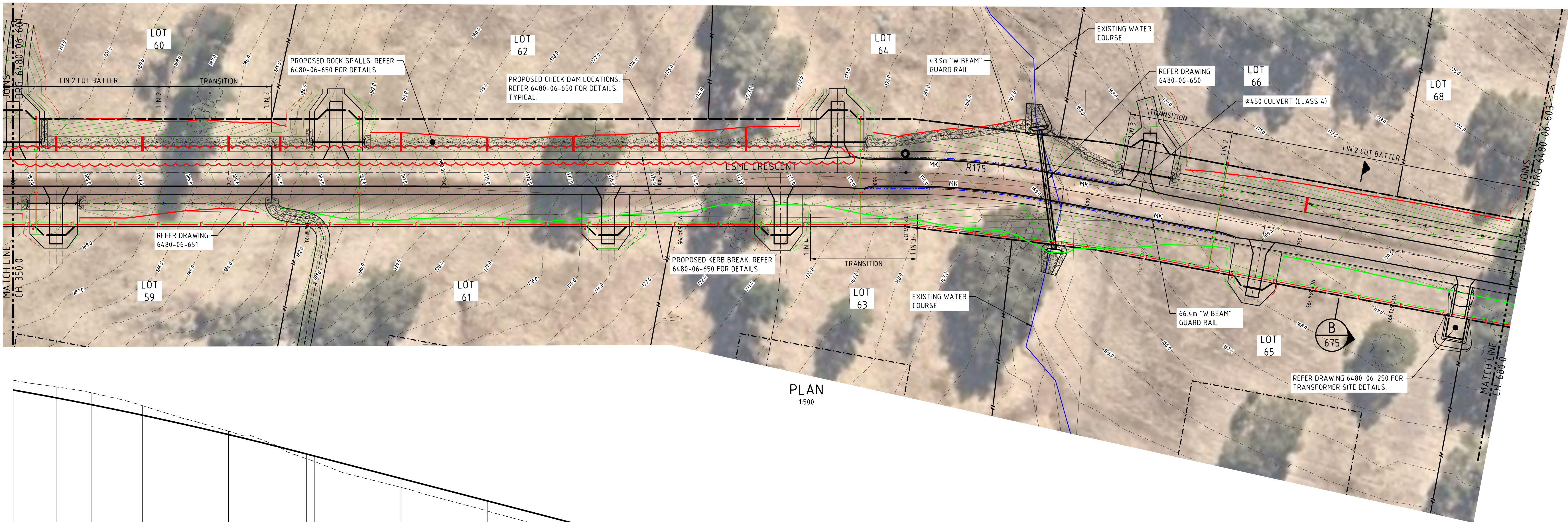
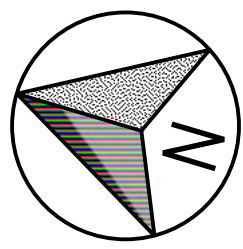
CW COSSILL & WEBLEY
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
T (08) 9422 5800
Street Address
Level 1, 502 Hay Street
Subiaco WA 6008
E perth.reception@cosweb.com.au

CLIENT
QUBE
APPROVED

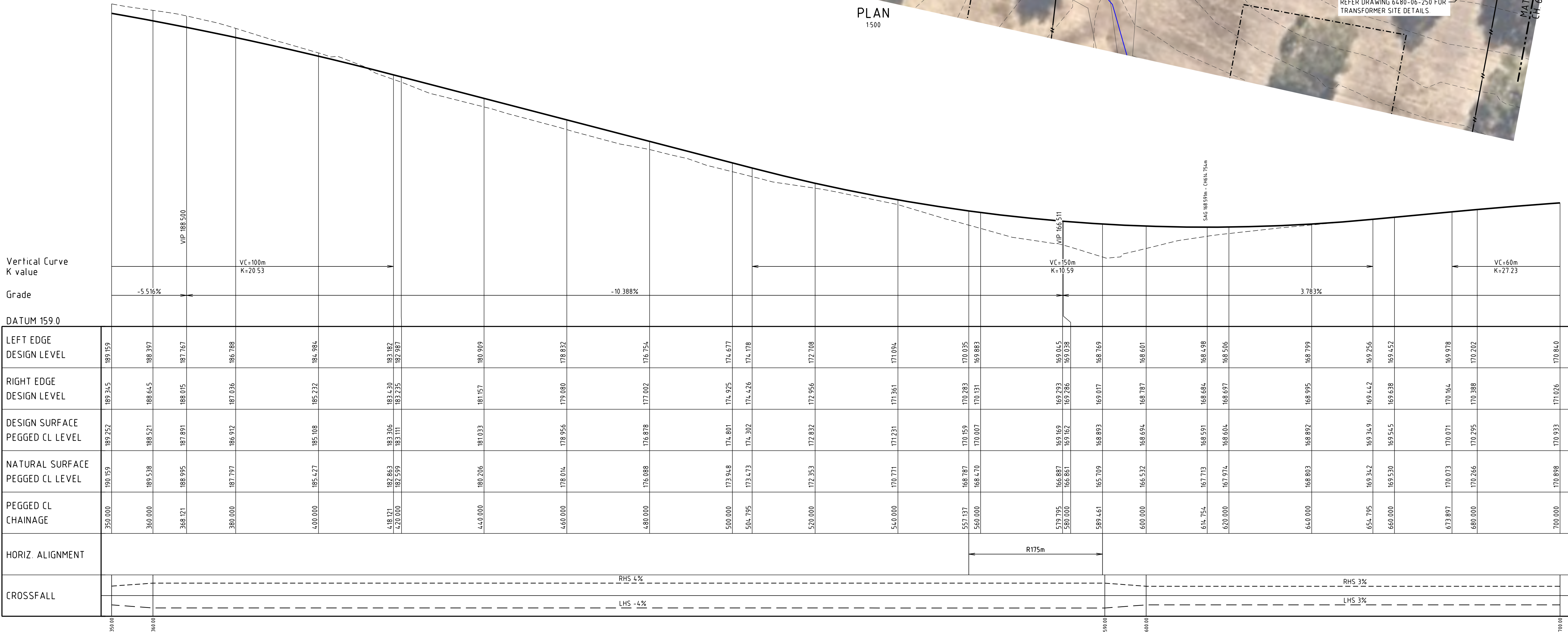
DESIGNED
ARH
SCALE
AS SHOWN

PROJECT
YARRIMBAH HEIGHTS - STAGE 06
TITLE
ROADWORKS PLAN AND PROFILE
SHEET 2 OF 8
WAPC No.
201629
DRAWING No.
6480-06-601
REVISION
2

ORIGINAL
SIZE
A1



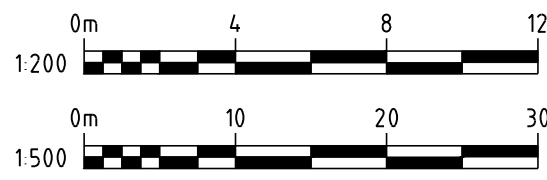
PLAN
1500



ESME CRESCENT CONT'D
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:200

FOR NOTES AND LEGEND REFER DRAWING 6480-06-600

4	16.03.26	HVD	SM		KERB AND OPENINGS REMOVED CH350 - CH544
3	22.01.26	HVD	SM	M. WALLIS	LOT 66 CROSSOVER SHIFTED
2	18.12.25	HVD	SM	M. WALLIS	EXTEND OF ROCK SPALLS AMENDED, ADDITIONAL CHECK DAMS AND KERBING
1	29.10.25	HVD	SM	M. WALLIS	DRIVEWAY CROSSOVERS AMENDED
0	26.09.25	HVD	SM	A. THOMSON	ISSUED FOR CONSTRUCTION
REV	DATE	DRN	CKD	APP	AMENDMENT



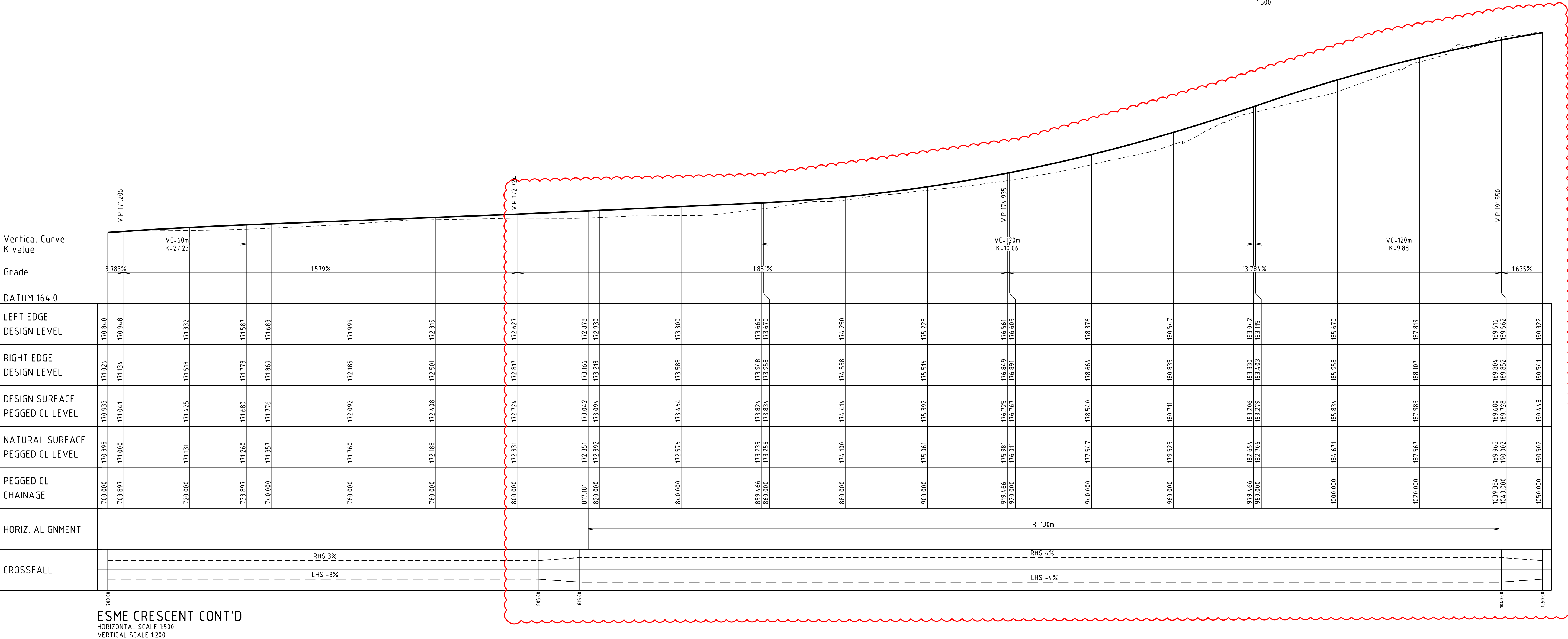
COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction.
This plan is not to be used for construction unless issued as revision 0 or higher.

CW COSSILL & WEBLEY
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
Street Address
Level 1, 502 Hay Street
Subiaco WA 6008
T (08) 9422 5800
E perth.reception@cosweb.com.au

CLIENT
QUBE
APPROVED 30.09.25
DESIGNED ARH
SCALE 1:500, 1:200

PROJECT
YARRIMBAH HEIGHTS - STAGE 06
TITLE
ROADWORKS PLAN AND PROFILE
SHEET 3 OF 8
WAPC No. 201629
DRAWING No. 6480-06-602
REVISION 4

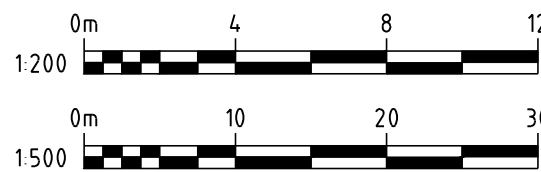
ORIGINAL
SIZE
A1



ESME CRESCENT CONT'D
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:200

FOR NOTES AND LEGEND REFER DRAWING 6480-06-600

3	02.12.25	HVD	SM		GRADING AMENDED CH800-1100
2	14.11.25	HVD	SM	M. WALLIS	CULVERT 4 LOCATION AMENDED, ROADSIDE SWALE EXTENDED
1	29.10.25	HVD	SM	M. WALLIS	CULVERT CROSSING MOVED TO SUIT CAD BOUNDARY, DRIVEWAY CROSSOVERS AMENDED
0	26.09.25	HVD	SM	A. THOMSON	ISSUED FOR CONSTRUCTION
B	01.07.25	HVD	SM	M. WALLIS	ISSUED FOR TENDER
REV	DATE	DRN	CKD	APP	AMENDMENT



COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction unless issued as revision 0 or higher.

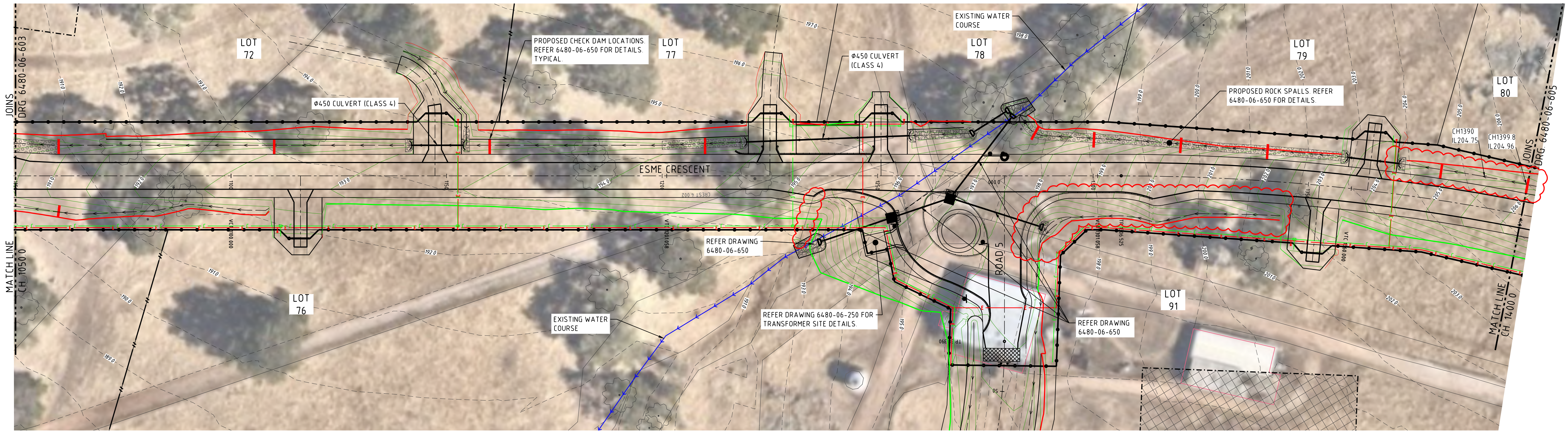
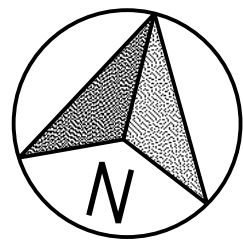
CW COSSILL & WEBLEY
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
T (08) 9422 5800
Street Address
Level 1, 502 Hay Street
Subiaco WA 6008
E perth.reception@cosweb.com.au

