LWP Property Group

Bushfire Management Plan (BMP) Compliance & Condition Clearance Report

Stages 24B & 24C Annie's Landing, Ellenbrook WA

27 October 2022

63810/147,896 (Rev 1)

JBS&G Australia Pty Ltd T/A Strategen-JBS&G

www.jbsg.com.au

Table of Contents

1. Introduction 1
   - 1.1 Site/development summary 1
   - 1.2 Purpose of report 1
2. Implementation of relevant bushfire management measures 2
3. Bushfire assessment results 5
   - 3.1 Assessment inputs 5
     - 3.1.1 Vegetation classification 5
     - 3.1.2 Effective slope 5
     - 3.1.3 Summary of inputs 5
   - 3.2 Assessment outputs 8
     - 3.2.1 Bushfire Attack Level (BAL) contour assessment 8
     - 3.2.2 BAL certificates 9
4. Conclusion and recommendations 11
5. References 12
6. Limitations 13

List of Tables

Table 1: Site/development summary 1
Table 2: BMP implementation actions 2
Table 3: Summary of vegetation classifications, exclusions and effective slope 6
Table 4: BAL contour assessment results 8

List of Figures

Figure 1: Vegetation classification and effective slope 7
Figure 2: BAL contour map 10

Appendices

Appendix A BAL Certificates
Appendix B Landscape plans
Appendix C Local Development Plan
Appendix D Civil engineering roadworks plan
Appendix E Civil engineering water reticulation plan
Appendix F Vegetation plot photos and descriptions

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 and Figure 2.

Table 1: Site/development summary

Site details	
Address details	29 proposed residential lots within Stages 24B & 24C Annie's Landing Estate, Ellenbrook WA 6069
Local government area	City of Swan
Description of building works	Construction of a single residential dwelling (Class 1a building and associated Class 10a building/s) within each lot

1.2 Purpose of report

This Bushfire Management Plan (BMP) compliance and condition clearance report has been prepared for 29 proposed residential lots within Stages 24B and 24C Annie's Landing Estate (hereafter referred to as the project area). Lots within the project area are subject to Condition 16 of WAPC subdivision approval (WAPC Ref. 157923), issued on 24 July 2020. Condition 16 reads as follows:

> *Condition 16: Information is to be provided to demonstrate that the measures contained in the bushfire management plan prepared by Strategen-JBS&G (dated 31 January 2018) have been implemented during subdivisional works. This information should include a completed 'Certification by Bushfire Consultant' from the bushfire management plan.*

This report has been prepared to address the above subdivision condition to demonstrate that Stages 24B and 24C have been established to comply with the relevant provisions of the approved subdivision stage BMP and associated bushfire protection criteria of the Guidelines, noting that the subdivision stage BMP was formally updated to its final version in April 2019. This report also provides a post-subdivisional works update of the Bushfire Attack Level (BAL) within the project area to further demonstrate compliance with the subdivision stage BMP.

The BAL assessment outlined in this report is the most current assessment by Strategen-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 (Strategen 2019). The approach for preparation of this BMP compliance report is consistent with Section 4.2 and Appendix 3 of *Guidelines for Planning in Bushfire Prone Areas* (the Guidelines; WAPC 2021).

20 of the 29 proposed lots within the project area are designated as bushfire prone on the Map of Bush Fire Prone Areas (DFES 2021, see Figure 1). As such, bushfire risk considerations and BAL assessment at the building stage are applicable to the 20 designated bushfire prone lots. BAL certificates for these 20 lots have been prepared based on the final site compliance check and are appended to this report (see Appendix A) for the benefit of the developer, future lot purchasers and decision makers to facilitate future lot sales and building approvals.

2. Implementation of relevant bushfire management measures

The endorsed BMP includes several bushfire management strategies that are inherent to the ability for the development to achieve bushfire compliance and the associated residential lots to achieve the BAL ratings intended under the subdivision stage BAL contour map.

Strategen-JBS&G can confirm that the relevant bushfire management actions detailed in the endorsed BMP (Strategen 2019) have been implemented as intended throughout the duration of subdivisional works. Table 2 summarises the status of each implementation action.

Table 2: BMP implementation actions

Action	Status	Evidence of compliance	Certification by bushfire consultant
Building setback requirements Management Action 1a: '*19 lots adjacent to POS area 8 and Sawpit Gully reserve impacted by BAL-FZ and/or BAL-40 will be subject to APZ building setbacks enforced via standard R code setbacks, Local Development Plan provisions and/or subdivision conditions stating restrictive covenants on title to ensure that all lots can achieve a compliant APZ and BAL rating as per Guideline acceptable solutions A1.1 and A2.1. All APZs are to be established and maintained in accordance with Schedule 1 of the Guidelines (Appendix 4).*'	Complete	Based on the latest landscaping plans for Stage 24 POS (formerly POS 8, see Appendix B) and subsequent confirmation of on-ground works, six proposed lots (Lots 10594 and 10598–10602) require front Asset Protection Zone (APZ) setbacks from 3–7 m in width to ensure all future habitable development within the lots achieves BAL-29 or lower (as depicted in Figure 2. The APZ setbacks will be enforced via the Stage 24 Local Development Plan (LDP, see Appendix C), as per BMP requirements. All other proposed lots within Stages 24B and 24C can achieve BAL-29 or lower without the need for any further consideration of APZ setbacks.	Zac Cockerill (Level 2 BPAD37803)
On-site clearing Management Action 1b: '*Establish and maintain bushfire fuels within all cleared vacant residential lots to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.*'	Complete	The project area and surrounding stages of development have been completely cleared and earthworked to mineral earth in preparation for proposed construction, which complies with exclusion under Clauses 2.2.3.2 (e) and (f), as per aerial imagery contained in Figure 1 and Photo Points 6A, 6B, 6D and 6F in Appendix F.	Zac Cockerill (Level 2 BPAD37803)
On-site clearing Management Action 1c: '*Establish and maintain POS areas 10, 11 and 13 in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.*'	N/A	POS areas 10, 11 and 13 are not in proximity to Stages 24B/24C and are not applicable to the BAL contour assessment for the project area.	N/A
On-site clearing Management Action 1d: '*Undertake tree and understorey thinning within northern portion of POS area 8 to achieve Class B woodland vegetation classification. Works to be verified via BAL compliance certification post-completion of all subdivisional works (see Management Action BMP 5c).*'	Complete	The northern portion of Stage 24 POS (formerly POS 8) has been thinned of vegetation, including clearing of understorey and trees, to achieve a Class B woodland vegetation classification. This is in accordance with BMP requirements and the Stage 24 POS landscape plan contained in Appendix B, with the required on-ground evidence shown in Photo Points 2A–2C in Appendix F.	Zac Cockerill (Level 2 BPAD37803)

Action	Status	Evidence of compliance	Certification by bushfire consultant
Ongoing management Management Action 1e: '*Maintain excluded areas of existing road reserves and new road verges in a low threat state to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.*'	Complete	All existing and proposed urban street reserves/verges within the project area and adjacent 150 m have either been constructed or are in a mineral earth state in preparation for construction, and therefore comply with exclusion under Clauses 2.2.3.2 (e) and (f). Refer to aerial imagery contained in Figure 1 and Photo Points 6A, 6B, 6C, 6E and 6F in Appendix F.	Zac Cockerill (Level 2 BPAD37803)
On-site clearing Management Action 1f: '*Where development is staged, implement and maintain on-site low fuel buffers to achieve exclusion Clause 2.2.3.2 (f) of AS 3959.*'	Complete	Low threat staging buffers have been established in a non-vegetated/low threat managed state across the balance undeveloped future stages of Annie's Landing, as shown in Figure 1 aerial imagery.	Zac Cockerill (Level 2 BPAD37803)
Building construction standards Management Action 2a: '*Construct buildings in accordance with AS 3959, either in accordance with this BMP or future reassessment of BALs.*'	N/A	Not applicable at subdivision clearance stage.	N/A
Vehicular access Management Action 3a: '*Construct public roads and cul-de-sac in accordance with subdivision approval and relevant technical requirements of the Guidelines.*'	Complete, with works bonded	Compliant public roads will be constructed in accordance with the civil roadworks plan contained in Appendix D. The proposed roads comply with relevant technical requirements of the Guidelines. Two proposed connections with Maralla Road, as well as direct lot frontage to both Maralla Road and Dunnett Drive, provides multiple access routes west, east and south throughout the broader public road network.	Zac Cockerill (Level 2 BPAD37803)
Reticulated water supply Management Action 4a: '*Construct reticulated water supply and network of hydrants in accordance with subdivision approval and water authority, DFES and City technical requirements.*'	Complete, with works bonded	A compliant reticulated water supply and network of street hydrants will be installed in accordance with the water reticulation plan (refer to Appendix E).	Zac Cockerill (Level 2 BPAD37803)
Additional measures Management Action 5a: '*Place notification on the Certificates of Title of all proposed lots with a BAL rating of 12.5 or above.*'	N/A	To be completed by others at creation of Title.	N/A
Additional measures Management Action 5b: '*Place restrictive covenant on the Certificates of Title of all proposed lots requiring APZ building setbacks to avoid habitable development with BAL-40 or BAL-FZ*'	N/A	Not required as APZ setbacks are being enforced via LDP provisions (see Appendix C).	N/A
Additional measures Management Action 5c: '*Undertake BAL compliance check.*'	Complete	This report (see Table 4 and Figure 2).	Zac Cockerill (Level 2 BPAD37803)

Action	Status	Evidence of compliance	Certification by bushfire consultant
Additional measures Management Action 5d: '*Comply with the City of Swan annual firebreak notice outlined in Appendix 5.*'	Complete/ ongoing	The project area complies with the current City of Swan annual firebreak notice and will continue to comply through establishment of the project area into a permanent low threat state through residential development.	Zac Cockerill (Level 2 BPAD37803) 
Additional measures Management Action 5e: '*Reassess BALs for individual lots.*'	Complete	This report (see Table 4 and Figure 2 and Appendix A).	Zac Cockerill (Level 2 BPAD37803) 

3. Bushfire assessment results

3.1 Assessment inputs

3.1.1 Vegetation classification

Strategen-JBS&G assessed classified vegetation and exclusions within the 150 m assessment area through on-ground verification on 24 August 2022 and reassessment on 28 September 2022 in accordance with AS 3959—2018 *Construction of Buildings in Bushfire-Prone Areas* (AS 3959; SA 2018) 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 are contained in Appendix F and depicted in Figure 1.