CLIENT
QUBE
APPROVED

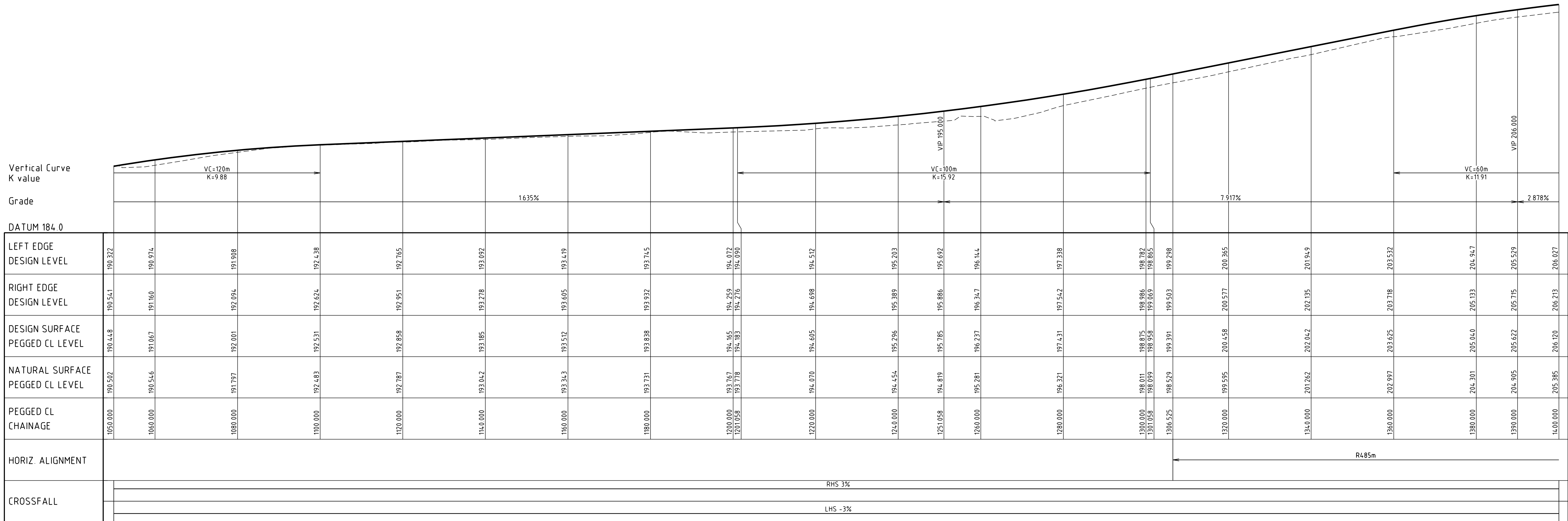
30.09.25
DESIGNED
ARH
SCALE
1:500, 1:200

PROJECT
YARRIMBAH HEIGHTS - STAGE 06
TITLE
ROADWORKS PLAN AND PROFILE
SHEET 4 OF 8
WAPC No.
201629
DRAWING No.
6480-06-603
REVISION
3

ORIGINAL SIZE
A1



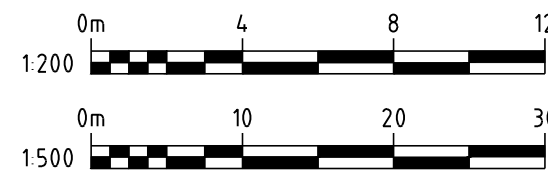
PLAN
1:500



ESME CRESCENT CONT'D
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:200

FOR NOTES AND LEGEND REFER DRAWING 6480-06-600

5	18 12 25	HVD	-		EXTEND OF ROCK SPALLS AND CHECK DAMS AMENDED
4	02 12 25	HVD	SM	M. WALLIS	GRADING AMENDED CH800-1050
3	12 11 25	AAD	SM	M. WALLIS	ISSUED FOR CONSTRUCTION
2	11 11 25	HVD	SM	M. WALLIS	DRAIN AMENDED AS SHOWN
1	29 10 25	HVD	SM	M. WALLIS	DRIVEWAY CROSSOVERS AMENDED
REV	DATE	DRN	CKD	APP	AMENDMENT



COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.

This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction.

This plan is not to be used for construction unless issued as revision 0 or higher.

CW COSSILL & WEBLEY
CONSULTING ENGINEERS

Mailing Address
PO Box 680
Subiaco WA 6904

Street Address
Level 1, 502 Hay Street
Subiaco WA 6008

T (08) 9422 5800
E perth.reception@cosweb.com.au

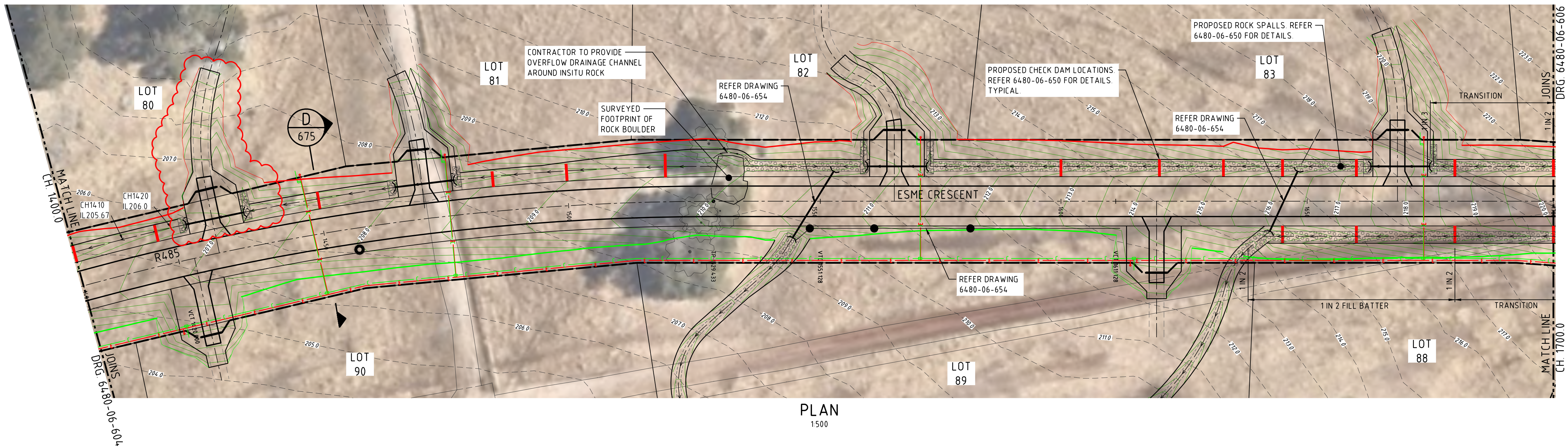
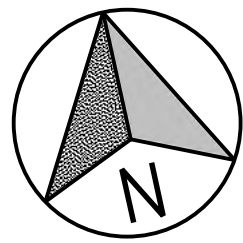
QUBE

APPROVED 30 09 25

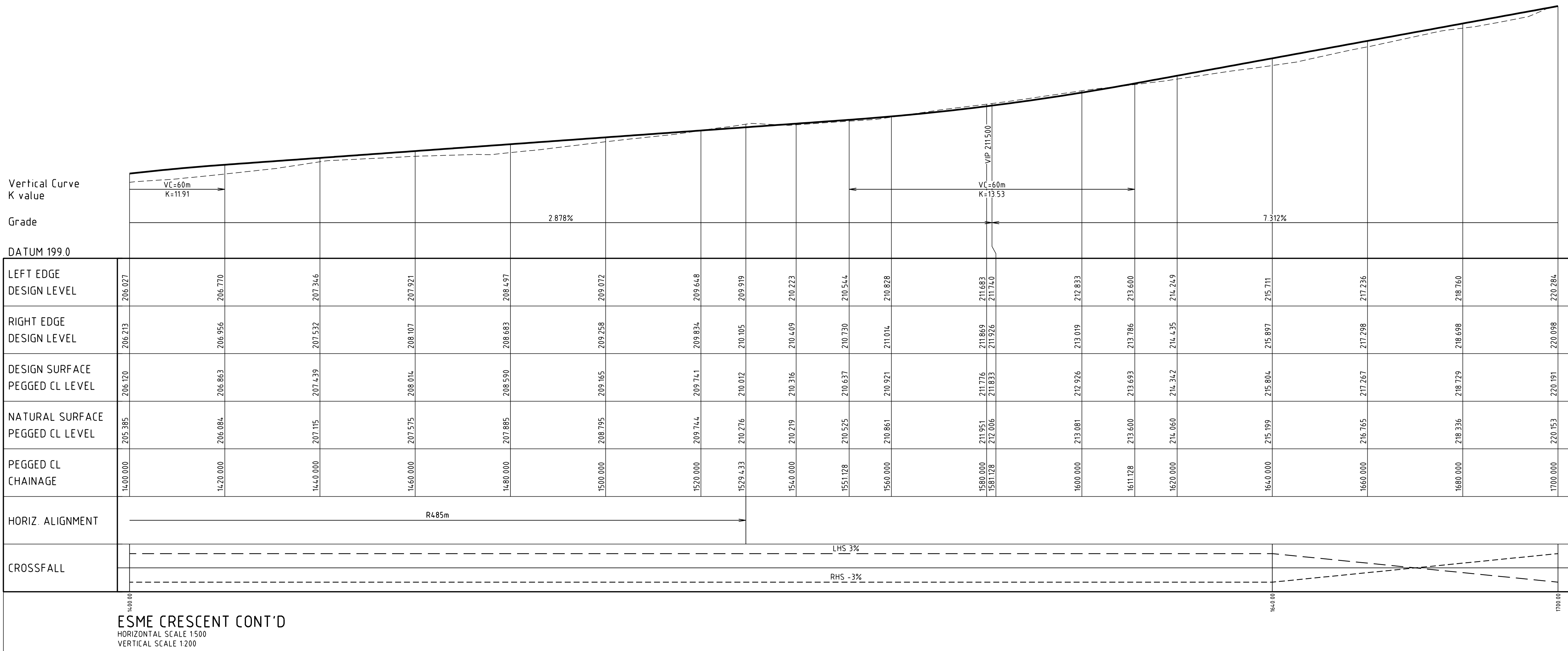
DESIGNED ARH
SCALE 1:500, 1:200

PROJECT YARRIMBAH HEIGHTS - STAGE 06
TITLE ROADWORKS PLAN AND PROFILE
SHEET 5 OF 8
WAPC No. 201629
DRAWING No. 6480-06-604
REVISION 5

ORIGINAL
SIZE
A1



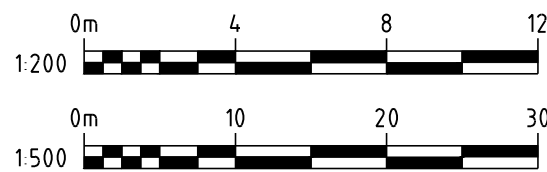
PLAN
1:500



ESME CRESCENT CONT'D
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:200

FOR NOTES AND LEGEND REFER DRAWING 6480-06-600

5	22.01.26	HVD	SM	-	LOT 80 CROSSOVER SHIFTED
4	18.12.25	HVD	SM	M. WALLIS	EXTEND OF ROCK SPALLS AMENDED, ADDITIONAL CHECK DAMS
3	02.12.25	HVD	SM	M. WALLIS	ADDITIONAL CULVERT/DRAINAGE OUTLET AS SHOWN
2	12.11.25	HVD	SM	M. WALLIS	SURVEY SHOWN
1	29.10.25	HVD	SM	M. WALLIS	DRIVEWAY CROSSOVERS AMENDED
REV	DATE	DRN	CKD	APP	AMENDMENT



COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction unless issued as revision D or higher.

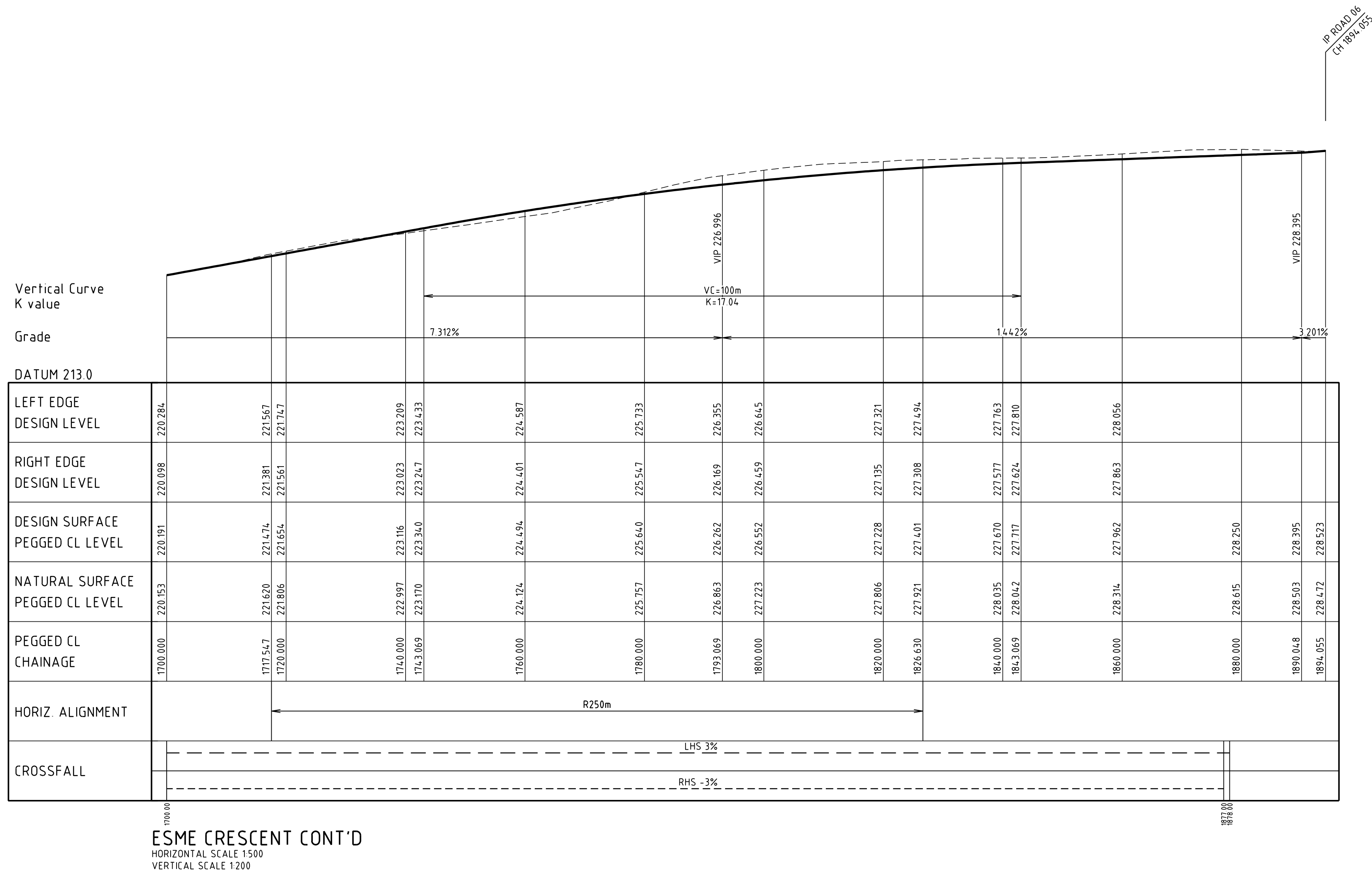
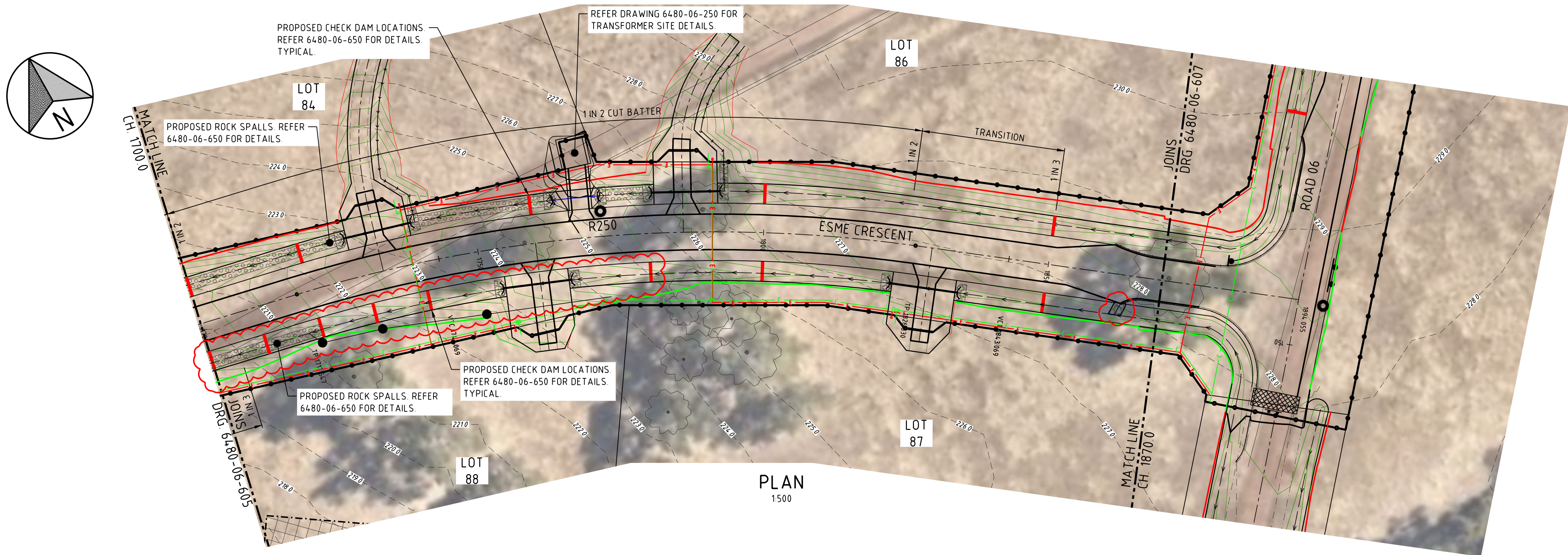
CW COSSILL & WEBLEY
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
T (08) 9422 5800
Street Address
Level 1, 502 Hay Street
Subiaco WA 6008
E perth.reception@cosweb.com.au