Site observations indicate that the current on-ground vegetation classifications for Stages 24B and 24C align with those from the endorsed subdivision stage BMP (Strategen 2019), as per the following comments:

- the project area and adjacent future stages of development have been completely cleared and maintained in preparation for proposed urban development and are excluded under Clauses 2.2.3.2 (e) and (f).
- the adjacent 150 m of land consists of:
    - Class A forest to the south and west of the project area retained within Sawpit Gully reserve and the southern portion of Stage 24 POS
    - Class B woodland to the north of the project area retained within private property opposite Maralla Road and the northern portion of Stage 24 POS
    - Class D scrub to the northeast of the project area retained within rural land opposite Maralla Road
    - Class G grassland to the north of the project area within cleared rural land opposite Maralla Road
    - existing non-vegetated areas (e.g. roads and buildings) and low threat managed land (street verge treatments, managed POS, cleared vacant lots, etc), which are excluded under Clauses 2.2.3.2 (e) and (f).

3.1.2 Effective slope

Strategen-JBS&G assessed effective slope under classified vegetation within the 150 m assessment area through on-ground verification on 24 August 2022 and reassessment on 28 September 2022 in accordance with AS 3959. Results were cross-referenced with DPIRD 2 m contour data and are depicted in Figure 1.

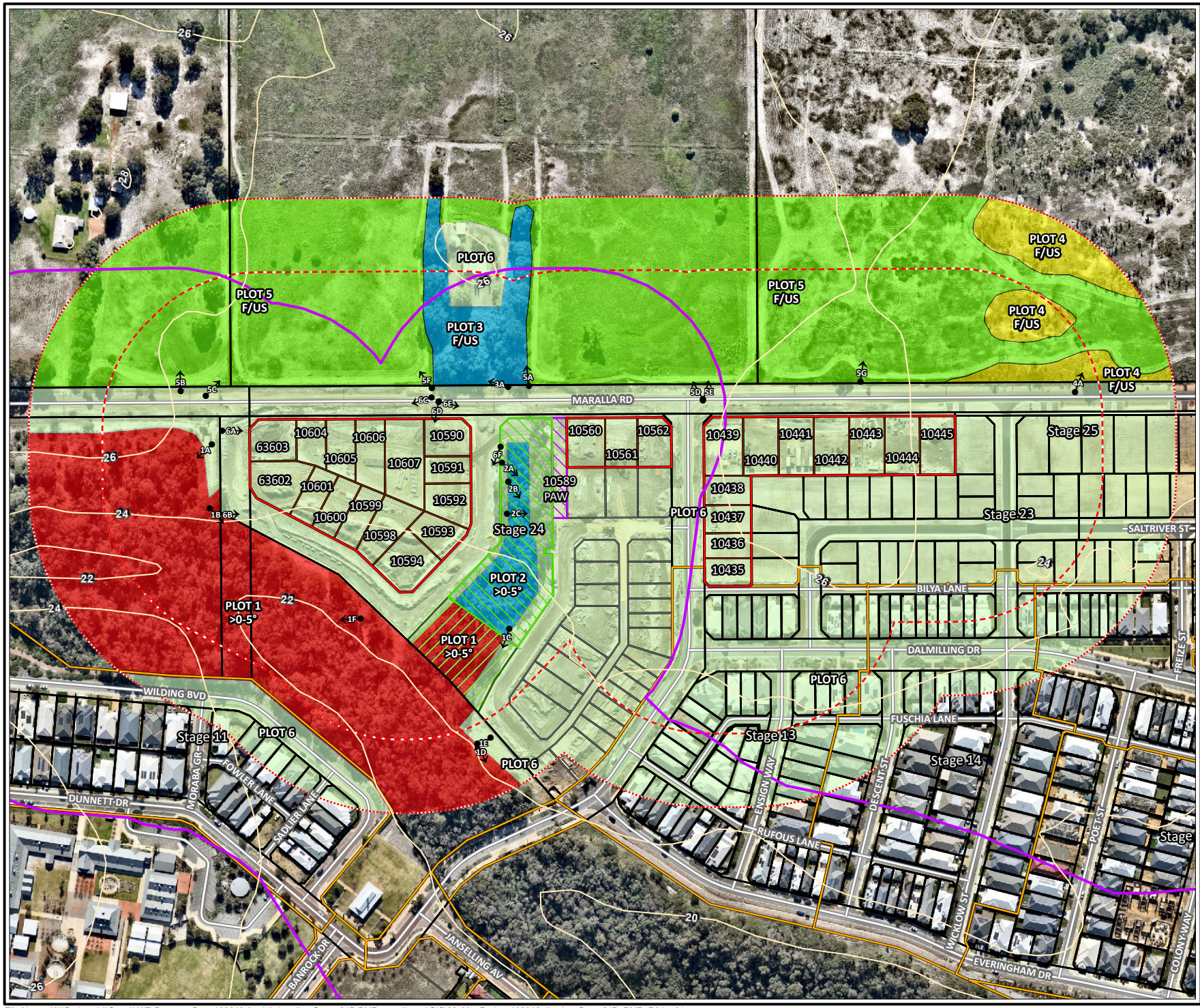
Site observations indicate that effective slope under the classified vegetation aligns with the effective slopes identified within the endorsed BMP (Strategen 2019), including a downslope of >0–5 degrees under classified forest and woodland vegetation retained within Sawpit Gully and Stage 24 POS; and flat/upsloping land under classified woodland, classified scrub, and classified grassland vegetation within rural land to the north of the project area opposite Maralla Road.

3.1.3 Summary of inputs

Figure 1 illustrates the current vegetation classifications and exclusions observed during the site inspection. The vegetation classifications/exclusions and effective slope are summarised in Table 3.

Table 3: Summary of vegetation classifications, exclusions and effective slope

Vegetation plot	Vegetation classification	Effective slope	Comments
1	Class A Forest	Downslope >0–5°	Forest vegetation retained within Sawpit Gully and the southern portion of Stage 24 POS containing a three-tiered forest fuel profile with a predominant eucalyptus overstorey.
2	Class B Woodland	Downslope >0–5°	Sparse eucalyptus canopy retained over grass within the northern section of Stage 24 POS.
3	Class B Woodland	Flat/upslope (0°)	Sparse eucalyptus canopy retained over grass within private rural land opposite Maralla Road.
4	Class D Scrub	Flat/upslope (0°)	Vegetation with a continuous horizontal and vertical structure, greater than 2 m high at maturity within private rural land opposite Maralla Road.
5	Class G Grassland	Flat/upslope (0°)	Grassland greater than 100 mm in height within cleared rural land opposite Maralla Road.
6	Excluded under Clause 2.2.3.2 (e) and (f)	N/A	Non-vegetated areas (i.e. land cleared for future development of the project area, roads, existing residential development, etc) and low threat managed vegetation (i.e. managed urban street verges, managed POS, maintained gardens, low threat staging buffers, etc).



Legend

- Project area
- 100m assessment area
- 150m assessment area
- Cadastral boundaries
- Bushfire prone areas
- Stage boundaries
- Proposed lots
- Future indicative lot layout on adjacent stages
- Conservation POS
- PAW
- POS

Vegetation classification

- Class A Forest
- Class B Woodland
- Class D Scrub
- Class G Grassland
- Clause 2.2.3.2 (e) & (f)
- Topographic contours (mAHD)
- Photo point directions
- Roads

strategen JBS&G

Job No: 63810

Client: LWP Property

Version: A	Date: 26/10/2022
Drawn By: jcrute	Checked By: CT

Scale 1:3,500 at A4

0 50 100
metres

Coord. Sys. GDA2020 MGA Zone 50

Annie's Landing Stage 24B, Ellenbrook, WA

VEGETATION CLASSIFICATION AND EFFECTIVE SLOPE

FIGURE 1

File Name: W:\Projects\1)Open\LWP Property Group\63810 Annie's Landing Stage 24B BMP compliance\GIS\02_MapProjects\63810_Annies_Stage24B_BMP_R01_v01.aprx
Image Reference: www.nearmap.com© - Imagery Date: 23. August 2022.

3.2 Assessment outputs

3.2.1 Bushfire Attack Level (BAL) contour assessment

Strategen-JBS&G has undertaken a BAL contour assessment in accordance with Method 1 of AS 3959 for the project area (Figure 2). 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 current on-ground site conditions and take into consideration the bushfire management measures that have been implemented on site as listed in Section 2.

Results of the BAL contour assessment are summarised in Table 4 and depicted in Figure 2, which demonstrate that all proposed lots can achieve compliance with BAL-29 or lower, except for Lots 10594 and 10598–10602, which require front APZ setbacks of 3–7 m in width to ensure all future habitable development within the lots achieves BAL-29 or lower (as shown on Figure 2). This is consistent with outcomes from the subdivision stage BMP (Strategen 2019), with the APZ setbacks enforced under the approved Stage 24 LDP (see Appendix C).