CLIENT
QUBE
APPROVED
30.09.25
DESIGNED
ARH
SCALE
1:500, 1:200

PROJECT
YARRIMBAH HEIGHTS - STAGE 06
TITLE
ROADWORKS PLAN AND PROFILE
SHEET 6 OF 8
WAPC No.
201629
DRAWING No.
6480-06-605
REVISION
5

ORIGINAL
SIZE
A1

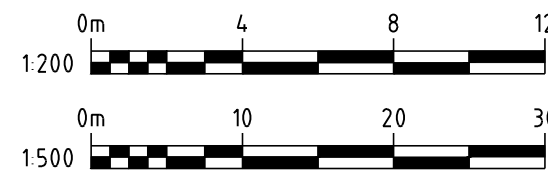
P:\6480 Bulbin Brook Sewer Rural\6480-06\6480-06-600-607.dwg, 18/12/2025 12:04:59 PM, Iamrv, Digital Signing PDF p3.1.1 - CV Reference



ESME CRESCENT CONT'D
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:200

FOR NOTES AND LEGEND REFER DRAWING 6480-06-600

2	18 12 25	HVD	-		EXTEND OF ROCK SPALLS AMENDED, ADDITIONAL CHECK DAMS
1	29 10 25	HVD	SM	M. WALLIS	DRIVEWAY CROSSOVERS AMENDED
0	26 09 25	HVD	SM	A. THOMSON	ISSUED FOR CONSTRUCTION
B	01 07 25	HVD	SM	M. WALLIS	ISSUED FOR TENDER
A	13 06 25	HVD	SM	M. WALLIS	ISSUED FOR TENDER/APPROVAL
REV	DATE	DRN	CKD	APP	AMENDMENT



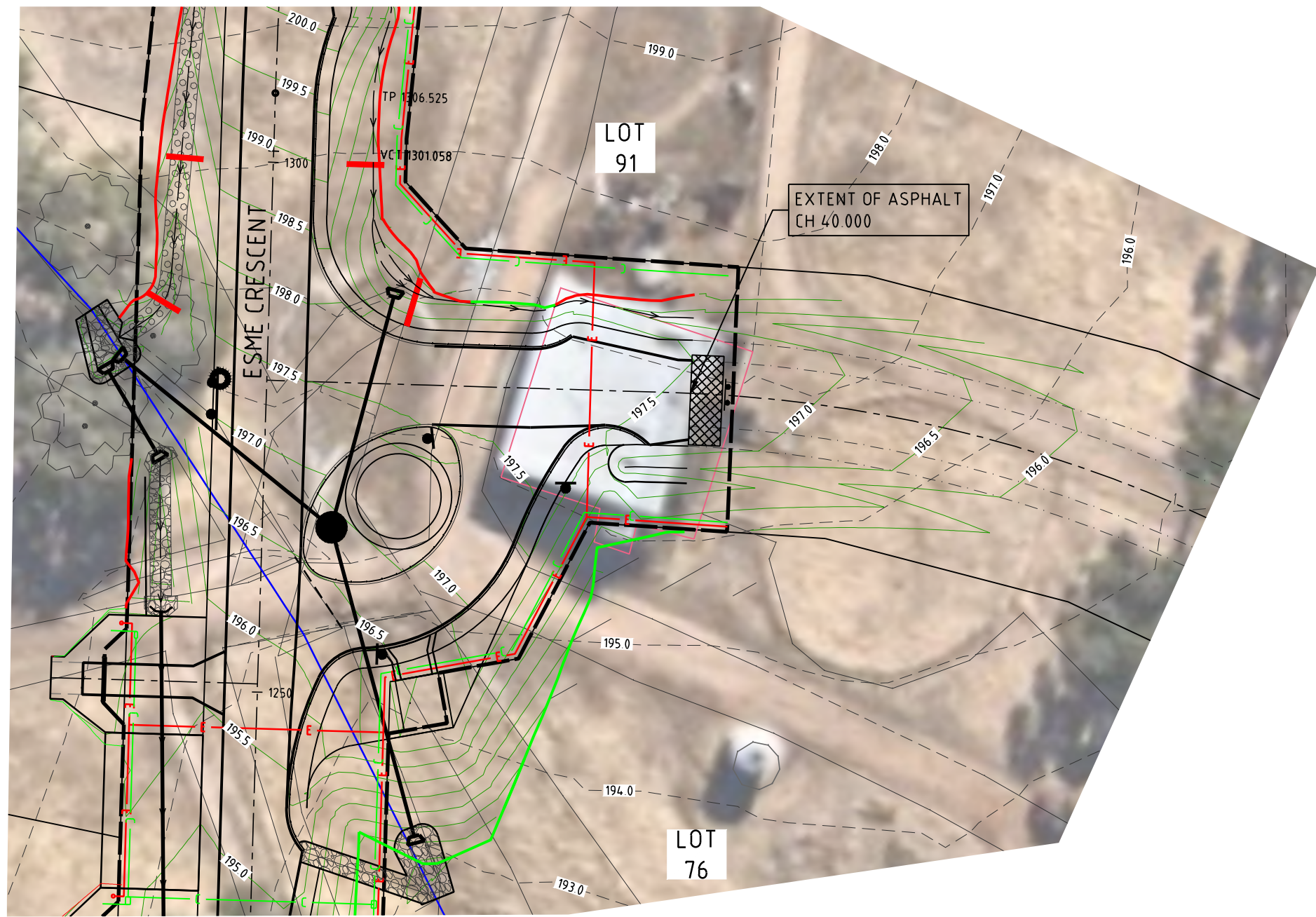
COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction.
This plan is not to be used for construction unless issued as revision 0 or higher.

CW COSSILL & WEBLEY
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
T (08) 9422 5800
Street Address
Level 1, 502 Hay Street
Subiaco WA 6008
E perth.reception@cosweb.com.au

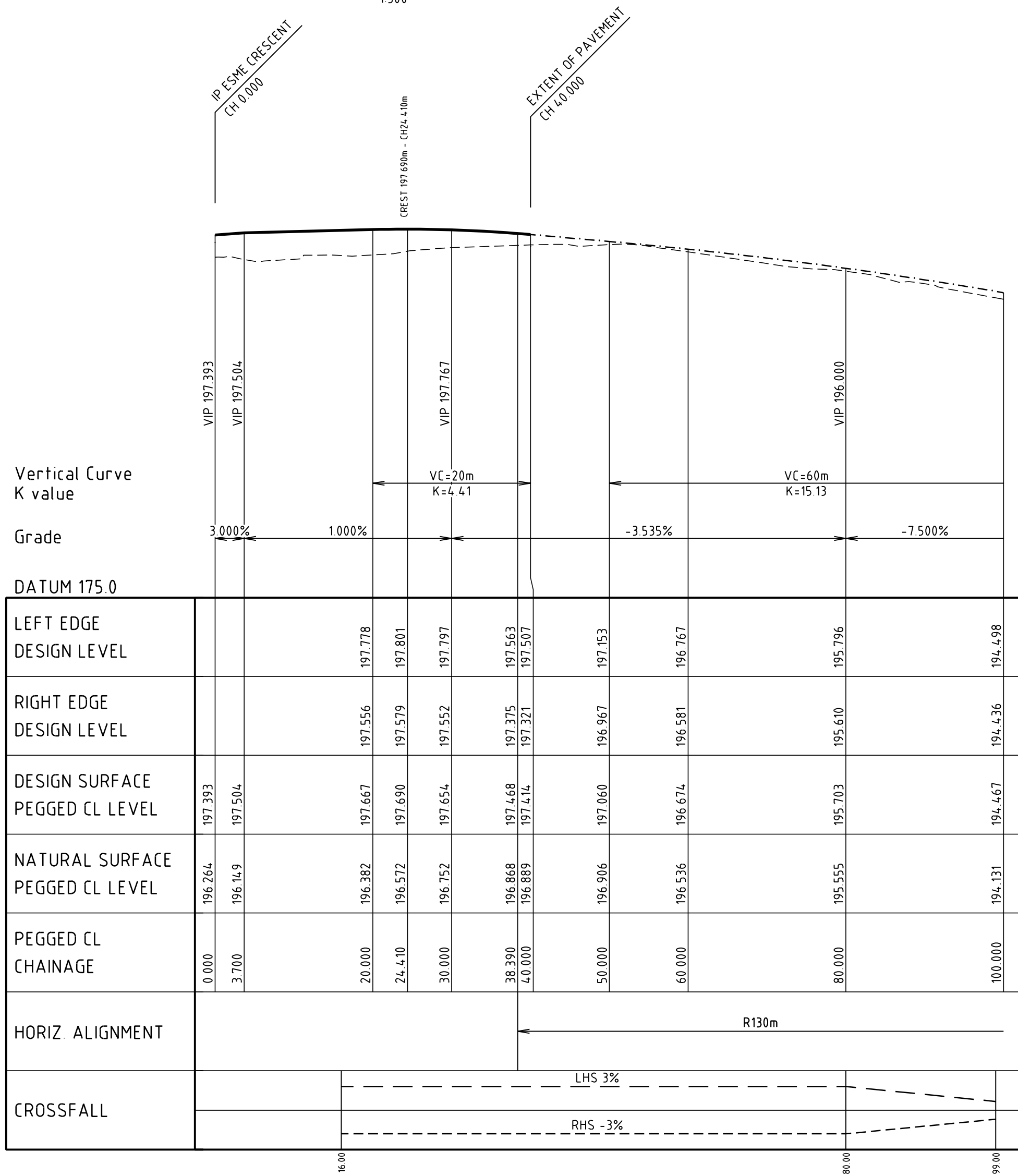
CLIENT
QUBE
APPROVED 30 09 25
DESIGNED ARH
SCALE 1:500, 1:200

PROJECT
YARRIMBAH HEIGHTS - STAGE 06
TITLE
ROADWORKS PLAN AND PROFILE
SHEET 7 OF 8
WAPC No.
201629
DRAWING No.
6480-06-606
REVISION
2

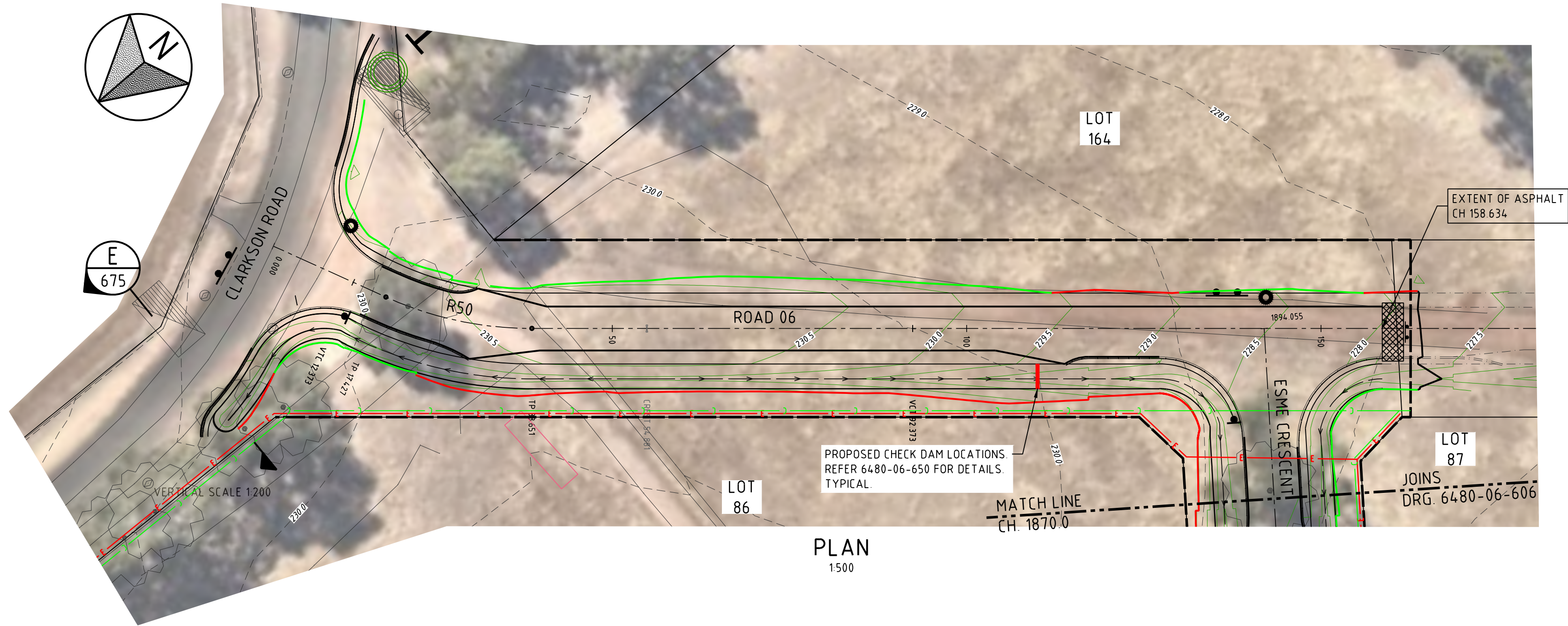
ORIGINAL SIZE
A1



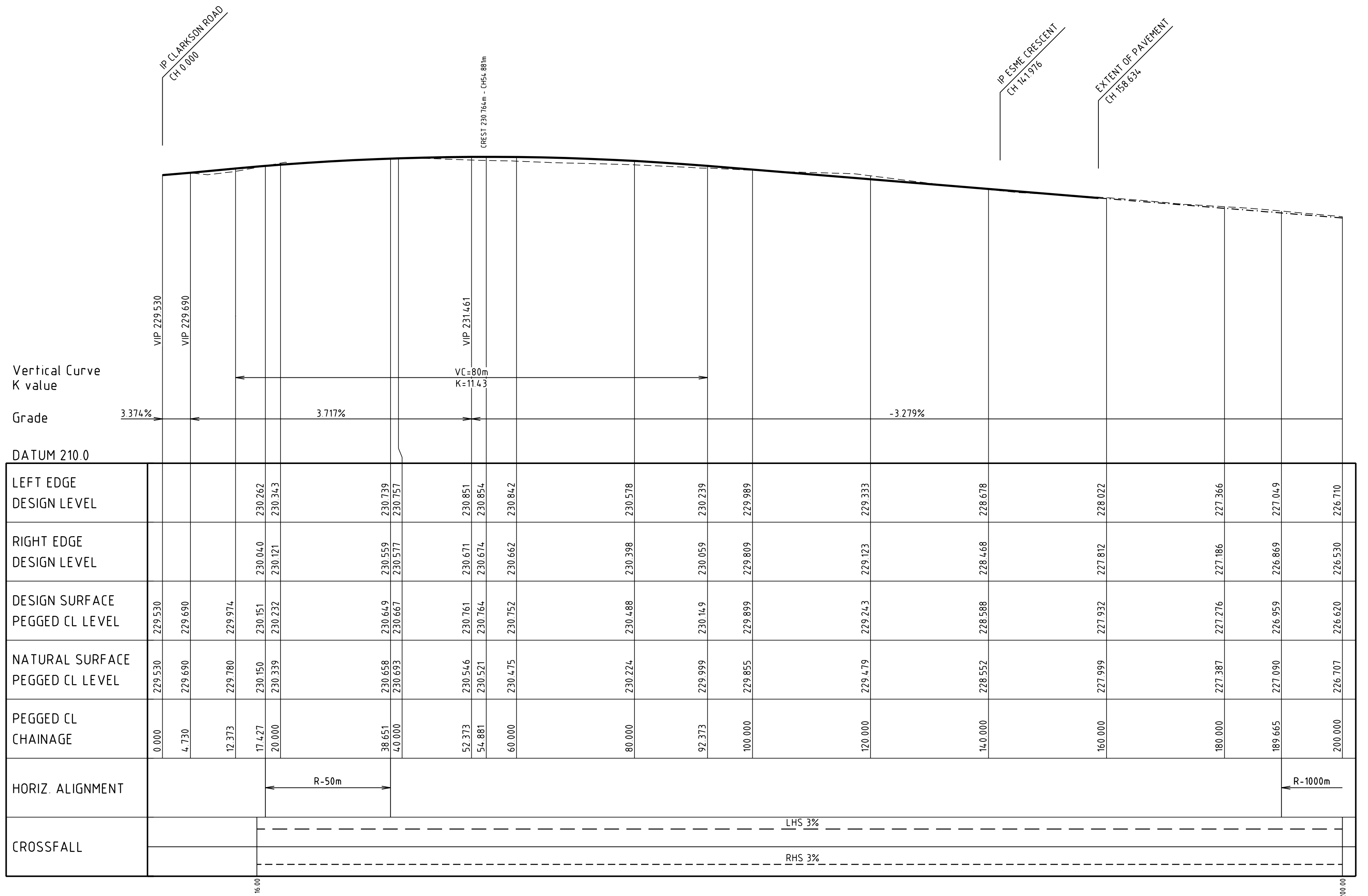
PLAN
1500



ROAD 05
HORIZONTAL SCALE 1500
VERTICAL SCALE 1200



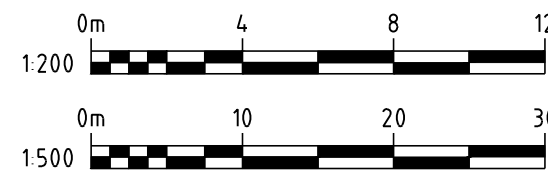
PLAN
1500



ROAD 06
HORIZONTAL SCALE 1500
VERTICAL SCALE 1200

FOR NOTES AND LEGEND REFER DRAWING 6480-06-600

0	26.09.25	HVD	SM	M. WALLIS	ISSUED FOR CONSTRUCTION
B	01.07.25	HVD	SM	M. WALLIS	ISSUED FOR TENDER
A	13.06.25	HVD	SM	M. WALLIS	ISSUED FOR TENDER/APPROVAL
REV	DATE	DRN	CKD	APP	AMENDMENT



COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction.
This plan is not to be used for construction unless issued as revision 0 or higher.

CW Cossill & Webley
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
Street Address
B12 (Level 2) 431 Roberts Road
Subiaco WA 6008
T (08) 9422 5800 F (08) 9422 5801 E admin@cosweb.com.au

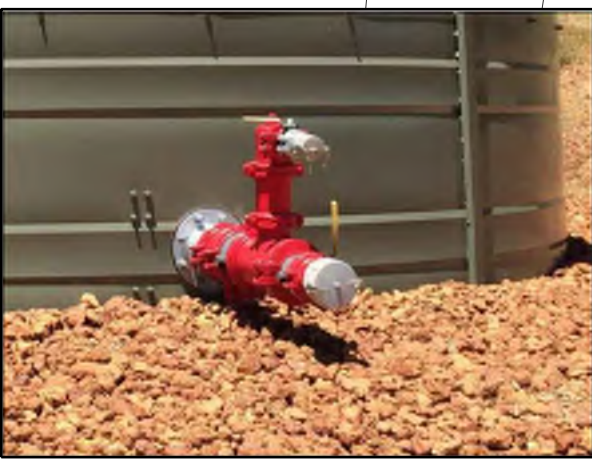
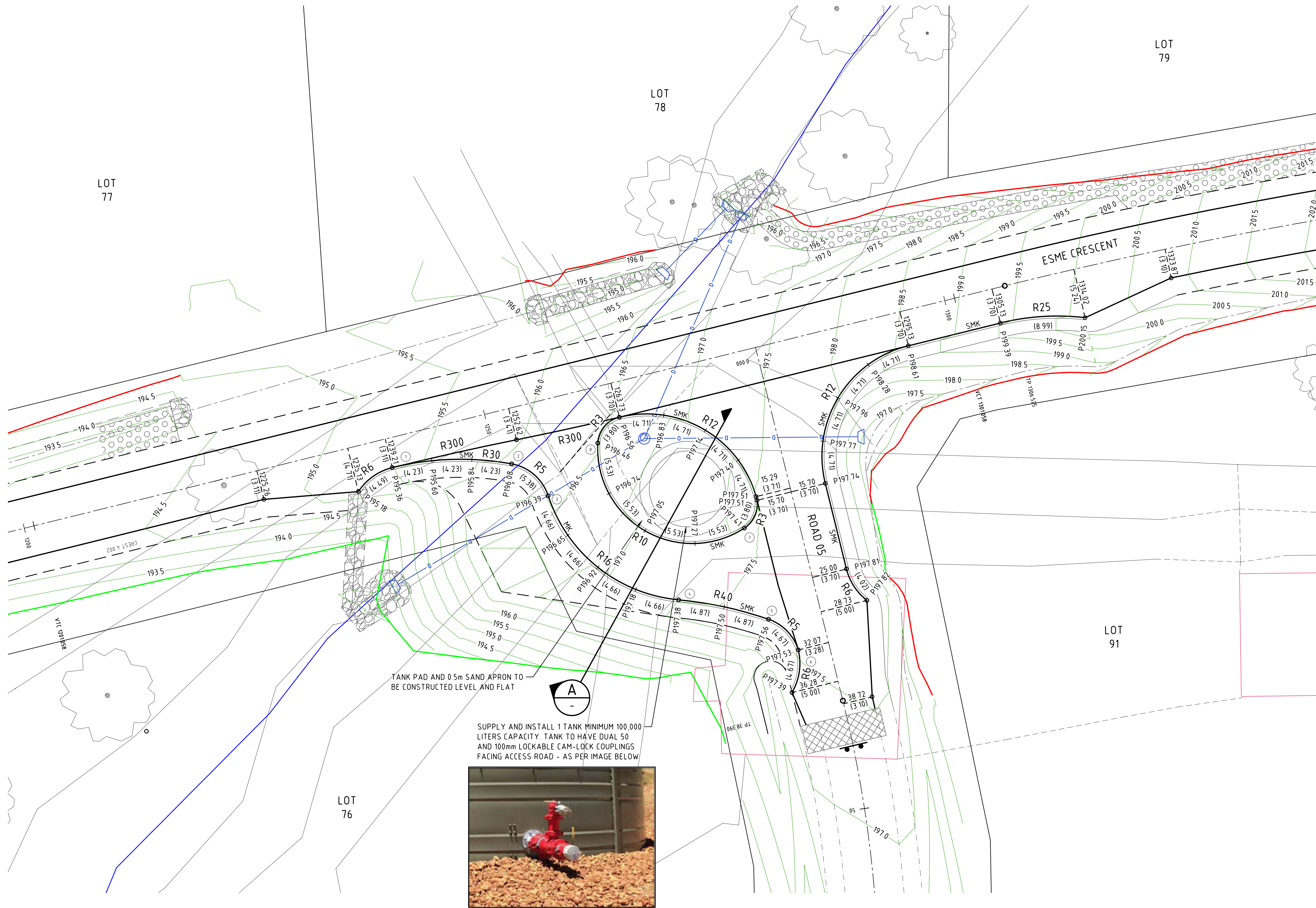
CLIENT
QUBE
APPROVED
30.09.25
DESIGNED
ARH
SCALE
1:500, 1:200

PROJECT
YARRIMBAH HEIGHTS - STAGE 06
TITLE
ROADWORKS PLAN AND PROFILE
SHEET 8 OF 8
WAPC No.
201629
DRAWING No.
6480-06-607
REVISION
0

ORIGINAL
SIZE
A1

Appendix C Water tank civil plan and specifications

P:\6480 Bulbin Brook Sewer Pipeline\6480-06-620-621.dwg, 26/09/2025 3:22:11 PM, hnmv, Digital Signing PDF, pc3, 1.1, - CW Reference



NOTES

- ALL CO-ORDINATES AND LEVELS SHOWN ON THIS DRAWING SHALL BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE SPECIFICATION AND ALSO THE REQUIREMENTS OF THE CITY OF SWAN AND THE TANK MANUFACTURER.
- THE CONTRACTOR SHALL LIAISE WITH ALL RELEVANT AUTHORITIES TO LOCATE ALL EXISTING SERVICES WITHIN THE CONTRACT AREA PRIOR TO THE COMMENCEMENT OF WORK. SERVICES INFORMATION SHOWN ON THE DRAWINGS IS INDICATIVE ONLY AND MAY NOT BE COMPLETE. WHERE EXISTING AND PROPOSED WORKS CONFLICT, LEVELS ARE TO BE TAKEN AND SUPPLIED TO THE SUPERINTENDENT IMMEDIATELY.
- ALL HEIGHTS ARE TO A.H.D. AND ALL LEVELS SHALL BE DERIVED FROM ESTABLISHED BENCHMARKS.
- ALL BENCHMARKS ARE TO BE PROTECTED AND PRESERVED.
- ALL KERBING TO BE SEMI MOUNTABLE U.S.O. (ALL KERBING ON A RADIUS OF 40m OR LESS MUST BE KEYED).
- ALL SETOUT POINTS AND RADII ARE TO FACE OF KERB.
- ALL CONSTRUCTION SHALL MAKE SMOOTH CONNECTION TO EXISTING WORK.
- GUIDE POSTS TO BE INSTALLED ALONG ROADSIDE IN ACCORDANCE WITH AST142.2-2009.
- ALL PAVEMENT TO BE CONSTRUCTED USING BLACK ASPHALT U.S.O.
- THE CONTRACTOR SHALL CONTACT THE SUPERINTENDENT WHEN ALL CONCRETE FORMWORK IS IN POSITION FOR INSPECTION AND APPROVAL, PRIOR TO THE POURING OF ANY CONCRETE.
- 'AS CONSTRUCTED' DRAWINGS ARE TO BE PREPARED TO THE REQUIREMENT OF THE CITY OF SWAN.

LEGEND

DESCRIPTION	SYMBOL
FINISHED SURFACE CONTOUR MAJOR	25.0
FINISHED SURFACE CONTOUR MINOR	25.1
FINISHED PAVEMENT LEVEL	P25.00
CHAINAGE / OFFSET SETOUT INFORMATION	10.00 (3.00)
PROPOSED ROAD	
EXISTING ROAD	
FUTURE ROAD	
PROPOSED KERB TRANSITION	///
FILL BATTER	
CUT BATTER	
EXISTING CREEK	
POST WITH STREET NAME PLATES	
CHEVRON BOARD	

NUMBER	EASTING	NORTHING
1	33701.022	49314.095
2	33713.609	49314.485
3	33717.465	49314.116
4	33731.220	493130.140
5	33740.711	493128.088
6	33743.842	493124.855
7	33738.153	493137.706
8	33722.696	493146.679

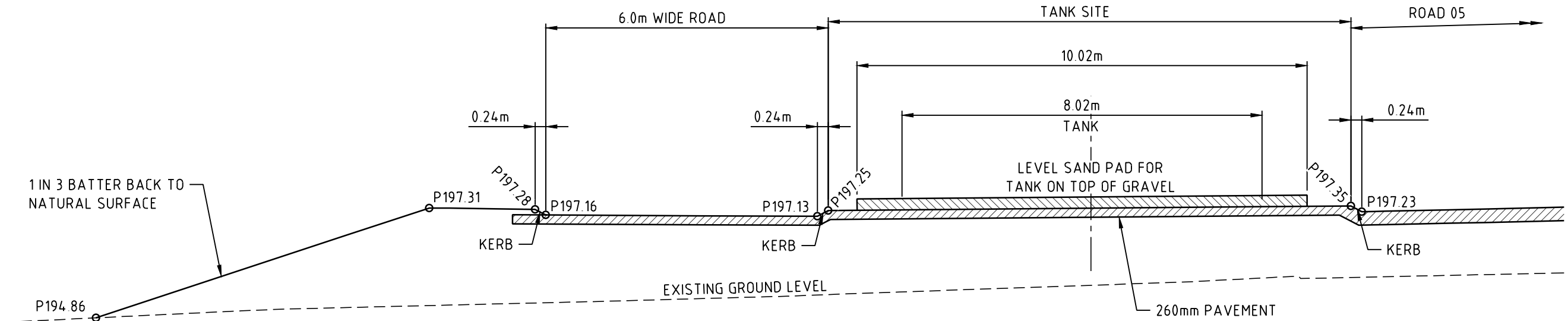
NOTE: ALL COORDINATES ARE IN PCG94

FIRE TANK ACCESS INFORMATION

COURSE	MATERIAL	THICKNESS (mm)
SUB-BASE	CRUSHED LIMESTONE / FERRICRETE / ROCK	260
BASE COURSE	CRUSHED ROCK / GRAVEL	100
SEAL PRIMER	-	0
ASPHALT	-	30
TOTAL THICKNESS		390

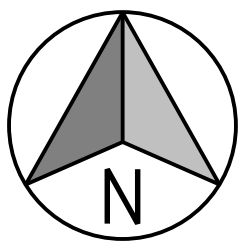
NOTICE TO CONTRACTOR

IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE THE NATURE AND LOCATION OF ALL SERVICES WHICH MAY BE ENCOUNTERED AND TO CONSULT WITH THE RELEVANT SERVICE AUTHORITIES PRIOR TO COMMENCEMENT OF EXCAVATIONS. FAILURE TO DO SO OR TO TAKE DUE CARE SHALL NOT LIMIT THE CONTRACTOR'S LIABILITY FOR REPAIR OF ALL SERVICES DAMAGED BY HIM DURING CONSTRUCTION WORKS. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY FOR THE PROTECTION OF ALL EXISTING SERVICES.