Table 4: BAL contour assessment results

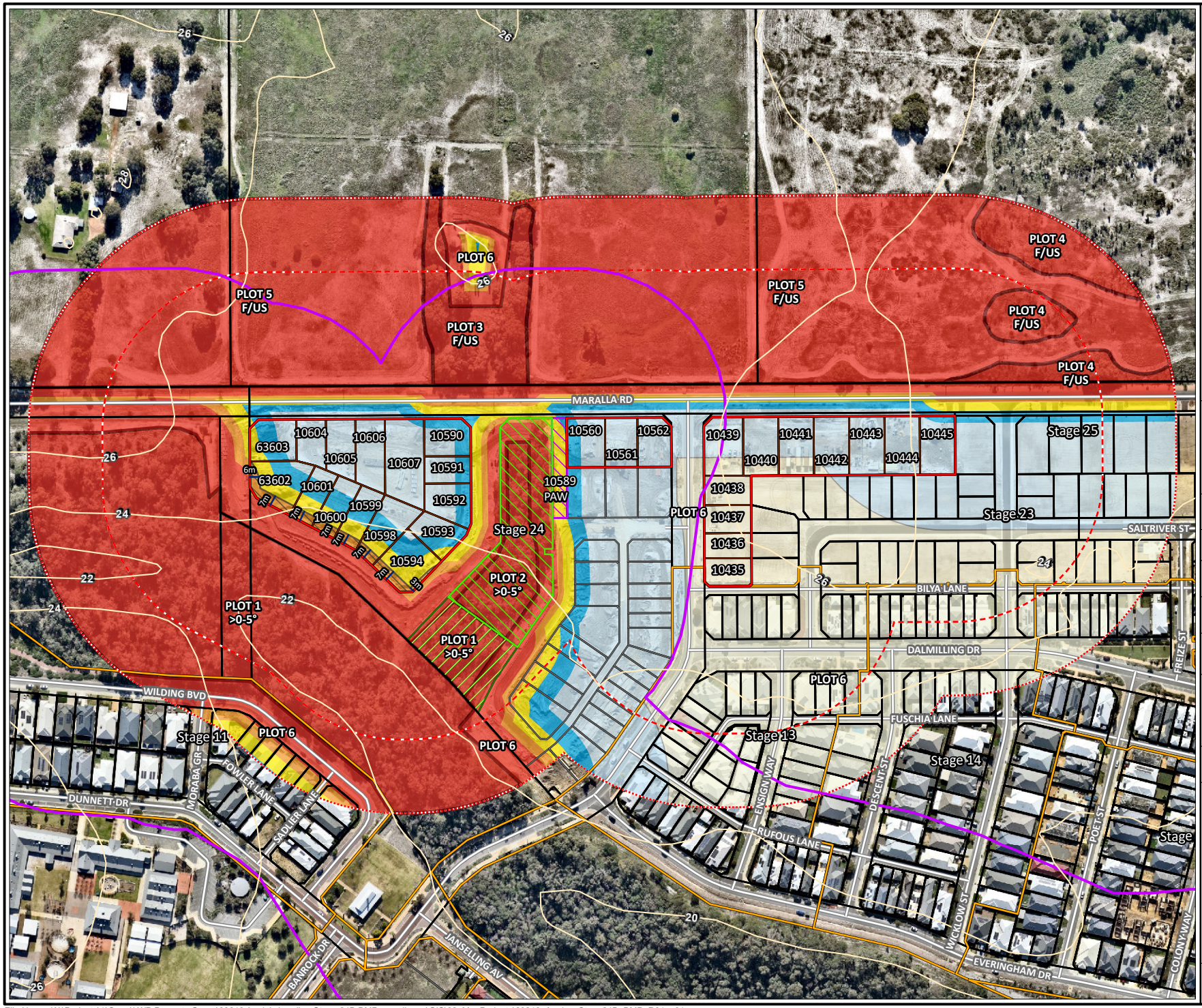
Lot	Bushfire prone	Vegetation plot	Vegetation classification	Effective slope	Separation distance	Highest BAL	Building setback to achieve lower BAL*	Reduced BAL*
Stage 24B								
10435	No	N/A	N/A	N/A	N/A	N/A	N/A	
10436		N/A	N/A	N/A	N/A	N/A	N/A	
10437		N/A	N/A	N/A	N/A	N/A	N/A	
10438	Yes	Plot 5	Glass G Grassland	Flat/upslope (0°)	>50 m	BAL-Low	N/A	
10439	Yes	Plot 5	Glass G Grassland	Flat/upslope (0°)	22 m	BAL-12.5	N/A	
10440	No	N/A	N/A	N/A	N/A	N/A	N/A	
10441		N/A	N/A	N/A	N/A	N/A	N/A	
10442		N/A	N/A	N/A	N/A	N/A	N/A	
10443		N/A	N/A	N/A	N/A	N/A	N/A	
10444		N/A	N/A	N/A	N/A	N/A	N/A	
10445		N/A	N/A	N/A	N/A	N/A	N/A	
10560	Yes	Plot 2	Class B Woodland	Downslope >0–5°	25 m	BAL-19	N/A	
10561	Yes	Plot 5	Class G Grassland	Flat/upslope (0°)	22 m	BAL-12.5	N/A	
10562	Yes	Plot 5	Class G Grassland	Flat/upslope (0°)	22 m	BAL-12.5	N/A	
10590	Yes	Plot 2	Class B Woodland	Downslope >0–5°	25 m	BAL-19	N/A	
10591	Yes	Plot 2	Class B Woodland	Downslope >0–5°	25 m	BAL-19	N/A	
10592	Yes	Plot 2	Class B Woodland	Downslope >0–5°	25 m	BAL-19	N/A	
10593	Yes	Plot 1	Class A Forest	Downslope >0–5°	29 m	BAL-29	N/A	

Lot	Bushfire prone	Vegetation plot	Vegetation classification	Effective slope	Separation distance	Highest BAL	Building setback to achieve lower BAL*	Reduced BAL*
10594	Yes	Plot 1	Class A Forest	Downslope >0–5°	27 m (including 3–7 m truncated front APZ setback	BAL-29	N/A	
10598	Yes	Plot 1	Class A Forest	Downslope >0–5°	27 m (including 7 m front APZ setback)	BAL-29	N/A	
10599	Yes	Plot 1	Class A Forest	Downslope >0–5°	27 m (including 7 m front APZ setback)	BAL-29	N/A	
10600	Yes	Plot 1	Class A Forest	Downslope >0–5°	27 m (including 7 m front APZ setback)	BAL-29	N/A	
10601	Yes	Plot 1	Class A Forest	Downslope >0–5°	27 m (including 7 m front APZ setback)	BAL-29	N/A	
10602	Yes	Plot 1	Class A Forest	Downslope >0–5°	27 m (including 6–7 m truncated front APZ setback)	BAL-29	N/A	
10603	Yes	Plot 1	Class A Forest	Downslope >0–5°	27 m	BAL-29	N/A	
10604	Yes	Plot 5	Class G Grassland	Flat/upslope (0°)	22 m	BAL-12.5	N/A	
10605	Yes	Plot 5	Class G Grassland	Flat/upslope (0°)	22 m	BAL-12.5	N/A	
10606	Yes	Plot 5	Class G Grassland	Flat/upslope (0°)	22 m	BAL-12.5	N/A	
10607	Yes	Plot 3	Class B Woodland	Flat/upslope (0°)	23 m	BAL-19	6 m truncated front setback	BAL-12.5

*The new BAL rating can only be confirmed once the building plan for the relevant lot has been prepared to demonstrate compliance with the recommended setback. An updated BAL certificate can be prepared at that time.

3.2.2 BAL certificates

BAL certificates for the 20 proposed lots situated within a designated bushfire prone area are provided in Appendix A in accordance with the BAL contour assessment results detailed in Table 4. Should a lower BAL rating be realistically achievable through an appropriate building setback, then the landowner can refer to the recommended setbacks listed in Table 4. The lower BAL rating may be achieved if the recommended building setback is reflected on the building plan for that lot and a revised BAL certificate can be issued at that time.



Legend

- Project area
- 100m assessment area
- 150m assessment area
- Cadastral boundaries
- Bushfire prone areas
- Stage boundaries
- Proposed lots
- Future indicative lot layout on adjacent stages
- Conservation POS
- PAW
- POS
- Classified vegetation
- APZ setback

BAL contours

- BAL FZ
- BAL 40
- BAL 29
- BAL 19
- BAL 12.5
- BAL Low
- APZ setback distance (m)
- Topographic contours (mAHD)
- Roads

strategen JBS&G

Job No: 63810

Client: LWP Property

Version: A	Date: 26/10/2022
Drawn By: jcrute	Checked By: CT

Scale 1:3,500 at A4

0 50 100
metres

Coord. Sys. GDA2020 MGA Zone 50

Annie's Landing Stage 24B, Ellenbrook, WA

BAL CONTOUR MAP

FIGURE 2

File Name: W:\Projects\1)Open\LWP Property Group\63810 Annie's Landing Stage 24B BMP compliance\GIS\02_MapProjects\63810_Annies_Stage24B_BMP_R01_v01.aprx
Image Reference: www.nearmap.com© - Imagery Date: 23. August 2022.

4. Conclusion and recommendations

This BMP compliance and condition clearance report has been prepared for 29 proposed residential lots within Stages 24B and 24C Annie's Landing Estate, Ellenbrook.

This report addresses Condition 16 of WAPC subdivision approval (WAPC Ref. 157923) and demonstrates that Stages 24B and 24C have been established to comply with the relevant provisions of the approved subdivision stage BMP (Strategen 2019) and associated bushfire protection criteria of the Guidelines. This includes provision for compliant access, water supply and 3–7 m APZ setbacks for Lots 10594 and 10598–10602 such that BAL-29 or lower can be achieved for all proposed habitable development within each proposed lot.

Assessment results are consistent with current on-ground conditions. Strategen-JBS&G can confirm that the existing BMP over the site has been implemented as intended throughout the duration of subdivisional works for the relevant Stage 24B/24C area and adjacent land.

BAL certificates have been prepared for the 20 designated bushfire prone lots within Stages 24B and 24C. BAL certificates for these lots are provided in Appendix A to facilitate future lot sales and building approvals.

5. References

Department of Fire and Emergency Services (DFES) 2021, *Map of Bush Fire Prone Areas*, [Online], Government of Western Australia, available from: https://maps.slip.wa.gov.au/landgate/bushfireprone/, [14/10/2022].

Department of Planning (DoP) 2016, *Visual guide for bushfire risk assessment in Western Australia*, Department of Planning, Perth.

Standards Australia (SA) 2018, *Australian Standard AS 3959–2018 Construction of Buildings in Bushfire-prone Areas*, Standards Australia, Sydney.

Strategen Environmental (Strategen) 2019, *Bushfire Management Plan: Annie's Landing – Village 7B, Ellenbrook,* Strategen Bunbury.

Western Australian Planning Commission (WAPC) 2021, *Guidelines for Planning in Bushfire Prone Areas, Version 1.4 December 2021*, Western Australian Planning Commission, Perth.

6. Limitations

Scope of services

This report ("the report") has been prepared by Strategen-JBS&G in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Strategen-JBS&G. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

Reliance on data

In preparing the report, Strategen-JBS&G has relied upon data and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise expressly stated in the report, Strategen-JBS&G has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. Strategen-JBS&G has also not attempted to determine whether any material matter has been omitted from the data. Strategen-JBS&G will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to Strategen-JBS&G. The making of any assumption does not imply that Strategen-JBS&G has made any enquiry to verify the correctness of that assumption.

The report is based on conditions encountered and information received at the time of preparation of this report or the time that site investigations were carried out. Strategen-JBS&G disclaims responsibility for any changes that may have occurred after this time. This report and any legal issues arising from it are governed by and construed in accordance with the law of Western Australia as at the date of this report.

Environmental conclusions

Within the limitations imposed by the scope of services, the preparation of this report has been undertaken and performed in a professional manner, in accordance with generally accepted environmental consulting practices. No other warranty, whether express or implied, is made.

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.

Strategen-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 Strategen-JBS&G, and should not be relied upon by other parties, who should make their own enquiries.

Appendix A BAL Certificates

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

This Certificate has been issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme. The certificate details the conclusions of the full Bushfire Attack Level Assessment Report (full report) prepared by the Accredited Practitioner.

Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**		
			10438	Dunnett Drive		
	Suburb				**State**	**Postcode**
	Ellenbrook				WA	6069
Local government area	City of Swan					
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling		
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s					

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G Grassland	Flat/upslope 0°	>50 m	BAL – LOW

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

I hereby declare that I am a BPAD accredited bushfire practitioner.
Accreditation No. 37803
Signature
Date 14/10/22

Authorised Practitioner Stamp

Reliance on the assessment and determination of the Bushfire Attack Level contained in this certificate should not extend beyond a period of 12 months from the date of issue of the certificate. If this certificate was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated certificate issued.

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

This Certificate has been issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme. The certificate details the conclusions of the full Bushfire Attack Level Assessment Report (full report) prepared by the Accredited Practitioner.

Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10439	Maralla Road	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G Grassland	Flat/upslope 0°	22 m	BAL – 12.5

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

I hereby declare that I am a BPAD accredited bushfire practitioner.
Accreditation No. 37803
Signature
Date 14/10/22

Authorised Practitioner Stamp

Reliance on the assessment and determination of the Bushfire Attack Level contained in this certificate should not extend beyond a period of 12 months from the date of issue of the certificate. If this certificate was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated certificate issued.

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

This Certificate has been issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme. The certificate details the conclusions of the full Bushfire Attack Level Assessment Report (full report) prepared by the Accredited Practitioner.

Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10560	Maralla Road	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope >0-5°	25 m	BAL – 19

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

I hereby declare that I am a BPAD accredited bushfire practitioner.

Accreditation No. 37803

Signature

Date 14/10/22

Authorised Practitioner Stamp

Reliance on the assessment and determination of the Bushfire Attack Level contained in this certificate should not extend beyond a period of 12 months from the date of issue of the certificate. If this certificate was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated certificate issued.

Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10561	Maralla Road	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G Grassland	Flat/upslope 0°	22 m	BAL – 12.5

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

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Bushfire Attack Level (BAL) Certificate

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10562	Maralla Road	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**	Residential dwelling		
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G Grassland	Flat/upslope 0°	22 m	BAL – 12.5

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no** 10590	**Street name / Plan Reference** Koomal Way	
	Suburb Ellenbrook			**State** WA	**Postcode** 6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**	Residential dwelling		
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope >0–5°	25 m	BAL – 19

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10591	Koomal Way	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope >0–5°	25 m	BAL – 19

BPAD Accredited Practitioner Details

Name
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Company Details
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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10592	Koomal Way	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Downslope >0–5°	25 m	BAL – 19

BPAD Accredited Practitioner Details

Name
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Company Details
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Bushfire Attack Level (BAL) Certificate

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**		
			10593	Koomal Way		
	Suburb				**State**	**Postcode**
	Ellenbrook				WA	6069
Local government area	City of Swan					
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling		
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s					

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Downslope >0–5°	29 m	BAL – 29

BPAD Accredited Practitioner Details

Name
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Company Details
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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10594	Koomal Way	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Downslope >0–5°	27 m	BAL – 29

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
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Bushfire Attack Level (BAL) Certificate

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**		
			10598	Koomal Way		
	Suburb				**State**	**Postcode**
	Ellenbrook				WA	6069
Local government area	City of Swan					
Main BCA class of the building	Class 1a	**Use(s) of the building**	Residential dwelling			
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s					

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Downslope >0–5°	27 m	BAL – 29

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
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Accreditation No. 37803

Signature

Date 14/10/22

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Bushfire Attack Level (BAL) Certificate

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**		
			10599	Koomal Way		
	Suburb				**State**	**Postcode**
	Ellenbrook				WA	6069
Local government area	City of Swan					
Main BCA class of the building	Class 1a	**Use(s) of the building**	Residential dwelling			
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s					

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Downslope >0–5°	27 m	BAL – 29

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

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Accreditation No. 37803

Signature

Date 14/10/22

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Bushfire Attack Level (BAL) Certificate

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10600	Koomal Way	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Downslope >0–5°	27 m	BAL – 29

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

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Accreditation No. 37803
Signature
Date 14/10/22

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Bushfire Attack Level (BAL) Certificate

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10601	Koomal Way	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Downslope >0–5°	27 m	BAL – 29

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

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Signature
Date 14/10/22

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Bushfire Attack Level (BAL) Certificate

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10602	Koomal Way	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Downslope >0–5°	27 m	BAL – 29

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

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I hereby declare that I am a BPAD accredited bushfire practitioner.
Accreditation No. 37803
Signature
Date 27/10/22

Authorised Practitioner Stamp

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Bushfire Attack Level (BAL) Certificate

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10603	Maralla Road	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class A - Forest	Downslope >0–5°	27 m	BAL – 29

BPAD Accredited Practitioner Details

Name
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Company Details
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Signature
Date 27/10/22

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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**		
			10604	Maralla Road		
	Suburb				**State**	**Postcode**
	Ellenbrook				WA	6069
Local government area	City of Swan					
Main BCA class of the building	Class 1a	**Use(s) of the building**	Residential dwelling			
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s					

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G Grassland	Flat/upslope (0°)	22 m	BAL – 12.5

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**		
			10605	Maralla Road		
	Suburb				**State**	**Postcode**
	Ellenbrook				WA	6069
Local government area	City of Swan					
Main BCA class of the building	Class 1a	**Use(s) of the building**	Residential dwelling			
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s					

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G Grassland	Flat/upslope (0°)	22 m	BAL – 12.5

BPAD Accredited Practitioner Details

Name
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Company Details
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Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10606	Maralla Road	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class G Grassland	Flat/upslope (0°)	22 m	BAL – 12.5

BPAD Accredited Practitioner Details

Name
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Company Details
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Bushfire Attack Level (BAL) Certificate

Determined in accordance with AS 3959-2018

This Certificate has been issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme. The certificate details the conclusions of the full Bushfire Attack Level Assessment Report (full report) prepared by the Accredited Practitioner.

Property Details and Description of Works

Address Details	**Unit no**	**Street no**	**Lot no**	**Street name / Plan Reference**	
			10607	Maralla Road	
	Suburb			**State**	**Postcode**
	Ellenbrook			WA	6069
Local government area	City of Swan				
Main BCA class of the building	Class 1a	**Use(s) of the building**		Residential dwelling	
Description of the building or works	Construction of a single Class 1a building and associated Class 10a building/s				

Determination of Highest Bushfire Attack Level

AS 3959 Assessment Procedure	Vegetation Classification	Effective Slope	Separation Distance	BAL
Method 1	Class B Woodland	Flat/upslope (0°)	23 m (lower BAL achievable with setback)	BAL – 19

BPAD Accredited Practitioner Details

Name
Zac Cockerill

Company Details
JBS&G Australia Pty Ltd T/A Strategen JBS&G

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2018.

I hereby declare that I am a BPAD accredited bushfire practitioner.
Accreditation No. 37803
Signature
Date 14/10/22

Authorised Practitioner Stamp

Reliance on the assessment and determination of the Bushfire Attack Level contained in this certificate should not extend beyond a period of 12 months from the date of issue of the certificate. If this certificate was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated certificate issued.