SECTION A-A
1:100

0	26.09.25	HVD	SM	M. WALLIS	ISSUED FOR CONSTRUCTION
B	01.07.25	HVD	SM	M. WALLIS	ISSUED FOR TENDER
A	13.06.25	HVD	SM	M. WALLIS	ISSUED FOR TENDER/APPROVAL
REV	DATE	DRN	CKD	APP	AMENDMENT



COPYRIGHT
The concepts and information contained in this document are the Copyright of Cossill & Webley Pty Ltd. Use or copying of the document in whole or part without the written permission of Cossill & Webley Pty Ltd constitutes an infringement of copyright.
This plan shall only be printed in full colour. If this plan is printed in black and white or grey scale it is not to be used for construction.
This plan is not to be used for construction unless issued as revision 0 or higher.

CW Cossill & Webley
CONSULTING ENGINEERS
Mailing Address
PO Box 680
Subiaco WA 6904
Street Address
B12 (Level 2) 431 Roberts Road
Subiaco WA 6008
T (08) 9422 5800 F (08) 9422 5801 E admin@cosweb.com.au

QUBE
APPROVED 30.09.25
DESIGNED ARH
SCALE 1:250

PROJECT YARRIMBAH HEIGHTS - STAGE 06
TITLE INTERSECTION DETAILS
SHEET 1
WAPC No. 201629
DRAWING No. 6480-06-620
REVISION 0

ORIGINAL SIZE A1

Appendix D Approved firebreak variations

Legend:

- Lot boundary
- 3m wide F/Bk
- 6m wide F/Bk
- Building envelope

Notes & Site Constraints

Other Notes (eg. pipelines, telecoms)

- 6m firebreak to Southern boundary is required per condition of subdivision approval
- Shown dam is due to be back filled to allow for future road alignment, potential to realign firebreaks in due course
- Site review required at renewal in 2031 to confirm if realignment of firebreaks is suitable

Note: This property in its entirety must be managed in accordance with the City of Swan's Fire Hazard Reduction Notice (Firebreak Notice) under the Bush Fires Act 1954.



Alternative Firebreak Plan - Valid Until 14 May 2031

Future Lot 76 Esme Crescent, Bullsbrook

Approved by

Alex Cardell-Oliver

Date: 15 May 2026

Legend:

-  Lot boundary
-  3m wide F/Bk
-  6m wide F/Bk
-  Building envelope

Notes & Site Constraints

Other Notes (eg. pipelines, telecoms)

Note: This property in its entirety must be managed in accordance with the City of Swan's Fire Hazard Reduction Notice (Firebreak Notice) under the Bush Fires Act 1954.



Alternative Firebreak Plan - Valid Until 14 May 2031

Future Lot 77 Esme Crescent, Bullsbrook

Approved by

Alex Cardell-Oliver

Date: 15 May 2026

Legend:

-  Lot boundary
-  3m wide F/Bk
-  6m wide F/Bk
-  Building envelope

Notes & Site Constraints

Other Notes (eg. pipelines, telecoms)

Note: This property in its entirety must be managed in accordance with the City of Swan's Fire Hazard Reduction Notice (Firebreak Notice) under the Bush Fires Act 1954.



Alternative Firebreak Plan - Valid Until 14 May 2031

Future Lot 78 Esme Crescent, Bullsbrook

Approved by

Alex Cardell-Oliver

Date: 15 May 2026

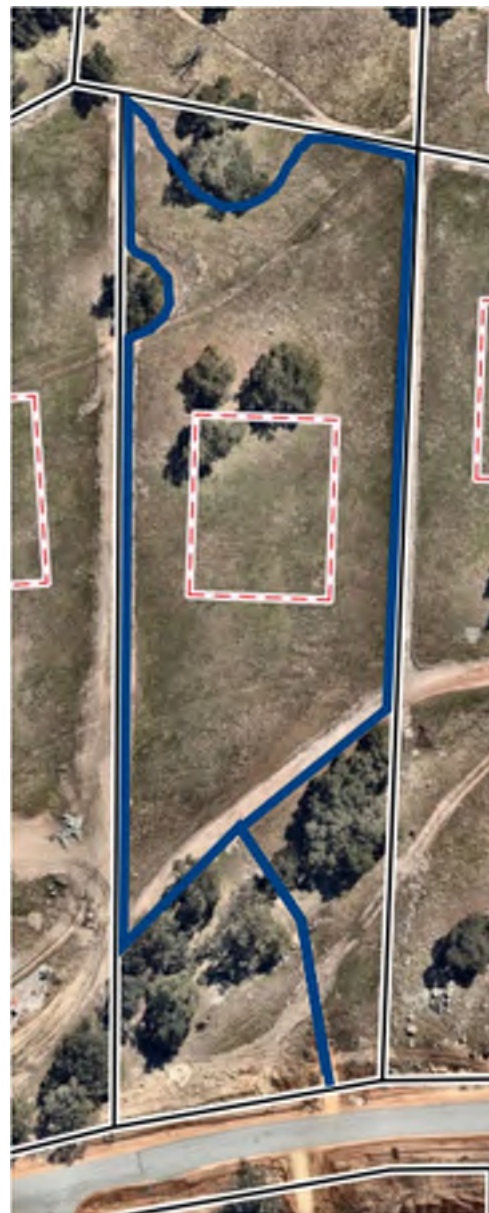
Legend:

-  Lot boundary
-  3m wide F/Bk
-  6m wide F/Bk
-  Building envelope

Notes & Site Constraints

Other Notes (eg. pipelines, telecoms)

Note: This property in its entirety must be managed in accordance with the City of Swan's Fire Hazard Reduction Notice (Firebreak Notice) under the Bush Fires Act 1954.



Alternative Firebreak Plan - Valid Until 14 May 2031

Future Lot 79 Esme Crescent, Bullsbrook

Approved by

Alex Cardell-Oliver

Date: 15 May 2026

Legend:

-  Lot boundary
-  3m wide F/Bk
-  6m wide F/Bk
-  Building envelope

Notes & Site Constraints

Other Notes (eg. pipelines, telecoms)

Note: This property in its entirety must be managed in accordance with the City of Swan's Fire Hazard Reduction Notice (Firebreak Notice) under the Bush Fires Act 1954.



Alternative Firebreak Plan - Valid Until 14 May 2031

Future Lot 81 Esme Crescent, Bullsbrook

Approved by

Alex Cardell-Oliver

Date: 29 May 2026

Legend:

-  Lot boundary
-  3m wide F/Bk
-  6m wide F/Bk
-  Building envelope

Notes & Site Constraints

Other Notes (eg. pipelines, telecoms)

Note: This property in its entirety must be managed in accordance with the City of Swan's Fire Hazard Reduction Notice (Firebreak Notice) under the Bush Fires Act 1954.



Alternative Firebreak Plan - Valid Until 14 May 2031

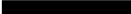
Future Lot 82 Esme Crescent, Bullsbrook

Approved by

Alex Cardell-Oliver

Date: 15 May 2026

Legend:

	Lot boundary
	3m wide F/Bk
	6m wide F/Bk
	Building envelope

Notes & Site Constraints

Other Notes (eg. pipelines, telecoms)

Note: This property in its entirety must be managed in accordance with the City of Swan's Fire Hazard Reduction Notice (Firebreak Notice) under the Bush Fires Act 1954.



Alternative Firebreak Plan - Valid Until 14 May 2031

Future Lot 89 Esme Crescent, Bullsbrook

Legend:

-  Lot boundary
-  3m wide F/Bk
-  6m wide F/Bk
-  Building envelope

Notes & Site Constraints

Other Notes (eg. pipelines, telecoms)

Note: This property in its entirety must be managed in accordance with the City of Swan's Fire Hazard Reduction Notice (Firebreak Notice) under the Bush Fires Act 1954.



Alternative Firebreak Plan - Valid Until 14 May 2031

Future Lot 90 Esme Crescent, Bullsbrook

Approved by

Alex Cardell-Oliver

Date: 15 May 2026

Appendix E Confirmation from DWER re: APZ implementation at DA/building stage

From: [Zac Cockerill](#)
Subject: FW: DWER Exemption Clarification
Date: Tuesday, 8 July 2025 4:05:32 PM
Attachments: [image001.png](#)
[ROBBUL03_NVCP_exemptions_letter_Rev 0.pdf](#)

From: Stacey Harley
Sent: Thursday, 1 May 2025 11:06 AM
To: Michael Mignacca
Cc: Kristen Watts ; Matt Cousins
Subject: FW: DWER Exemption Clarification

Hi Michael

Please see below the response from DWER confirming that future clearing by residents at Yarrimbah Heights Estate within APZs is exempt from needing a NVCP.

Kind regards
Stacey

Stacey Harley
Director

COTERRA
ENVIRONMENT

From: Mat Gannaway <mat.gannaway@dwer.wa.gov.au>
Sent: Thursday, 1 May 2025 9:00 AM
To: Stacey Harley <stacey.harley@coterra.com.au>
Subject: RE: DWER Exemption Clarification

OFFICIAL

OFFICIAL

Hi Stacey,

Based on the information you have provided, I concur that the clearing of the Asset Protection Zones (APZs) is not necessarily required to be undertaken now, prior to the final design of developments within the subdivision.

Clearing of APZ's may be able to be undertaken under the two following exemptions:

- Schedule 6, Item 10: Clearing under the *Bush Fires Act 1954* (BF Act). Clearing done in accordance with the City of Swan annual Fire Hazard Reduction Notice which is pursuant to Section 33(1) of the BF Act that requires APZs to be installed around relevant buildings.

- Regulation 5, Item 1: Clearing of a site for the lawful construction of a building or other structure on a property. Outside of any Environmentally Sensitive Areas, if individual Development Approvals (DA) are required for each building/structure/Lot, and the DA specifies that in order for the building/structure to comply it needs an APZ, then works can be undertaken under that mechanism. It is to the extent necessary to make the building/structure 'lawful'.

Any person who wishes to go beyond the APZ specified in the Section 33 notice or DA would require a separate clearing permit/referral as the above exemptions only apply to the APZ distances specified in the relevant instrument.

Note, it is ultimately up to the person doing the clearing to determine whether a valid exemption applies.

Regards

Mathew Gannaway

A/Senior Manager

Native Vegetation Regulation

Statewide Delivery

From: Stacey Harley <stacey.harley@coterra.com.au>

Sent: Tuesday, 29 April 2025 3:07 PM

To: Mat Gannaway <mat.gannaway@dwer.wa.gov.au>

Subject: DWER Exemption Clarification

Dear Mat

We write to you on behalf of our client for the Yarrimbah Heights Estate located at Lot 901 Stock Road Bullsbrook. The proposed rural residential subdivision of Lots 301 and 302 (later subdivided into Lot 901) was approved by the Western Australian Planning Commission subject to conditions. The developer has nearly completed construction of the initial subdivision stages in accordance with the approval including clearing within the building envelopes. The local government (City of Swan) is however also requesting the developer to clear the full maximum extent of the Asset Protection Zones (APZs) around each of the building envelopes prior to subdivision clearance. A key reason why the local government is asking for the APZ clearing to be undertaken now is that this avoids future land owners needing to obtain a Native Vegetation Clearing Permit (NVCP) for the clearing if it is done as part of the subdivision works by the developer, and the associated risk of NVCPs not being granted for the final determined APZs.

If the developer proceeds with the City's request unnecessary clearing will occur, including impacts on some of the mapped plant communities and habitat trees marked for retention where possible. We seek confirmation from DWER that exemption Schedule 6 Item 10 is applicable for future land owners within the Yarrimbah Heights Estate to avoid unnecessary clearing by the developer prior to final building locations being determined.

Please refer to attached correspondence for further information, many thanks for your assistance in this matter.

Kind regards
Stacey

Stacey Harley
Director

COTERRA
ENVIRONMENT

Ph: (08) 9381 5513 | Mobile: 0418 281 757

Level 1, 98 Colin Street, West Perth WA 6005 | www.coterra.com.au | 

NOTICE: This email and any attachments are confidential. They may contain legally privileged information or copyright material. You must not read, copy, use or disclose them without authorisation. Thank you.

 Please consider the environment before printing this email

Disclaimer: This e-mail is confidential to the addressee and is the view of the writer, not necessarily that of the Department of Water and Environmental Regulation, which accepts no responsibility for the contents. If you are not the addressee, please notify the Department by return e-mail and delete the message from your system; you must not disclose or use the information contained in this email in any way. No warranty is made that this material is free from computer viruses.



COTERRA
ENVIRONMENT

Level 1, 98 Colin Street
West Perth WA 6005

T (08) 9381 5513

www.coterra.com.au
info@coterra.com.au

Our Ref: ROBBUL03
Date: 28 April 2025

Attention: Mat Gannaway

Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919
Via email: admin.nvp@dwer.wa.gov.au

Dear Mat

Yarrimbah Heights Estate – Native Vegetation Clearing Permit Exemption

Yarrimbah Heights Estate is situated on Lot 901 Stock Road approximately 2km south-east of the existing Bullsbrook townsite and to the east of the Great Northern Highway, within the locality of Bullsbrook ('the site'; Figure 1). The site falls within the City of Swan local government area.

The site is predominantly cleared as a result of agricultural practice however does contain some remnant vegetation areas. The site extends over approximately 491 ha and includes 173 future rural residential lots.

Vegetation and Flora

Cardno (2011) undertook flora and vegetation investigations on the site and determined four existing community types, including:

- Community H1: Heath to low shrubland of *Calothamnus quadrifidus*, *Hypocalymma angustifolium*, *Acacia pulchella*, *Trymalium floribundum* and *Hibbertia* spp. with emergent *Corymbia calophylla* and *Eucalyptus wandoo* over *Dryandra lindleyana*, *Phyllanthus calycinus* and a herbaceous ground cover.
- Community T1 – Thicket to scrub of *Acacia pulchella* with emergent *Corymbia calophylla*, *Eucalyptus wandoo* and *Acacia saligna* over *Melaleuca radula*, *Darwinia citriodora*, *Hypocalymma angustifolium*, *Baeckea camphorosmae* over a herbaceous ground cover.
- Community T2 – Low open woodland of *Corymbia calophylla* (to 10 m) over *Trymalium floribundum*, *Xanthorrhoea preissii* and *Acacia pulchella* over herbaceous ground cover.
- Community T3 – Developed agricultural paddocks with scattered trees and shrubs of *Corymbia calophylla*, *Eucalyptus wandoo* and *Xanthorrhoea preissii*.

The agricultural paddocks (Community T3) dominated 99% of the site. Based on this agricultural disturbance, vegetation condition was described as 'Completely Degraded' for the majority of the site (Cardno, 2011).

Subdivision Approval

The proposed rural residential subdivision of Lots 301 and 302 (later subdivided into Lot 901) was approved by the Western Australian Planning Commission (WAPC) subject to conditions on the 5th October 2021 (WAPC reference no 160314) (see Attachment 1).

The siting of building envelopes for the proposed lots was carefully considered in consultation with the local government to avoid locations where significant trees and the mapped extent of plant communities H1, T1 and T2 were found and has been refined further at the subdivision stage in accordance with Condition 4 of the subdivision approval.

A habitat tree survey was undertaken by Western Wildlife (2020) to determine the presence of potential habitat trees on site, which may provide fauna value. Habitat trees were defined as any native tree with a DBH $\geq 100\text{cm}$ (Western Wildlife, 2020). Trees were identified in the following parts of the site as shown in the local structure plan design:

- Proposed roads
- Proposed building envelopes
- Proposed asset protection zone (APZs)
- Proposed fire service access route
- Firebreaks within 3m of the proposed lot boundaries

The above areas were selected for survey, as these are locations where impacts to trees could occur. Vegetation will be retained in the remaining portions of the site.

A Habitat Tree Protection Plan was prepared by Coterra Environment (2020) as part of the structure plan approval process to identify and prioritise habitat trees with a diameter of 1m and greater for retention, and provide guidance and suggested management methods to protect the habitat trees during development and post-construction of the site. In accordance with Condition 11 of the subdivision approval, an addendum to this plan is prepared for the subdivision stages to confirm tree retention for these trees previously identified as possible to retain subject to detailed design as well as providing additional management requirements related to plant communities H1, T1 and T2.