Appendix B Landscape plans

ELLENBROOK MANAGEMENT PTY LTD

ANNIE'S LANDING

STAGE 24

HARD & SOFT LANDSCAPE WORKS
ISSUED FOR APPROVAL

PROJECT NO: 1001555

SCHEDULE OF DRAWINGS:

LANDSCAPE DRAWINGS:

L100 COVER SHEET

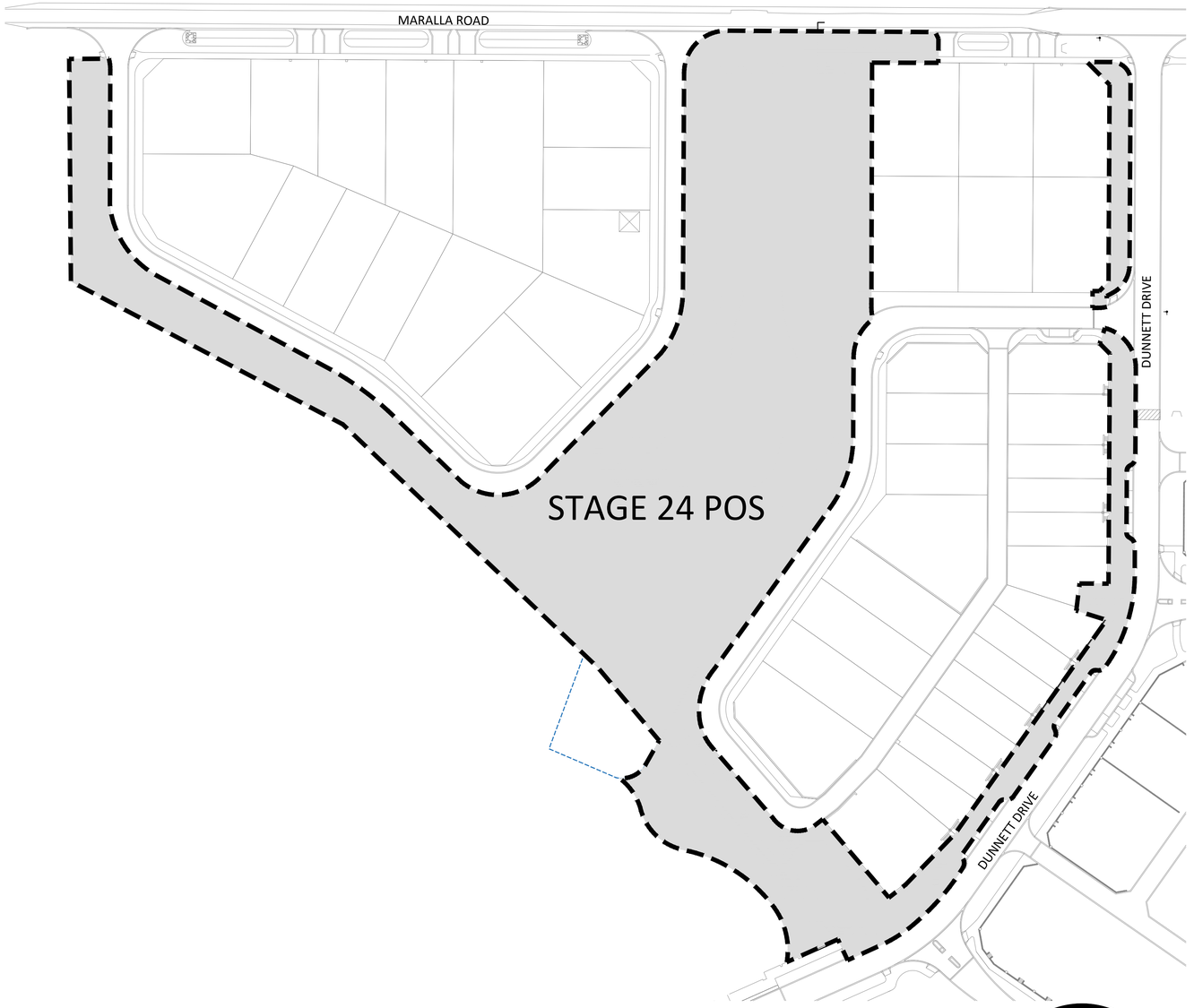
L3 LEVELS & GRADING
L3.101 LEVELS & GRADING & HARD WORKS
L3.102 LEVELS & GRADING & HARD WORKS

L4 HARD WORKS
L4.101 HARD WORKS
L4.102 HARD WORKS

L5 SOFT WORKS
L5.101 SOFT LANDSCAPE DRAWING
L5.102 SOFT LANDSCAPE DRAWING
L5.103 SOFT LANDSCAPE DRAWING

L7 DETAILS
L7.101 GENERAL DETAILS
L7.102 GENERAL DETAILS
L7.103 GENERAL DETAILS
L7.104 GENERAL DETAILS
L7.105 GENERAL DETAILS
L7.106 GENERAL NOTES

JULY 2022



LOCATION PLAN
NOT TO SCALE

LANDSCAPE ARCHITECTS
414 ROKEBY RD SUBIACO WA 6008
T: (08) 9388 9566 E: mail@plane.com.au
LANDSPACE PTY LTD ACN 056 538 679

PLAN E

EXTENT OF WORKS/SITE

DRAINAGE & HEADWORKS BY OTHERS

assumed road 26.00

24.50

+26.30 +26.00 +25.90 +26.20 +26.10 +26.00 +25.80 +25.60 +25.40 +25.20 +25.00 +24.80 +24.60 +24.40 +24.20 +26.00 +25.80 +25.50 +25.40 +25.30 +25.20

TOW 25.90+ BGL 25.50

TOW 25.90+ BGL25.50

Cadastral Boundary

EXISTING VEGETATION CLASS B WOODLAND CLASSIFICATION

LOW FUEL ZONE BUFFER 25M

EXISTING DRAINAGE CHANNEL

MATCH L.101
MATCH L.103

MATCH L.102
MATCH L.101

CERTIFICATION:
This drawing shall not be used for construction purposes unless Revised 0 Issued for Construction and signed and approved by the Certifying Landscape Architect. Verify all dimensions on site before commencing work or ordering materials. Refer any discrepancy to Landscape Architect before proceeding with the works.

DO NOT SCALE FROM THE DRAWING

DATE	REV	DESCRIPTION	BY	AP
11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD

LEGEND:

- 28.50 DESIGN CONTOUR
- 28.50 EXISTING CONTOUR
- + 17.53 SPOT RL LEVEL
- +BGL 17.53 BASE GROUND LEVEL
- +TOW 17.53 TOP OF WALL RL

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION

LEVELS & GRADING DRAWING

JOB NO. 1001555 L3.101 REV A JULY 2022

1:250 @ A1

0 5 10 15 25m

PLOTTED BY: TKOCH

PLOT DATE: 18/07/2022 12:10:04 PM

FILE LOCATION: L:\PROJECTS\2010 PROJECTS\10015 ELLENBROOK VILLAGE 8\1001555 ANNIE'S LANDING - STAGE 24 POS\PROJECT\PS DRAWINGS\CONDOCS\1001555_L3 L4 L5 (A).DWG

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PLAN \ E

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LEGEND:

- 28.50 DESIGN CONTOUR
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- + 17.53 SPOT RL LEVEL
- +BGL 17.53 BASE GROUND LEVEL
- +TOW 17.53 TOP OF WALL RL

MATCH L.102
MATCH L.101

MATCH L.102
MATCH L.103

Cadastral Boundary

EXTENT OF WORKS/SITE

GREVILLEA PROTECTION AREA

FOOTBRIDGE @ 23.92

AREA TO BE PLANTED WITH LOW FUEL PLANTING

DRAINAGE VOLUME:
1:1 YR 53M3 (300mm DEEP)
1:5YR 54M3 (500mm DEEP)

EXISTING TREES TO BE RETAINED ON SITE

DALMILLING DRIVE

DUNNET DRIVE

REFER INSET
INSET

REFER INSET
INSET

REFER INSET
INSET

EXISTING TREES TO BE RETAINED ON SITE

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE INFORMATION

LEVELS & GRADING DRAWING

PLAN E

JOB NO. 1001555 | L3.102 | REV A | JULY 2022

1:250 @ A1

0 5 10 15 25m

LANDSCAPE ARCHITECTS
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PLOTTED BY: TKOCH

PLOT DATE: 18/07/2022 12:10:10 PM

EXTENT OF WORKS/SITE

DRAINAGE & HEADWORKS BY OTHERS

Cadastral Boundary

BIN

SS

TS

TS

MK

W1

MK

W1

MK

MK

BS

EXISTING VEGETATION
CLASS B WOODLAND CLASSIFICATION.

MK

MATCH L.101
MATCH L.103

LOW FUEL ZONE BUFFER 25M

EXISTING DRAINAGE CHANNEL

MK

BF

BR

MAINTENANCE ACCESS FOR FIRE VEHICLES

Cadastral Boundary

PATH BY CIVIL

MOWING MAINTENANCE ACCESS

MATCH L.102
MATCH L.101

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DATE	REV	DESCRIPTION	BY	AP
11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD

LEGEND:

(P1) INSITU CONCRETE PAVEMENT
TYPE: GREY, 32MPa
THICKNESS:100MM WITH EDGE THICKENING
FINISH: BROOM FINISH NO PICTURE FRAMES
BASE COURSE: 150mm
REFER DETAIL 01/L7.101.

(P2) INSITU CONCRETE PAVEMENT
TYPE: CCS CANVAS, 32MPa
THICKNESS:100MM WITH EDGE THICKENING
FINISH:BROOM FINISH NO PICTURE FRAMES
BASE COURSE: 150mm
REFER DETAIL 01/L7.101.

(P3) TRAFFICABLE INSITU CONCRETE PAVEMENT
CEMENT: CCS ZEUS, 32MPA
150mm THICK WITH EDGE THICKENING
REINFORCING: SL82 MESH CENTRAL
FINISH: BROOM FINISH, NO PICTURE FRAMES
BASE COURSE: 200mm THK COMPACTED LIMESTONE
REFER DETAIL 02/L7.101.

CRUSHED LIMESTONE TRAIL
100MM CRUSHED LIMESTONE
COMPACTED SUBGRADE
REFER DETAIL 03/L7.101.

COMPOSITE TIMBER BRIDGE
MAKE: STEEL FRAME WITH 32mm MILLBOARD COMPOSITE TIMBER DECKING, COLOUR: CARBONISED EMBERED
REFER DETAIL 04-09/L7.101

LATERITE ROCK PITCHING
TYPE: LATERITE SPALLS
SIZE: 150mm MIN DIA - 300mm MAX DIA
MORTAR COLOUR: TO MATCH SPALLS
150mm COMPACTED SUBGRADE
REFER DETAIL 10/L7.101

MK — INSITU CONCRETE MOWING KERB
GREY 32MPa
DIMENSIONS: 200x200mm
BASE COURSE: COMPACTED SUBGRADE
REFER DETAIL 10/L7.101

BA — BALUSTRADE:
MAKE: CUSTOM
REFER DETAIL 01-04/L7.102.