Further Condition 21 of the subdivision approval requires the preparation of a Bushfire Management Plan. This plan has been prepared by Strategen JBS&G (September 2021) and has been approved by the Local Government.

Proposed Clearing

The developer has nearly completed construction of the initial subdivision stages in accordance with the approval and Habitat Tree Protection Plan, including clearing within the building envelopes. The local government (City of Swan) is however also requesting the developer to clear the full extent of the Asset Protection Zones (APZs) around each of the building envelopes prior to subdivision clearance be given on the Bushfire Management Plan condition. This request is in line with the Bushfire Management Plan which states that *“Once validated, APZs will need to be implemented by the developer prior to lot title as part of site engineering and clearing works. The developer will also be required to manage the APZs in a low threat state on a regular and ongoing basis until lot sale, after which this responsibility will rest with the future landowner (Strategen JBS&G, 2021).”*

Our concern with installing the APZs to the full extent surrounding the building envelopes ahead of subdivision clearance and lot titles, is that the developer will be clearing the vegetation on the assumption that future residences are sited right up against each border of the building envelopes. Given the Building Envelopes on the estate are large at $2,000\text{m}^2$, this assumption is incorrect. If the developer proceeds with the City’s request unnecessary clearing will occur, including impacts on some of the mapped plant communities and habitat trees marked for retention where possible.

A key reason why the local government is asking for the APZ clearing to be undertaken now is that this avoids future land owners needing to obtain a Native Vegetation Clearing Permit (NVCP) for the clearing if it is done as part of the subdivision works by the developer, and the associated risk of NVCPs not being granted for the building envelopes and final APZs.

In order to address the future approval query, the local government is seeking written clarification from DWER that the clearing of native vegetation within the APZ's by future landowners is exempt from needing a NVCP if the developer does not clear the APZ ahead of sale to private landowners.

Upon review of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*, a native vegetation clearing permit (NVCP) exemption is considered relevant to development at the site for the future landowners.

In accordance with the *Bush Fires Act 1954*, the client has prepared a Bushfire Management Plan for the site identifying maximum APZs for each of the future lots and building envelopes. In conjunction with the City of Swan's Fire Hazard Reduction Notice (Attachment 2), that specifies that APZs are required to be installed and maintained, this future clearing of APZs appears to fall under the Schedule 6 Item 10 (Clearing under the *Bush Fires Act 1954*) NVCP exemption (Table 1). We seek your written confirmation of our interpretation.

Table 1: NVCP Exemption

Item No.	Wording of Exemption	Applicability
Schedule 6 Item 10. Clearing under the <i>Bush Fires Act 1954</i>	10. Clearing that is done — (a) as permitted under section 17(5); or (b) in accordance with a permit obtained under section 18; or (c) in accordance with an exemption granted under section 22C; or (d) under section 22(2), 23, 26A, 39(1)(d) or 44(1)(c); or (e) as authorised by a proclamation under section 26; or (f) to comply with a notice given under section 33(1); or (g) as authorised under section 36(b), of the Bush Fires Act 1954.	If the clearing is required by the City of Swan, as identified through a notice issued under the <i>Bush Fires Act 1954</i>, the proposed works would be exempt from requiring a NVCP from DWER. The CoS annual Fire Hazard Reduction Notice (Attachment 2) which is pursuant to Section 33(1) of the <i>Bush Fires Act 1954</i> requires that: 2. All land greater than 5,000 sqm (0.5 ha or 1.2 acres) a. Install and maintain an asset protection zone in accordance with the requirements specified in clause 8 3. Bushfire management plans a. Where a property is affected by an approved bushfire management plan, property owners must still comply with all requirements in this notice and with any additional requirements outlined within that plan. 8. Asset protection zone specification Asset protection zones must be installed around relevant buildings (see section 12) and must meet the following requirements: a. Extend 20m out from the external walls of the relevant building. Note: Asset protection zone requirements only apply within the boundaries of the lot on which the relevant building is located b. The average fuel loads must be reduced and maintained at two tonnes per hectare or lower c. All grass is maintained to under 10cm d. Tree canopy coverage is no greater than 15 per cent. The crowns of trees must have clear separation distance between one another e. A small group of trees within proximity to one another may be treated as one crown provided the combined crowns do not exceed the area of a large or mature crown size for that species f. Trees must be low-pruned (or under-pruned) to at least a height of 2m from the ground g. No tree or shrub over 2m high is planted within 3m of a building h. There are no tree crowns or branches hanging over buildings i. Scrub is reduced to a sparse density (able to walk through vegetation with relative ease and minimal deviation) j. Install paths or clear flammable or dry vegetation, debris, and materials immediately adjacent to the building k. Wood piles and flammable materials are stored a safe distance from buildings.

Source: DWER (2019)

On the basis of the abovementioned exemption, it is our interpretation that the proposed future clearing of APZs within the approved subdivision by future landowners in accordance with the requirements of the approved BMP will not require an NVCP from DWER. We believe the clearing will be undertaken in accordance with exemptions under Schedule 6 (Item 10(f)) of the *Protection (Clearing of Native Vegetation) Regulations 2004*.

Confirmation from DWER is requested that the above exemption is applicable for future land owners within the Yarrimbah Heights Estate to avoid unnecessary clearing by the developer prior to building locations being determined.

Thank you very much for your assistance with this matter.

Yours sincerely



Stacey Harley
Director

References

- Cardno (2011) Lot 301 Stock Road and Lot 302 Lage Road Bullsbrook – Landscape Structure Plan Environmental Component. Report prepared for Marlin Bullsbrook Pty Ltd. Perth, WA.
- Coterra Environment (2020) *Habitat Tree Protection Plan – Lot 301 Stock Rd and 302 Lage Rd Bullsbrook*. Report prepared for McRae Investments Pty Ltd. Rev 0 December 2020. Perth, WA.
- Department of Water and Environmental Regulation (2019). *A Guide to the Exemption and Regulations for Clearing Native Vegetation under Part V of the Environmental Protection Act 1986*. Government of Western Australia, Perth, Western Australia. [Online]. Available at: [A guide to the exemptions and regulations for clearing native vegetation \(der.wa.gov.au\)](https://www.der.wa.gov.au/publications/2019/06/a-guide-to-the-exemption-and-regulations-for-clearing-native-vegetation-under-part-v-of-the-environmental-protection-act-1986).
- Strategen JBS&G (2021) *Bushfire Management Plan (Subdivision Application) Lot 301 Stock Road and Lot 302 Lage Road Bullsbrook*. Reference 59125/133,804 (Rev 1). Prepared for McRae Investments Pty Ltd.
- Western Wildlife (2020) *Lot 301 Stock Road and Lot 302 Lage Road, Bullsbrook: Habitat Tree Survey 2020*. Report prepared for Coterra Environment. Perth, WA.

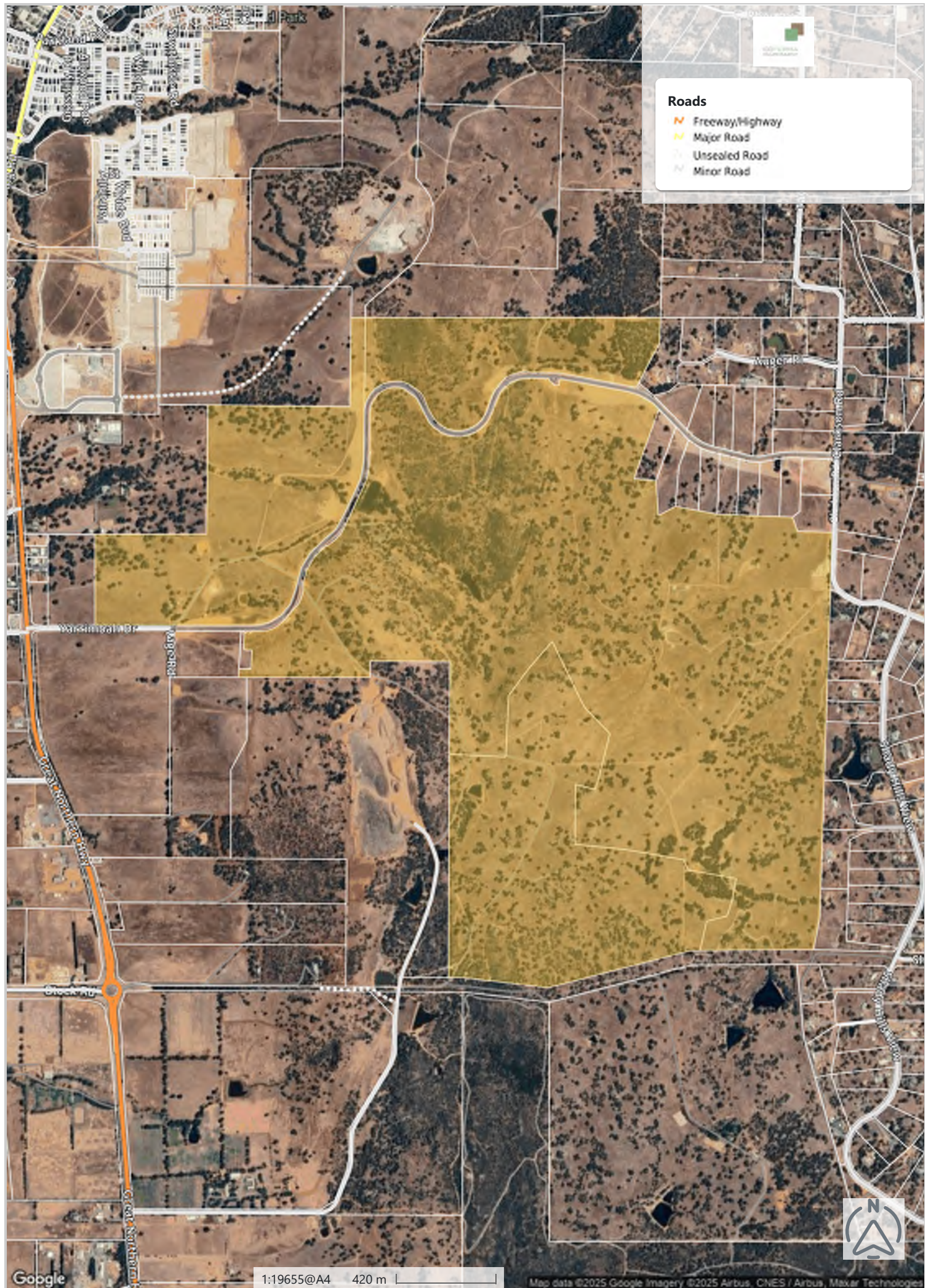
Figures

Figure 1 - Site Location

Attachments

- Attachment 1 - WAPC Subdivision Approval
- Attachment 2 – City of Swan Fire Hazard Reduction Notice

Figures



Roads

- Freeway/Highway
- Major Road
- Unsealed Road
- Minor Road

Google

1:19655@A4

420 m

Map data ©2025 Google Imagery ©2025 Airbus, CNES / Airbus, Maxar Technologies

Created by Stacey Harley (Client)
28th April 2025 at 1:44pm (GMT+8) by **MNG.**

Attachment 1



Your Ref : PKF BUL

Roberts Day
2/442 Murray Street
PERTH WA 6000

**Approval Subject To Condition(s)
Freehold (Green Title) Subdivision**

Application No : 160314

Planning and Development Act 2005

Applicant	:	Roberts Day 2/442 Murray Street PERTH WA 6000
Owner	:	Khaki Nominees Pty Ltd 237 Stirling Highway CLAREMONT WA 6010; McRae Investments Pty Ltd 45 Stirling Highway NEDLANDS WA 6009; George Humphery Park & Esme Florence Park 61 Lage Road BULLSBROOK WA 6084
Application Receipt	:	8 January 2021

Lot Number	:	301, 302
Diagram / Plan	:	Deposited Plan 29235
Location	:	-
C/T Volume/Folio	:	2095/259, 2096/751, 2096/311
Street Address	:	Stock Road & Lage Road, Bullsbrook
Local Government	:	City of Swan

The Western Australian Planning Commission has considered the application referred to and is prepared to endorse a deposited plan in accordance with the plan date-stamped **08 January 2021** once the condition(s) set out have been fulfilled.

This decision is valid for **four years** from the date of this advice, which includes the lodgement of the deposited plan within this period.



The deposited plan for this approval and all required written advice confirming that the requirement(s) outlined in the condition(s) have been fulfilled must be submitted by **05 October 2025** or this approval no longer will remain valid.

Reconsideration - 28 days

Under section 151(1) of the *Planning and Development Act 2005*, the applicant/owner may, within 28 days from the date of this decision, make a written request to the WAPC to reconsider any condition(s) imposed in its decision. One of the matters to which the WAPC will have regard in reconsideration of its decision is whether there is compelling evidence by way of additional information or justification from the applicant/owner to warrant a reconsideration of the decision. A request for reconsideration is to be submitted to the WAPC on a Form 3A with appropriate fees. An application for reconsideration may be submitted to the WAPC prior to submission of an application for review. Form 3A and a schedule of fees are available on the WAPC website: <http://www.dplh.wa.gov.au>

Right to apply for a review - 28 days

Should the applicant/owner be aggrieved by this decision, there is a right to apply for a review under Part 14 section 251 of the *Planning and Development Act 2005*. The application for review must be submitted in accordance with part 2 of the *State Administrative Tribunal Rules 2004* and should be lodged within 28 days of the date of this decision to: the State Administrative Tribunal, Level 6, State Administrative Tribunal Building, 565 Hay Street, PERTH, WA 6000. It is recommended that you contact the tribunal for further details: telephone 9219 3111 or go to its website: <http://www.sat.justice.wa.gov.au>

Deposited plan

The deposited plan is to be submitted to the Western Australian Land Information Authority (Landgate) for certification. Once certified, Landgate will forward it to the WAPC. In addition, the applicant/owner is responsible for submission of a Form 1C with appropriate fees to the WAPC requesting endorsement of the deposited plan. A copy of the deposited plan with confirmation of submission to Landgate is to be submitted with all required written advice confirming compliance with any condition(s) from the nominated agency/authority or local government. Form 1C and a schedule of fees are available on the WAPC website: <http://www.dplh.wa.gov.au>

Condition(s)

The WAPC is prepared to endorse a deposited plan in accordance with the plan submitted once the condition(s) set out have been fulfilled.

The condition(s) of this approval are to be fulfilled to the satisfaction of the WAPC.

The condition(s) must be fulfilled before submission of a copy of the deposited plan for endorsement.



The agency/authority or local government noted in brackets at the end of the condition(s) identify the body responsible for providing written advice confirming that the WAPC's requirement(s) outlined in the condition(s) have been fulfilled. The written advice of the agency/authority or local government is to be obtained by the applicant/owner. When the written advice of each identified agency/authority or local government has been obtained, it should be submitted to the WAPC with a Form 1C and appropriate fees and a copy of the deposited plan.

If there is no agency/authority or local government noted in brackets at the end of the condition(s), a written request for confirmation that the requirement(s) outlined in the condition(s) have been fulfilled should be submitted to the WAPC, prior to lodgement of the deposited plan for endorsement.

Prior to the commencement of any subdivision works or the implementation of any condition(s) in any other way, the applicant/owner is to liaise with the nominated agency/authority or local government on the requirement(s) it considers necessary to fulfil the condition(s).

The applicant/owner is to make reasonable enquiry to the nominated agency/authority or local government to obtain confirmation that the requirement(s) of the condition(s) have been fulfilled. This may include the provision of supplementary information. In the event that the nominated agency/authority or local government will not provide its written confirmation following reasonable enquiry, the applicant/owner then may approach the WAPC for confirmation that the condition(s) have been fulfilled.