EW — EXISTING BLOCK WALL
TO BE RETAINED AND PROTECTED
BALUSTRADE TO BE INSTALLED
WHERE SHOWN ON DRAWINGS.

WT — WALL TYPE 1
MANUFACTURER: BRICKMAKERS
SIZE: 1000x350x165MM
NATURAL EARTH BLOCK WITH MORTAR
TO MATCH BLOCKWORK
LAID:STRETCHER
REFER DETAIL 06/L7.104

ROCKWORK LATERITE BOULDERS
ON 100mm THICK N32 INSITU CONCRETE
REFER DETAIL 05/L7.101

SS — SHADE STRUCTURE:
MAKE: CUSTOM
REFER DETAIL L7.103-L7.104.

LG — LYNCHGATE STRUCTURE:
MAKE: CUSTOM
REFER DETAILS L7.105

BS — BENCH SEAT:
MAKE: COX URBAN FURNITURE
MODEL / CODE: PMD SBA-2
INSTALL TO MANUFACTURERS SPECIFICATION

TS — TABLE SETTING:
MAKE: COX URBAN FURNITURE
MODEL / CODE: TBS-2 DA
INSTALL TO MANUFACTURERS SPECIFICATION

BF — BOLLARD - FIXED:
CITY OF SWAN STANDARD

BR — BOLLARD - REMOVABLE:
CITY OF SWAN STANDARD

BIN — RUBBISH BIN:
MAKE: COX URBAN FURNITURE
MODEL / CODE: PMD LTD-3
INSTALL TO MANUFACTURERS SPECIFICATION

RCB — ROOT CONTROL BARRIER
INSTALL TO LOCATIONS WITHIN 1800mm OF NEW TREES
MAKE: GREENWAY ENTERPRISES
DEPTH: MIN. 600mm

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION

HARD WORKS DRAWING

JOB NO. 1001555 L4.101 REV A JULY 2022

1:250 @ A1

0 5 10 15 25m

LANDSCAPE ARCHITECTS
414 ROKEBY RD SUBIACO WA 6008
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LANDSPACE PTY LTD ACN 056 538 679

PLAN E

FILE LOCATION: L:\PROJECTS\2010 PROJECTS\10015 ELLENBROOK VILLAGE 8\1001555 ANNIE'S LANDING - STAGE 24 POS\PROJECT\PS DRAWINGS\CONDOCS\1001555_L3 L4 L5 (A).DWG

PLOTTED BY: TKOCH

PLOT DATE: 18/07/2022 12:10:14 PM

MATCH L.102
MATCH L.101

MATCH L.102
MATCH L.103

MOWING MAINTENANCE ACCESS

Limestone

BA/EW

W1

TS

Cadastral Boundary

EXISTING FENCE ALIGNMENT

CUT STAIRS INTO EXISTING WALL

GREVILLEA PROTECTION AREA

EXTENT OF WORKS/SITE

LARGER WALL EXISTS ON SITE, TO BE PROTECTED AND RETAINED, BALUSTRADE ADDED.

FENCE TO MEET EXISTING WALL

PROPOSED ACCESS GATE LOCATION

SS

1.5M WIDE GRAVEL TRAIL

BA

AREA TO BE PLANTED WITH LOW FUEL PLANTING

NEW WALL BALUSTRADE ADDED

EXISTING TREES TO BE RETAINED ON SITE

REFER INSET

INSET

LATERITE BOULDERS AND LATERITE PITCHING TO WEIR

EXISTING PATH

PATH BY CIVIL

DUNNET DRIVE

LG

EXISTING STREET LIGHT WITH STREET SIGN

DALMILLING DRIVE

WALLS EXIST ON SITE, TO BE PROTECTED AND RETAINED

EW

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LEGEND:

(P1) INSITU CONCRETE PAVEMENT
TYPE: GREY, 32MPa
THICKNESS:100MM WITH EDGE THICKENING
FINISH: BROOM FINISH NO PICTURE FRAMES
BASE COURSE: 150mm
REFER DETAIL 01/L7.101.

(P2) INSITU CONCRETE PAVEMENT
TYPE: CCS CANVAS, 32MPa
THICKNESS:100MM WITH EDGE THICKENING
FINISH:BROOM FINISH NO PICTURE FRAMES
BASE COURSE: 150mm
REFER DETAIL 01/L7.101.

(P3) TRAFFICABLE INSITU CONCRETE PAVEMENT
CEMENT: CCS ZEUS, 32MPA
150mm THICK WITH EDGE THICKENING
REINFORCING: SL82 MESH CENTRAL
FINISH: BROOM FINISH, NO PICTURE FRAMES
BASE COURSE: 200mm THK COMPACTED LIMESTONE
REFER DETAIL 02/L7.101.

CRUSHED LIMESTONE TRAIL
100MM CRUSHED LIMESTONE
COMPACTED SUBGRADE
REFER DETAIL 03/L7.101.

COMPOSITE TIMBER BRIDGE
MAKE: STEEL FRAME WITH 32mm MILLBOARD COMPOSITE TIMBER DECKING, COLOUR: CARBONISED EMBERED
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LATERITE ROCK PITCHING
TYPE: LATERITE SPALLS
SIZE: 150mm MIN DIA - 300mm MAX DIA
MORTAR COLOUR: TO MATCH SPALLS
150mm COMPACTED SUBGRADE
REFER DETAIL 10/L7.101

MK — INSITU CONCRETE MOWING KERB
GREY 32MPa
DIMENSIONS: 200x200mm
BASE COURSE: COMPACTED SUBGRADE
REFER DETAIL 10/L7.101

BA — BALUSTRADE:
MAKE: CUSTOM
REFER DETAIL 01-04/L7.102.

BS — BENCH SEAT:
MAKE: COX URBAN FURNITURE
MODEL / CODE: PMD SBA-2
INSTALL TO MANUFACTURERS SPECIFICATION

TS — TABLE SETTING:
MAKE: COX URBAN FURNITURE
MODEL / CODE: TBS-2 DA
INSTALL TO MANUFACTURERS SPECIFICATION

BF — BOLLARD - FIXED:
CITY OF SWAN STANDARD

BR — BOLLARD - REMOVABLE:
CITY OF SWAN STANDARD

BIN — RUBBISH BIN:
MAKE: COX URBAN FURNITURE
MODEL / CODE: PMD LTD-3
INSTALL TO MANUFACTURERS SPECIFICATION

RCB — ROOT CONTROL BARRIER
INSTALL TO LOCATIONS WITHIN 1800mm OF NEW TREES
MAKE: GREENWAY ENTERPRISES
DEPTH: MIN. 600mm

EW — EXISTING BLOCK WALL
TO BE RETAINED AND PROTECTED
BALUSTRADE TO BE INSTALLED
WHERE SHOWN ON DRAWINGS.

W1 — WALL TYPE 1
MANUFACTURER: BRICKMAKERS
SIZE: 1000x350x165MM
NATURAL EARTH BLOCK WITH MORTAR
TO MATCH BLOCKWORK
LAID:STRETCHER
REFER DETAIL 06/L7.104

ROCKWORK LATERITE BOULDERS
ON 100mm THICK N32 INSITU CONCRETE
REFER DETAIL 05/L7.101

SS — SHADE STRUCTURE:
MAKE: CUSTOM
REFER DETAIL L7.103-L7.104.

LG — LYNCHGATE STRUCTURE:
MAKE: CUSTOM
REFER DETAILS L7.105

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE INFORMATION

HARD WORKS DRAWING

JOB NO. 1001555 | L4.102 | REV A | JULY 2022

1:250 @ A1

0 5 10 15 25m

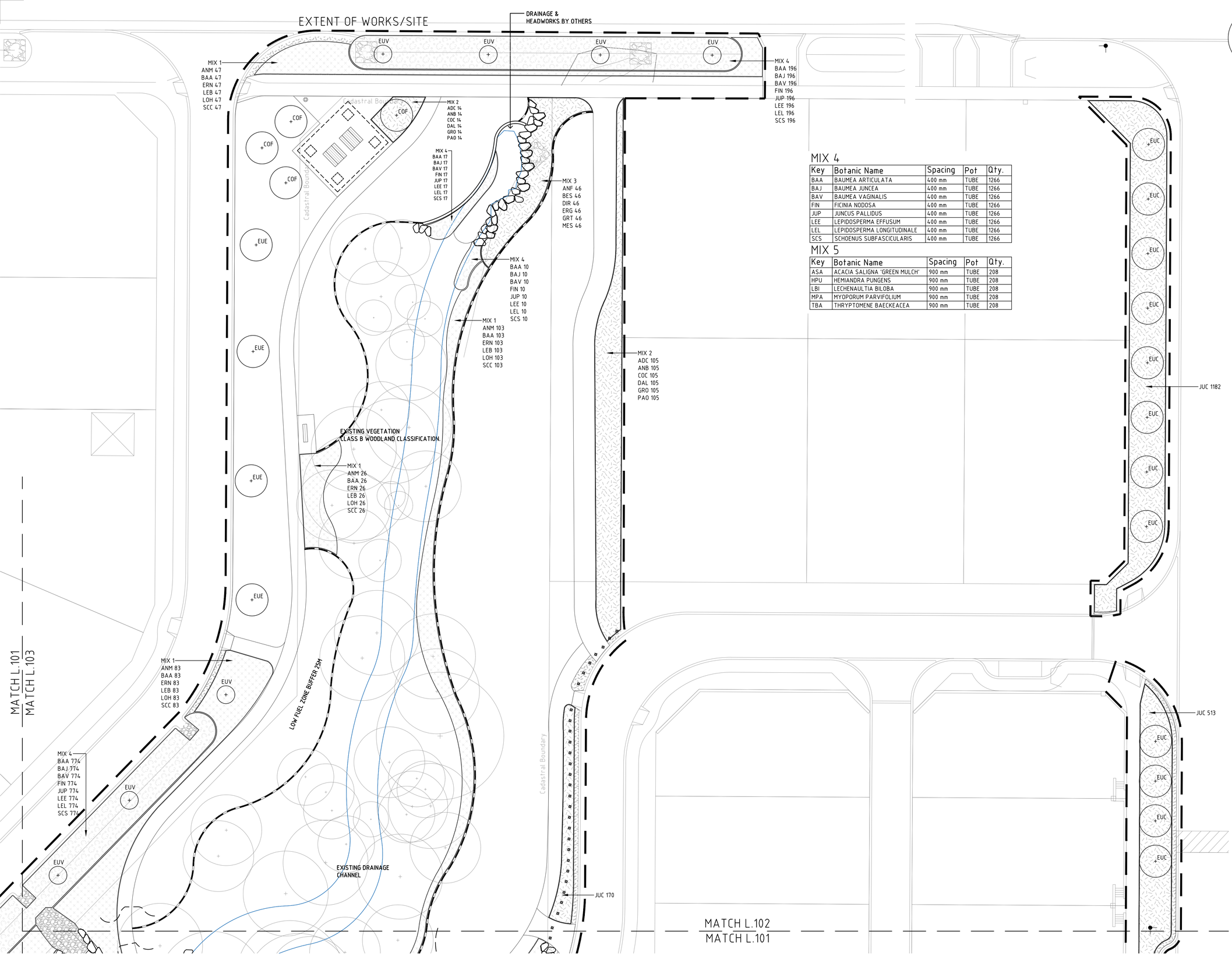
PLAN E

LANDSCAPE ARCHITECTS
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T: (08) 9388 9566 E: mail@plane.com.au
LANDSPACE PTY LTD ACN 056 538 679

FILE LOCATION: L:\PROJECTS\2010 PROJECTS\10015 ELLENBROOK VILLAGE 8\1001555 ANNIE'S LANDING - STAGE 24 POS\PROJECT\PS DRAWINGS\CONDOCS\1001555_L3 L4 L5 (A).DWG

PLOTTED BY: TKOCH

PLOT DATE: 18/07/2022 12:10:20 PM



MIX 4

Key	Botanic Name	Spacing	Pot	Qty.
BAA	BAUMEA ARTICULATA	400 mm	TUBE	1266
BAJ	BAUMEA JUNCEA	400 mm	TUBE	1266
BAV	BAUMEA VAGINALIS	400 mm	TUBE	1266
FIN	FICINIA NODOSA	400 mm	TUBE	1266
JUP	JUNCUS PALLIDUS	400 mm	TUBE	1266
LEE	LEPIDOSPERMA EFFUSUM	400 mm	TUBE	1266
LEL	LEPIDOSPERMA LONGITUDINALE	400 mm	TUBE	1266
SCS	SCHOENUS SUBFASCICULARIS	400 mm	TUBE	1266

MIX 5

Key	Botanic Name	Spacing	Pot	Qty.
ASA	ACACIA SALIGNA 'GREEN MULCH'	900 mm	TUBE	208
HPU	HEMIANDRA PUNGENS	900 mm	TUBE	208
LBI	LECHENAULTIA BILOBA	900 mm	TUBE	208
MPA	MYOPORUM PARVIFOLIUM	900 mm	TUBE	208
TBA	THRYPTOMENE BAECKEACEA	900 mm	TUBE	208

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DO NOT SCALE FROM THE DRAWING

DATE	REV	DESCRIPTION	BY	AP
11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD

LEGEND:

GARDEN BED
IRRIGATED
MULCH: 75mm IMPORTED ENVIROMULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

SWALE GARDEN BED
UN-IRRIGATED
NO MULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

TUBESTOCK PLANTING
UN-IRRIGATED
MULCH: 75mm IMPORTED ENVIROMULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

TURF GRASSING:
SPECIES: KIKUYU
IRRIGATED
IMPORTED SAND: 100mm TURF SAND

MULCH ONLY:
TYPE: 100mm THICK IMPORTED ENVIROMULCH
SUPPLY & INSTALL

GRASS TREES: SUPPLIED AND INSTALLED BY GRASS TREES AUSTRALIA

NOTE:
STREET TREES ARE TO BE LOCATED AT A MIN CLEARANCE OF 8m FROM STREET LIGHTS & 3.5m FROM SIDE ENTRY DRAINAGE PITS & SERVICE PITS AS PER COUNCIL/SHIRE REQUIREMENTS. IMPORTED SOIL TO ALL TREES INSTALLED BY CONTRACTOR. LANDSCAPE CONTRACTOR IS TO PEG ALL TREE LOCATIONS TO THE SUPERINTENDENT'S APPROVAL PRIOR TO INSTALLATION.
PLANTS USED IN MIXED PLANTING ARE TO BE SPACED AS SHOWN & PLACED WHERE NO MORE THAN THREE (3) PLANTS OF THE SAME SPECIES ARE ADJACENT TO EACH OTHER. ALL PLANT CENTRES ADJACENT ALL KERBS, PAVEMENTS, WALLS AND SPRINKLERS TO BE OFFSET 500MM OR, HALF THE DIAMETER OF THE MATURE PLANT, WHICHEVER IS THE GREATER.

TREES

Key	Botanic Name	Pot	Spacing	Qty.
COF	CORYMBIA FICIFOLIA	300Lt	AS SHOWN	11
EUE	EUCALYPTUS ERYTHROCORYS	300Lt	AS SHOWN	7
EUV	EUCALYPTUS VICTRIX	15Lt	AS SHOWN	20
EUC	EUCALYPTUS WANDOO	200Lt	AS SHOWN	40
MEP	MELALEUCA PREISSIANA	15Lt	AS SHOWN	4

SHRUBS

Key	Botanic Name	Pot	Spacing	Qty.
JUC	JUNIPERUS CONFERTA	140mm	550 mm	3812

MIX 1

Key	Botanic Name	Spacing	Pot	Qty.
ANM	ANIGOZANTHOS MANGLESII	600 mm	TUBE	1135
BAA	BANKSIA ASHBYII DWARF	600 mm	TUBE	1135
ERN	EREMOPHILA NIVEA	600 mm	TUBE	1135
LEB	LEUCOPHYTA BROWNII	600 mm	TUBE	1135
LOH	LOMANDRA HYSTRIX	600 mm	TUBE	1135
SCC	SCAEVOLA CRASSIFOLIA	600 mm	TUBE	1135

MIX 2

Key	Botanic Name	Spacing	Pot	Qty.
ADC	ADENANTHOS CUNEATUS	550 mm	140mm	197
ANB	ANIGOZANTHOS 'BUSH PEARL'	550 mm	140mm	197
COC	CONOSTYLIS CANDICANS	550 mm	140mm	197
DAL	DAMPIERA LINEARIS 'BEACH BALL'	550 mm	140mm	197
GRO	GREVILLEA OBTUSIFOLIA 'GIN GIN GEM'	550 mm	140mm	197
PAO	PATERSONIA OCCIDENTALIS	550 mm	140mm	197

MIX 3

Key	Botanic Name	Spacing	Pot	Qty.
ANF	ANIGOZANTHOS FLAVIDUS YELLOW	550 mm	140mm	141
BES	BEAUFORTIA SQUARSOSA	550 mm	140mm	141
DIR	DIANELLA REVOLUTA	550 mm	140mm	141
ERG	EREMOHPHILA GLABRA	550 mm	140mm	141
GRT	GREVILLEA THELEMANIANA	550 mm	140mm	141
MES	MELALEUCA SYSTENA	550 mm	140mm	141

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION

SOFT WORKS DRAWING

JOB NO. 1001555 | L5.101 | REV A | JULY 2022

1:250 @ A1

0 5 10 15 25m

LANDSCAPE ARCHITECTS
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PLOTTED BY: TKOCH

PLOT DATE: 18/07/2022 12:10:25 PM

MATCH L.102
MATCH L.101

MATCH L.102
MATCH L.103

MIX 4
BAA 29
BAJ 29
BAV 29
FIN 29
JUP 29
LEE 29
LEL 29
SCS 29

MIX 1
ANM 84
BAA 84
ERN 84
LEB 84
LOH 84
SCC 84

MIX 1
ANM 93
BAA 93
ERN 93
LEB 93
LOH 93
SCC 93

JUC 168

Landscape Edge Buffer

GREVILLEA PROTECTION AREA

EXTENT OF WORKS/SITE

MIX 2
ADC 33
ANB 33
COC 33
DAL 33
GRO 33
PAO 33

MIX 3
ANF 36
BES 36
DIR 36
ERG 36
GRT 36
MES 36

MIX 5
ASA 208
HPU 208
LBI 208
MPA 208
TBA 208

AREA TO BE PLANTED WITH LOW ROLL PLANTING

MIX 5
ANF 78
BES 78
DIR 78
ERG 78
GRT 78
MES 78

MIX 2
ADC 45
ANB 45
COC 45
DAL 45
GRO 45
PAO 45

MIX 4
BAA 223
BAJ 223
BAV 223
FIN 223
JUP 223
LEE 223
LEL 223
SCS 223

EXISTING TREES TO BE RETAINED ON SITE

JUC 743

JUC 95

REFER INSET
INSET

MIX 3
ANF 19
BES 19
DIR 19
ERG 19
GRT 19
MES 19

JUC 33

JUC 473

JUC 380

DUNNET DRIVE

DALMILLING DRIVE

REFER INSET
INSET

MIX 3
ANF 19
BES 19
DIR 19
ERG 19
GRT 19
MES 19

MIX 3
ANF 22
BES 22
DIR 22
ERG 22
GRT 22
MES 22

JUC 115

DUNNET DRIVE

EXISTING TREES TO BE RETAINED ON SITE

TREES

Key	Botanic Name	Pot	Spacing	Qty.
COF	CORYMBIA FICIFOLIA	300Lt	AS SHOWN	11
EUE	EUCALYPTUS ERYTHROCORYS	300Lt	AS SHOWN	7
EUV	EUCALYPTUS VICTRIX	15Lt	AS SHOWN	20
EUC	EUCALYPTUS WANDOO	200Lt	AS SHOWN	40
MEP	MELALEUCA PREISSIANA	15Lt	AS SHOWN	4