In approaching the WAPC, the applicant/owner is to provide all necessary information, including proof of reasonable enquiry to the nominated agency/authority or local government.

The condition(s) of this approval, with accompanying advice, are:

CONDITION(S):

Modifications

1. The subdivision plan dated 8 January 2021 being modified as follows:
 - a) Proposed Lots 117 to 125 and 175 to 190 being excluded;
 - b) Proposed Lots 1 - 6 being excluded from the approved plan of subdivision until such time as the Department of Mines, Industry Regulation and Safety advises the Western Australian Planning Commission that blasting operations are no longer required to extract the clay resource and the corresponding stage of the quarry has been closed;
 - c) Proposed Lots 19, 20 and 21 being amalgamated into one lot given the topography, extent of clearing combined with the interface with the 59ha lot;

- d) Proposed Lots 14 and 16 and Lots 18 and 22 being amalgamated as it has not been suitably demonstrated that the gradient of future driveways can be provided in accordance with the requirements of the Guidelines for Planning in Bushfire Prone Areas and the extent of the asset protection zones over these lots;
- e) Proposed Lots 55, 56, 57, 59, 61, 63, 65, 67, 69 and 71 being excluded given the topography, extent of clearing combined with the interface with the 59ha lot;
- f) Proposed Lots 31 and 32, Lots 149 to 151 and Lots 156 and 157 being amalgamated given the extent of clearing to achieve asset protection zones;
- g) Modify lot boundaries and/or building envelopes, where necessary, to ensure all asset protection zones are contained within individual lot boundaries;
- h) The battle-axe access leg to the telecommunication infrastructure lot being increased to a minimum width of 6m and the size of the lot being increased to accommodate the necessary asset protection zone;
- i) Identify land for the provision of water tanks in accordance with the approved Bushfire Management Plan; and
- j) The water body straddling proposed Lots 9 and 10 being contained within one lot.

(Local Government)

Contributions

- 2. The landowner/applicant making a pro-rata contribution towards the cost of the acquisition of the primary school site identified in the subdivision locality. (Department of Education)

Building

- 3. All buildings and effluent disposal systems having the necessary clearance from the new boundaries as required under the relevant legislation including the Local Planning Scheme, Building Act 2011, and National Construction Code Series/Building Code of Australia (as amended). (Local Government)
- 4. Prior to commencement of subdivisional works, a detailed plan identifying building envelope(s) on all lots on the approved plan of subdivision is to be prepared in consultation with the local government to ensure the appropriate siting of development, to the satisfaction of the Western Australian Planning Commission. The Building envelope locations shall address and respond to the following issues (but not limited to):

- Setbacks to boundaries;
- Where lots are located within a Visual Management Area, envelopes are to be located a sufficient distance from the top of a ridgeline to minimise the visual impact of buildings upon the skyline;
- Sited so as to achieve a maximum BAL-29 rating;
- Sited to ensure no significant trees are located within the envelopes;
- Sited to minimise the presence of significant trees within asset protection zones;
- Sited to minimise intrusion into mapped plant communities H1, T1 and T2 as mapped by GHD (2008);
- Sited outside of the clay and quarry buffer areas;
- Sited outside of strategic development setbacks;
- Sited to ensure optimal locations for effluent disposal; and
- Sited away from drainage pathways.

(Local Government)

Drainage and Site Works

5. Engineering drawings and specifications are to be submitted, approved, and works undertaken in accordance with the approved engineering drawings, specifications and approved plan of subdivision, for grading and/or stabilisation of the site to ensure that:
 - a) lots can accommodate their intended use; and
 - b) finished ground levels at the boundaries of the lot(s) the subject of this approval match or otherwise coordinate with the existing and/or proposed finished ground levels of the land abutting.

(Local Government)

6. Prior to the commencement of subdivisional works, an Urban Water Management Plan is to be prepared and approved, in consultation with the Department of Water and Environmental Regulation, consistent with any approved Local Water Management Strategy/Drainage and Water Management Plan. (Local Government)
7. Prior to the commencement of subdivisional works, the landowner/applicant is to provide a pre-works geotechnical report certifying that the land is physically capable of development or advising how the land is to be remediated and compacted to ensure it is capable of development; and In the event that remediation works are required, the landowner/applicant is to provide a post geotechnical report certifying that all subdivisional works have been carried out in accordance with the pre-works geotechnical report. (Local Government)

8. Engineering drawings and specifications are to be submitted and approved, and works undertaken in accordance with the approved engineering drawings and specifications and approved plan of subdivision, for the filling and/or draining of the land, including ensuring that stormwater is contained on-site, or appropriately treated and connected to the local drainage system. Engineering drawings and specifications are to be in accordance with an approved Urban Water Management Plan (UWMP) for the site, or where no UWMP exists, to the satisfaction of the Western Australian Planning Commission. (Local Government)
9. Drainage easements and reserves as may be required by the local government for drainage infrastructure being shown on the diagram or plan of survey (deposited plan) as such, granted free of cost, and vested in that local government under Sections 152 and 167 of the Land Administration Act 1997. (Local Government)

Reserves

10. The proposed FESA reserve(s) shown on the approved plan of subdivision being shown on the diagram or plan of survey (deposited plan) as reserve(s) for "DFES – public purposes - strategic water supply for fire fighting purposes" and vested in the Crown under Section 152 of the Planning and Development Act 2005, such land to be ceded free of cost and without any payment of compensation by the Crown. Ceding will be required as part of the first stage of subdivision. (Local Government)

Environment

11. Prior to the commencement of subdivisional works a Habitat Tree and Native Vegetation Community Protection Plan is to be prepared and approved by the City of Swan to ensure the protection and management of the sites environmental assets, specifically in relation to the habitat trees and plant communities H1, T1 and T2 as mapped by GHD (2008), with satisfactory arrangements being made for the implementation of the approved plan. (Local Government)
12. A restrictive covenant, to the benefit of the local government, pursuant to section 129BA of the Transfer of Land Act 1893 is to be placed on the certificate(s) of title of the proposed lot(s) advising of the existence of a restriction on the use of the land. Notice of this restriction is to be included on the diagram or plan of survey (deposited plan). The restrictive covenant is to state as follows:

"No buildings and effluent disposal systems are to take place outside the defined building envelope(s), unless otherwise approved by the local government."

(Local Government)

13. A management plan detailing how risk of drainage, erosion and sedimentation or other environmental impacts into nearby water bodies will be minimised during subdivision is to be:
- a) prepared by the landowner/applicant and approved prior to the commencement of subdivisional works; and
 - b) implemented during subdivisional works.

(Department of Biodiversity, Conservation and Attractions)

14. A fence restricting vehicle, pedestrian and stock access to Walyunga National Park is to be constructed on the boundaries shown on the plan dated received 8 January 2021 in order to protect native vegetation. (Local Government)

Roads and Access

15. Engineering drawings and specifications are to be submitted, approved, and subdivisional works undertaken in accordance with the approved plan of subdivision, engineering drawings and specifications, to ensure that those lots not fronting an existing road are provided with frontage to a constructed road(s) connected by a constructed road(s) to the local road system and such road(s) are constructed and drained at the landowner/applicant's cost.

As an alternative, and subject to the agreement of the Local Government the Western Australian Planning Commission (WAPC) is prepared to accept the landowner/applicant paying to the local government the cost of such road works as estimated by the local government and the local government providing formal assurance to the WAPC confirming that the works will be completed within a reasonable period as agreed by the WAPC.

Ceding and construction of the Rural Link Road connecting Lage Road with Clarkson Road to a public road standard to the specifications of the City of Swan is to be undertaken in the first subdivision stage.

(Local Government)

16. Engineering drawings and specifications are to be submitted and approved, and subdivisional works undertaken for construction of roads in accordance with the approved plan of subdivision, engineering drawings and specifications to ensure that:
- a) street lighting in accordance with dark sky principles is installed on all new subdivisional roads to the standards of the relevant licensed service provider; and

- b) roads that have been designed to connect with existing or proposed roads abutting the subject land are coordinated so the road reserve location and width connect seamlessly; and
- c) temporary turning areas are provided to those subdivisional roads that are subject to future extension.

(Local Government)

- 17. Satisfactory arrangements being made with the local government for the partial cost of upgrading and/or construction of Lage Road to the standard of a rural road. (Local Government)
- 18. All local streets within the subdivision being truncated in accordance with the Western Australian Planning Commission's Liveable Neighbourhoods policy/DC 1.7 General Road Planning. (Local Government)
- 19. Suitable arrangements being made with the local government for the provision of vehicular crossovers to service the lots shown on the approved plan of subdivision. (Local Government)
- 20. Prior to the creation of any lot, it be suitably demonstrated that private driveways can be constructed with a maximum gradient of 1:10 to the building envelope. (Local Government)

Bushfire

- 21. An updated Bushfire Management Plan is to be provided to the City of Swan for approval for each stage of subdivision which includes a Bushfire Attack Level contour map for each individual lot for which a certificate of title is being sought. It shall be demonstrated that the building envelope for each lot can be accommodated within an area of BAL-29 or below. (Local Government)
- 22. Information is to be provided to demonstrate that the relevant measures contained in the updated Implementation Table of the Bushfire Management Plan have been implemented during subdivisional works. This information should include a completed "Certification by Bushfire Consultant" from the bushfire management plan. (Local Government)
- 23. Engineering drawings and specifications are to be submitted, approved, and works undertaken in accordance with the approved plan of subdivision, engineering drawings and specifications, for the siting of 5 x 100kL water tanks to be provided within the road reserve locations depicted in the Bushfire Management Plan and to the following specifications:

- 2 outlets with a 100mm gate and a 50mm butterfly protected by a mesh cage;
- Concrete slash apron;
- Inlet at top of tank with BIC coupling;
- Overflow outlet; and
- A water level gauge.

(Local Government)

24. A notification, pursuant to Section 165 of the Planning and Development Act 2005, is to be placed on the certificate(s) of title of the proposed lot(s) with a Bushfire Attack Level (BAL) rating of 12.5 or above, advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows:

“This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and is subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land.”

(Western Australian Planning Commission)

Notifications

25. A notification, pursuant to Section 70A of the Transfer of Land Act 1893 is to be placed on the certificate(s) of title of the proposed lot(s). Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows:

‘A mains potable water supply is not available to the lot(s).’

(Local Government)

26. A notification, pursuant to Section 70A of the Transfer of Land Act 1893 is to be placed on the certificate(s) of title of the proposed lot(s). Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows:

‘A reticulated sewerage service is not available to the lot(s). Anaerobic treatment units (ATU) may be required on the lot(s) in accordance with the Government Sewerage Policy 2019.’

(Local Government)

27. A notification, pursuant to Section 165 of the Planning and Development Act 2005 is to be placed on the certificate(s) of title of proposed lots 6, 7, 9, 115 and 116 location within the 500m clay quarry buffer advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows:

'This lot is located within 500 metres of operating clay quarry and has the potential to be affected by noise and dust that are associated with the continued operation of the quarry'.

(Western Australian Planning Commission)

28. A notification, pursuant to Section 70A of the Transfer of Land Act 1893 is to be placed on the certificate(s) of title of the proposed lot(s) containing any plant communities and habitat trees identified in the approved Habitat Tree and Native Vegetation Community Protection Plan as requiring protection or management. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows:

'The lot contains plant communities and/or habitat trees that are required to be protected and retained in accordance with the approved Habitat Tree and Native Vegetation Community Protection Plan.

(Local Government)

Services

29. Arrangements being made with a licensed electricity network operator for the provision of an underground electricity distribution system that can supply electricity to each lot shown on the approved plan of subdivision. (Western Power)
30. The transfer of land as a Crown reserve free of cost to Western Power for the provision of electricity supply infrastructure. (Western Power)

ADVICE:

1. Relative to Conditions 1a), 1c), 1d), 1e) and 1f), the Commission is prepared to consider a further, separate subdivision application(s) for the creation of the proposed lots referenced in those conditions, subject to the proponent demonstrating that:
- (i) For the proposed lots excluded by condition 1a), Fire Service Access Routes shown on the approved plan of subdivision will comply with the criteria for Fire Service Access Routes set out in Acceptable Solution A3.7 of the Guidelines for Planning in Bushfire Prone Areas and will be protected via an appropriate easement specifying access rights for emergency fire purposes in favour of the local government.
 - (ii) For the proposed lots referenced in condition 1c), Asset Protection Zones will be sufficient to achieve BAL-29 or lower for the respective building envelopes, to comply with the Guidelines for Planning in Bushfire Prone Areas.

- (iii) For the proposed lots referenced in condition 1d), the gradient of future driveways will accord with Acceptable Solution A3.5 of the Guidelines for Planning in Bushfire Prone Areas; and Asset Protection Zones will be sufficient to achieve BAL-29 or lower for the respective building envelopes, to comply with those Guidelines.
 - (iv) For the proposed lots excluded by condition 1e), Asset Protection Zones will be sufficient to achieve BAL-29 or lower for the respective building envelopes, to comply with the Guidelines for Planning in Bushfire Prone Areas.
 - (v) For the proposed lots referenced in condition 1f), Asset Protection Zones will be sufficient to achieve BAL-29 or lower for the respective building envelopes, to comply with the Guidelines for Planning in Bushfire Prone Areas.
2. In relation to Condition 1g, lot boundaries and/or building envelopes will need to be modified to ensure asset protection zones are contained within individual lot boundaries. Asset protection zones straddling firebreaks on adjoining properties may be acceptable.
 3. Condition 6 has been imposed in accordance with Better Urban Water Management Guidelines (WAPC 2008). Further guidance on the contents of urban water management plans is provided in "Urban Water Management Plans: Guidelines for preparing and complying with subdivision conditions" (Published by the then Department of Water 2008)
 4. In relation to Condition 11, all trees listed as 'encouraged to be retained' are to be amended to either require their retention, or accept the trees can be cleared.
 5. In regard to Condition 13, the Subdivision Works Management Plan will need to demonstrate that site works will not interfere, alter or pollute any wetland, watercourse, surface water expression or groundwater in the area, or alter the water quality of such waters. The Subdivision Works Management Plan should include details of onsite storage of materials and equipment, waste management (including how any fill, building materials, rubbish and other deleterious matter will be prevented from being deposited on the foreshore reserve, or allowed to enter the waterways as a result of the subdivision), management of stormwater and associated sedimentation and complaints/incidents.
 6. In regard to Condition 21, particular attention be given to the recommendations listed in table 2 of the Peer Review prepared by Emerge Associates, dated June 2021.
 7. In regard to Condition 27, a notification is only required for those lots affected by the clay quarry buffer as per Structure Plan 11. Any existing notifications for lots outside the buffer are not required.



8. In regard to Condition 29, Western Power provides only one underground point of electricity supply per freehold lot.

A handwritten signature in dark ink, appearing to read "Sam Fagan".

Ms Sam Fagan
Secretary
Western Australian Planning Commission
5 October 2021

Enquiries : Mario Carbone (Ph 6551 9617)



Your Ref : PKF BUL
Enquiries : Mario Carbone (Ph 6551 9617)

Hatch RobertsDay
2/442 Murray Street
PERTH WA 6000

**Approval Subject to Condition(s)
Freehold (Green Title) Subdivision
Reconsideration Of Condition(s)**

Application No : 160314

Planning and Development Act 2005

Applicant	: Hatch RobertsDay 2/442 Murray Street PERTH WA 6000
Owner	: Khaki Nominees Pty Ltd 237 Stirling Highway CLAREMONT WA 6010; McRae Investments Pty Ltd 45 Stirling Highway NEDLANDS WA 6009; George Humphery Park & Esme Florence Park 61 Lage Road BULLSBROOK WA 6084
Application Receipt	: 8 January 2021

Lot Number	: 301, 302
Diagram / Plan	: Deposited Plan 29235
Location	: -
C/T Volume/Folio	: 2095/259, 2096/751, 2096/311
Street Address	: Stock Road & Lage Road, Bullsbrook
Local Government	: City of Swan

The Western Australian Planning Commission resolved to reconsider subdivision approval WAPC Ref 160314 for Lot 302 Lage Road and Lot 301 Stock Road, Bullsbrook granted 5 October 2021, and modify the conditions and advice as follows:

A. Condition 1 to be modified to read in full as follows:

1. The subdivision plan dated 8 January 2021 being modified as follows:
 - a) The indicative fire service access routes for proposed Lots 117 to 125 and 175 to 190 being shown on the subdivision plan;
 - b) Proposed Lots 1 - 6 being excluded from the approved plan of subdivision until such time as the Department of Mines, Industry Regulation and Safety advises the Western Australian Planning Commission that blasting operations are no longer required to extract the clay resource and the corresponding stage of the quarry has been closed;
 - c) Modify lot boundaries and/or building envelopes, where necessary, to ensure all asset protection zones are contained within individual lot boundaries;
 - d) The battle-axe access leg to the telecommunication infrastructure lot being increased to a minimum width of 6m and the size of the lot being increased to accommodate the necessary asset protection zone;
 - e) Identify land for the provision of water tanks in accordance with the approved Bushfire Management Plan; and
 - f) The water body straddling proposed Lots 9 and 10 being contained within one lot. (Local Government)

B. Add new Conditions as follows:

31. Easement(s) in accordance with Section 195 of the Land Administration Act 1997 specifying access rights for emergency fire purposes in favour of the Local Government are to be placed on the certificate(s) of title of proposed Lots 117 to 125 and 175 to 190 and the deed(s) of easement to specify care and management of the easement area is by the Local Government. Notice of this easement(s) is to be included on the diagram or plan of survey (deposited plan). The easement(s) are to state as follows:

"6 metre wide permanent emergency access way for vehicles is to be provided as per the indicative Fire Service Access Routes depicted on the approved plan of subdivision."

(Local Government)

32. Engineering drawings and specifications are to be submitted, approved and subdivisional works undertaken in accordance with the approved plan of subdivision, engineering drawings and specifications, for the provision of Fire Service Access Routes compliant with the criteria for Fire Service Access Routes set out within the Guidelines for Planning in Bushfire Prone Areas. Fire Service Access Routes shall have a maximum grade of 1:10, unless sections with grades greater than 1:10 are sealed. Turn around areas for type 3.4 fire appliances shall be provided every 500m, if applicable. (Local Government)
 33. The internal driveways for Lots 14, 16, 18 and 22 being constructed and drained at the landowner/applicants cost to the specifications of the local government. The driveways shall be constructed between the street boundary and the proposed building envelope. (Local Government)
- C. Delete advice note 1.
- D. Add new advice notes as follows:
9. In regard to Condition 1a, the fire service access route may need to be greater than 6m in width to accommodate engineering requirements such as batters and drainage.
 10. Reduced building envelope sizes may be required for proposed Lots 19 to 21 to accommodate the necessary asset protection zones.
 11. Building envelopes for proposed Lots 14, 19, 20, 21, 55, 56, 57, 59, 61, 63, 65, 67, 69 and 71 should be located as closed as possible to the street boundary.
 12. The fire service access routes shall be designed and constructed to avoid habitat trees where possible.
 13. In regard to Condition 21, details of the strategic firebreak for proposed Lots 19, 20, 21, 55, 56, 57, 59, 61, 63, 65, 67, 69 and 71 should be included in the Bushfire Management Plan. The strategic firebreak to be 6m in width or a lessor amount as agreed by the local government.
- E. Modify advice note 2 to reference Condition 1c and modify advice note 6 to read in full as follows:
6. In regard to Condition 21, particular attention be given to the recommendations listed in table 2 of the peer review prepared by Emerge Associates, dated June 2021 and the summary table within the level 3 peer review report prepared by Ecosystem Solutions, dated 7 September 2022.



All other terms and conditions remain as per the Commission's original decision letter dated 05 October 2021.

Right to apply for review - 28 days

Should the applicant/owner be aggrieved by this decision, there is a right to apply for a review under Part 14 section 251 of the *Planning and Development Act 2005*. The application for review must be submitted in accordance with part 2 of the *State Administrative Tribunal Rules 2004* and should be lodged within 28 days of the date of this decision to: the State Administrative Tribunal, Level 6, State Administrative Tribunal Building, 565 Hay Street, PERTH, WA 6000. It is recommended that you contact the tribunal for further details: telephone 9216 3111 or go to its website: <http://www.sat.justice.wa.gov.au>

A handwritten signature in black ink, appearing to read "S Fagan".

Ms Sam Fagan
Secretary
Western Australian Planning Commission

17 October 2022

Cc: City of Swan
Department of Education
Department of Biodiversity, Conservation and Attractions
Western Power
Water Corporation

Attachment 2

Bush Fires Act 1954

Fire Hazard Reduction Notice (Firebreak Notice)

Notice to Owners and/or Occupiers of land situated within the City of Swan.

To assist in the control of bushfires, and pursuant to Section 33 of the Bush Fires Act 1954, all owners and occupiers of land within the City of Swan are required on or before November 1, 2024, or within 14 days of becoming an owner or occupier of land after that date, to meet the fire hazard reduction conditions described in this notice and maintain these conditions up to and including April 30, 2025.

1. All land equal to or less than 5,000 sqm (0.5 ha or 1.2 acres)

- a. Install and maintain an asset protection zone in accordance with the requirements specified in clause 8
- b. Maintain all grass to a height of no greater than 10cm
- c. Maintain areas of natural vegetation to at or below eight tonnes per hectare.

2. All land greater than 5,000 sqm (0.5 ha or 1.2 acres)

- a. Install and maintain an asset protection zone in accordance with the requirements specified in clause 8
- b. Install firebreaks as close as practicable inside of, but no more than 10m from, the property's external boundaries firebreaks need to be 3m wide with 4m vertical height clearance free from flammable materials and overhanging branches (see clause 7 for further details):
 - i. A boundary firebreak is not required where the land is 90 per cent or more covered by buildings, other non-vegetated areas, and/or irrigated orchards/vineyards. All grass must be maintained to 10cm or less
 - ii. Properties over 100 ha require additional firebreaks to divide the land into areas not exceeding 100 ha.
- c. Maintain all grass:
 - i. On land between 5,000 sqm and 25,000 sqm (0.5-2.5 ha) or (1.2-6.2 acres) all grass must be reduced to a height no greater than 10cm
 - ii. On land greater than 25,000 sqm (2.5 ha or 6.2 acres) all grass immediately adjacent to any firebreak must be reduced to a height of no greater than 10cm for a minimum width of 3m
 - iii. If the land is stocked, compliance with conditions 2(a) and 2(b) can postponed until December 1.
- d. Maintain areas of natural vegetation within 100m of relevant buildings to at or below eight tonnes per hectare fuel load, by passive methods of fuel reduction.

3. Bushfire management plans

- a. Where a property is affected by an approved bushfire management plan, property owners must still comply with all requirements in this notice and with any additional requirements outlined within that plan.

4. Fuel storage areas/haystacks/stockpiled flammable material

- a. Remove all flammable material within 10m of the storage area
- b. Install a firebreak (to the specifications outlined in clause 7) immediately adjacent to any haystacks or stockpiled flammable material.

5. Fire service access routes (strategic firebreaks) and emergency access ways

Where under a written agreement with the City, or where depicted on an approved bushfire management plan, fire service access routes (FSARs) or emergency access ways (EAWs) are required on the land, you are required to:

- a. Clear and maintain the FSAR/EAW to 6m wide free from flammable material with a 4m vertical height clearance above the full 6m width
- b. The FSAR/EAW must remain unimpeded by obstructions at all times, including boundary fences and gates unless approved in writing by the City
 - i. Approved gates on FSARs may be secured with a City of Swan fire service padlock. Private padlocks may be added if approved in writing by the City
 - ii. Approved gates on EAWs must always remain unlocked
- c. FSARs must provide a continuous 4-wheel drive trafficable surface for the full 6m width
- d. EAWs must provide a continuous 2-wheel drive trafficable surface for the full 6m width.

6. Driveways

Where a dwelling is situated more than 70m from a public road

- a. Driveways must be maintained clear of all obstacles and flammable materials to create a minimum 3m wide trafficable surface suitable for all types of 2-wheel drive vehicles
- b. Overhanging branches must be pruned to provide 4m vertical clearance above the driveway.

7. Firebreak specification

- a. Firebreaks are to be installed and maintained clear of all obstacles and flammable materials (e.g. maintained to mineral earth, gravel, limestone, bitumen, or green lawn to a height no greater than 25mm) to create a minimum 3m wide trafficable surface suitable for 4-wheel drive vehicles
- b. Overhanging branches must be pruned to provide 4m vertical clearance above the full width of the firebreak
- c. Firebreaks must not terminate in a dead-end
- d. Firebreaks may be constructed by ploughing, grading, raking, burning, chemical spraying or any other method that achieves the required standard.

8. Asset protection zone specification

Asset protection zones must be installed around relevant buildings (see section 12) and must meet the following requirements:

- a. Extend 20m out from the external walls of the relevant building. Note: Asset protection zone requirements only apply within the boundaries of the lot on which the relevant building is located
- b. The average fuel loads must be reduced and maintained at two tonnes per hectare or lower
- c. All grass is maintained to under 10cm
- d. Tree canopy coverage is no greater than 15 per cent. The crowns of trees must have clear separation distance between one another
- e. A small group of trees within proximity to one another may be treated as one crown provided the combined crowns do not exceed the area of a large or mature crown size for that species
- f. Trees must be low-pruned (or under-pruned) to at least a height of 2m from the ground
- g. No tree or shrub over 2m high is planted within 3m of a building

- h. There are no tree crowns or branches hanging over buildings
- i. Scrub is reduced to a sparse density (able to walk through vegetation with relative ease and minimal deviation)
- j. Install paths or clear flammable or dry vegetation, debris, and materials immediately adjacent to the building
- k. Wood piles and flammable materials are stored a safe distance from buildings.

9. Application to vary firebreak and hazard reduction requirements

- a. If it is considered impractical for any reason to clear firebreaks in a manner or location required by this notice, or to carry out any fire hazard reduction work or measures required by this notice, you may apply in writing on or before November 1 for approval to provide firebreaks in alternative positions or to take alternative measures to abate fire hazards on the land
- b. If permission is not granted in writing by the City prior to December 1, you shall comply with the requirements of this notice
- c. When permission for alternative firebreaks or fire hazard reduction measures has been granted, you shall comply with all conditions on the approved plan and maintain the land to the required standard throughout the period specified by this notice.

10. Environmental and heritage considerations

It is the responsibility of the landowner to ensure appropriate environmental and heritage due diligence relating to any works required by this notice is undertaken. Please refer to the Department of Water and Environmental Regulation (DWER), the Department of Planning, Lands and Heritage, and/or the Department of Fire and Emergency Services (DFES) websites for further information.

11. Compliance

- a. In addition to the requirements of this notice, further works which are considered necessary by an authorised officer of the City may be required as specified in writing in a subsequent notice addressed to the landowner
- b. Where the owner or occupier of the land fails or neglects to comply with the requirements of this notice or a subsequent notice addressed to the landowner, the City of Swan may enter onto the land with workers, contractors, vehicles, and machinery to carry out the requisitions of the notice at the expense of the landowner
- c. Failure to comply with this notice and subsequent written notices may result in a penalty not exceeding \$5,000, or the issue of a \$250 infringement notice and liability for any costs incurred by the City in relation to works undertaken on behalf of the landowner.

12. Definitions

‘Alternative firebreak’ is a firebreak that is in an alternative position or alignment to the requirement specified in paragraphs 2 and 3 of this notice.

‘Asset protection zone (APZ)’ is a low fuel area that is reduced of flammable vegetation and materials surrounding relevant buildings to minimise the likelihood and impact that direct flame contact, radiant heat or ember attack may have on buildings and assets in the event of a bushfire.

‘Bushfire management plan’ or **‘fire management plan’** is a plan that may be placed on the certificate of title(s) of land that has been developed as a condition of development or subdivision.

‘Emergency access way’ is a two-wheel drive trafficable, 6m wide access route to provide local residents, general public and emergency services alternative links to road networks at the end of cul-de-sacs or areas where access is limited during an emergency incident.

'Firebreak' is an area of land cleared of flammable material to minimise the spread of a bushfire and to provide access for firefighting vehicles.

'Fire service access route (strategic firebreaks)' is a firebreak that is 6m wide established to provide strategic access and links to road networks whilst providing a wider control/ containment line for emergency services use only.

'Flammable material' is anything that is easily able to catch on fire including, but not limited to, grasses, leaves, branches, scrub and trees.

'Irrigated' means an area that is watered and maintained, with all vegetation in an alive, green, and non-flammable state.

'Natural vegetation' means natural areas of forest, woodland, shrubland, scrub, mallee, or mulga.

'Passive fuel reduction' means lowering the amount of available fuel that will burn under prevailing conditions by means that will not permanently reduce or modify the structure or life cycle of plant, shrub, scrub, or tree communities within a treated area.

'Relevant building' is classified under the building code as one of the following:

- i. Single dwelling such as a detached house, duplex, villa or townhouse (class 1a)
- ii. Small boarding house, guest house or hostel (class 1b)
- iii. Dwellings such as apartments and flats in a building containing two or more units (class 2)
- iv. Accommodation for unrelated people such as a hotel, motel, residential part of a school, accommodation for the aged, children or people with disabilities (class 3)
- v. Building of a public nature such as a health care building (9a), an assembly building such as a school (9b) or an aged care building (9c)
- vi. Private bushfire shelters associated with a single dwelling (class 10c) or
- vii. Non-habitable buildings including sheds, carports, and private garages (class 10a) when within 6m of a class 1a, 1b, 2, 3 or 9 building.

By order of the Council,



Mark Bishop

Acting Chief Executive Officer

© JBS&G

This document is and shall remain the property of JBS&G. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited

Document Status

Rev No.	Purpose	Author	Reviewed and approved for Issue	
			Name	Date
Rev 0	Issued for use: to facilitate subdivision clearances and creation of title for Stage 7 lots	Zac Cockerill (BPAD 37803, Level 2)	Zac Cockerill (BPAD 37803, Level 2)	17 July 2026



Adelaide

Kaurna Country | 100 Hutt St,
Adelaide, SA 5000
T: 08 8431 7113

Brisbane

Turrbal/Yuggera Country | Level 37, 123
Eagle Street, Brisbane, QLD 4000
T: 07 3211 5350

Bunbury

Wardandi Noongar Country | 177
Spencer Street Bunbury, WA 6230
T: 08 9792 4797

Canberra

Ngunnawal Country | Level 1, The Realm
18 National Circuit Barton, ACT 2600
T: 02 6198 3278

Darwin

Larrakia Country | Suite G1, Level 1
48-50 Smith Street, Darwin NT 0800
T: 08 8943 0600

Hobart

Muwununa/Nuenon Country | Level 6,
111 Macquarie Street Hobart, TAS 7000
T: 03 6108 9054

Melbourne

Kulin Country | Level 5, 10 Queen
Street, Melbourne, VIC 3000
T: 03 9642 0599

Newcastle

Awabakal/Worimi Country | 61 / 63
Parry Street Newcastle West, NSW 2302
T: 02 8245 0300

Perth

Whadjuk Nyoongar Country | Allendale Square,
Level 9, 77 St Georges Terrace, WA 6000
T: 08 9380 3100

Sydney

Gadigal Country | Level 1, 50
Margaret Street, Sydney, NSW 2000
T: 02 8245 0300

Wollongong

Dharawal Country | Suite 1A, 280 - 286
Keira Street, Wollongong, NSW 2500
T: 02 4225 2647