SHRUBS

Key	Botanic Name	Pot	Spacing	Qty.
JUC	JUNIPERUS CONFERTA	140mm	550 mm	3812

MIX 1

Key	Botanic Name	Spacing	Pot	Qty.
ANM	ANIGOZANTHOS MANGLESII	600 mm	TUBE	1135
BAA	BANKSIA ASHBYII DWARF	600 mm	TUBE	1135
ERN	EREMOPHILA NIVEA	600 mm	TUBE	1135
LEB	LEUCOPHYTA BROWNII	600 mm	TUBE	1135
LOH	LOMANDRA HYSTRIX	600 mm	TUBE	1135
SCC	SCAEVOLA CRASSIFOLIA	600 mm	TUBE	1135

MIX 2

Key	Botanic Name	Spacing	Pot	Qty.
ADC	ADENANTHOS CUNEATUS	550 mm	140mm	197
ANB	ANIGOZANTHOS 'BUSH PEARL'	550 mm	140mm	197
COC	CONOSTYLIS CANDICANS	550 mm	140mm	197
DAL	DAMPIERA LINEARIS 'BEACH BALL'	550 mm	140mm	197
GRO	GREVILLEA OBTUSIFOLIA 'GIN GIN GEM'	550 mm	140mm	197
PAO	PATERSONIA OCCIDENTALIS	550 mm	140mm	197

MIX 3

Key	Botanic Name	Spacing	Pot	Qty.
ANF	ANIGOZANTHOS FLAVIDUS YELLOW	550 mm	140mm	141
BES	BEAUFORTIA SQUARSOSA	550 mm	140mm	141
DIR	DIANELLA REVOLUTA	550 mm	140mm	141
ERG	EREMOHPHILA GLABRA	550 mm	140mm	141
GRT	GREVILLEA THELEMANNIANA	550 mm	140mm	141
MES	MELALEUCA SYSTENA	550 mm	140mm	141

MIX 4

Key	Botanic Name	Spacing	Pot	Qty.
BAA	BAUMEA ARTICULATA	400 mm	TUBE	1266
BAJ	BAUMEA JUNCEA	400 mm	TUBE	1266
BAV	BAUMEA VAGINALIS	400 mm	TUBE	1266
FIN	FICINIA NODOSA	400 mm	TUBE	1266
JUP	JUNCUS PALLIDUS	400 mm	TUBE	1266
LEE	LEPIDOSPERMA EFFUSUM	400 mm	TUBE	1266
LEL	LEPIDOSPERMA LONGITUDINALE	400 mm	TUBE	1266
SCS	SCHOENUS SUBFASCICULARIS	400 mm	TUBE	1266

MIX 5

Key	Botanic Name	Spacing	Pot	Qty.
ASA	ACACIA SALIGNA 'GREEN MULCH'	900 mm	TUBE	208
HPU	HEMIANDRA PUNGENS	900 mm	TUBE	208
LBI	LECHENAULTIA BILOBA	900 mm	TUBE	208
MPA	MYOPORUM PARVIFOLIUM	900 mm	TUBE	208
TBA	THRYPTOMENE BAECKEACEA	900 mm	TUBE	208

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DO NOT SCALE FROM THE DRAWING

DATE	REV	DESCRIPTION	BY	AP
11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD

LEGEND:

GARDEN BED
IRRIGATED
MULCH: 75mm IMPORTED ENVIROMULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

SWALE GARDEN BED
UN-IRRIGATED
NO MULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

TUBESTOCK PLANTING
UN-IRRIGATED
MULCH: 75mm IMPORTED ENVIROMULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

TURF GRASSING:
SPECIES: KIKUYU
IRRIGATED
IMPORTED SAND: 100mm TURF SAND

MULCH ONLY:
TYPE: 100mm THICK IMPORTED ENVIROMULCH
SUPPLY & INSTALL

XPR
GRASS TREES: SUPPLIED AND INSTALLED BY GRASS TREES AUSTRALIA

NOTE:
STREET TREES ARE TO BE LOCATED AT A MIN CLEARANCE OF 8m FROM STREET LIGHTS & 3.5m FROM SIDE ENTRY DRAINAGE PITS & SERVICE PITS AS PER COUNCIL/SHIRE REQUIREMENTS. IMPORTED SOIL TO ALL TREES INSTALLED BY CONTRACTOR. LANDSCAPE CONTRACTOR IS TO PEG ALL TREE LOCATIONS TO THE SUPERINTENDENT'S APPROVAL PRIOR TO INSTALLATION.
PLANTS USED IN MIXED PLANTING ARE TO BE SPACED AS SHOWN & PLACED WHERE NO MORE THAN THREE (3) PLANTS OF THE SAME SPECIES ARE ADJACENT TO EACH OTHER. ALL PLANT CENTRES ADJACENT ALL KERBS, PAVEMENTS, WALLS AND SPRINKLERS TO BE OFFSET 500MM OR, HALF THE DIAMETER OF THE MATURE PLANT, WHICHEVER IS THE GREATER.

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE INFORMATION

SOFT WORKS DRAWING

PLAN \ E

JOB NO. 1001555 L5.102 REV A JULY 2022

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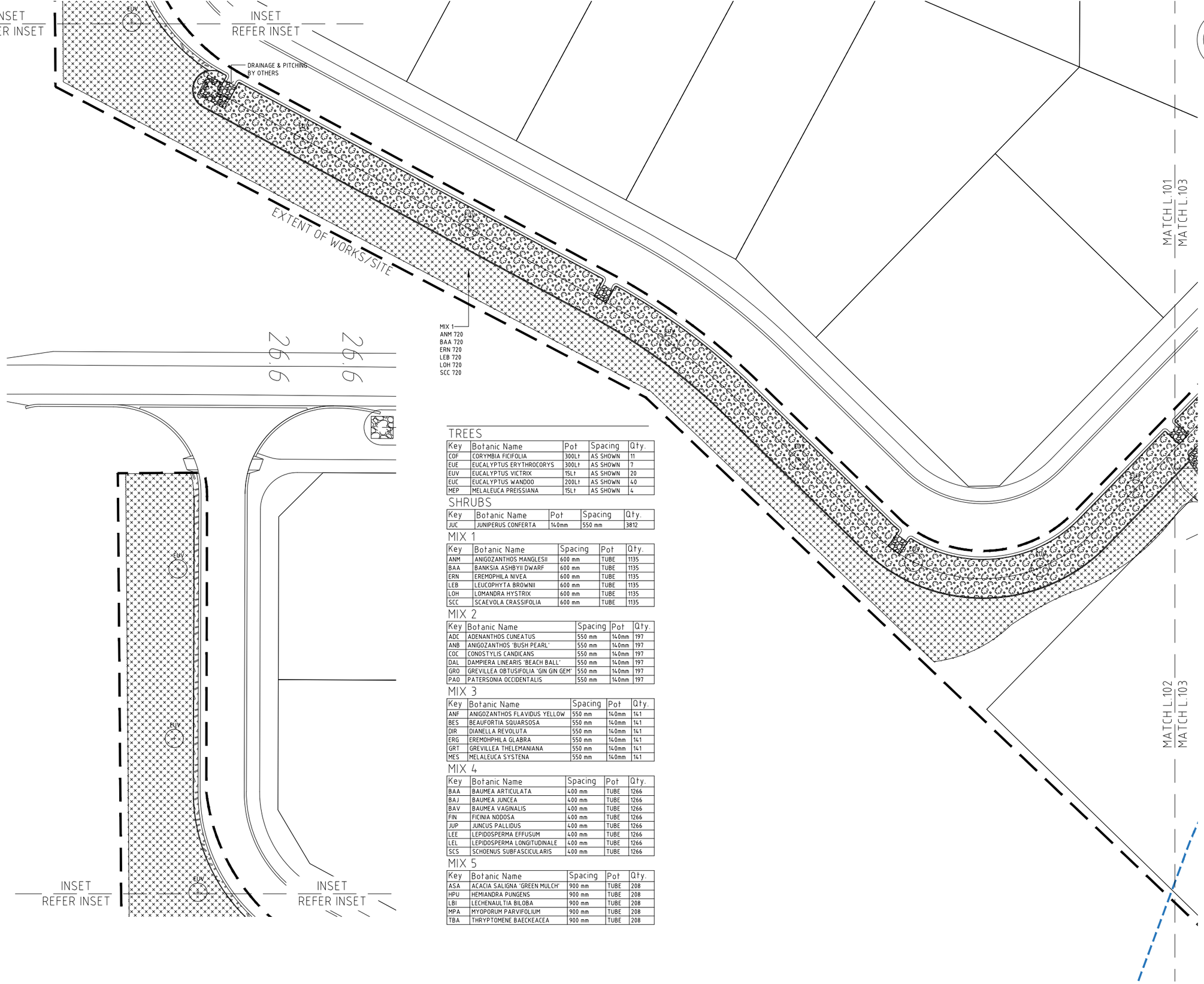
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LANDSCAPE ARCHITECTS
414 ROKEBY RD SUBIACO WA 6008
T: (08) 9388 9566 E: mail@plane.com.au
LANDSPACE PTY LTD ACN 056 538 679

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PLOTTED BY: TKOCH

PLOT DATE: 18/07/2022 12:10:30 PM



TREES

Key	Botanic Name	Pot	Spacing	Qty.
COF	CORYMBIA FICIFOLIA	300Lt	AS SHOWN	11
EUE	EUCALYPTUS ERYTHROCORYS	300Lt	AS SHOWN	7
EUV	EUCALYPTUS VICTRIX	15Lt	AS SHOWN	20
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MEP	MELALEUCA PREISSIANA	15Lt	AS SHOWN	4

SHRUBS

Key	Botanic Name	Pot	Spacing	Qty.
JUC	JUNIPERUS CONFERTA	140mm	550 mm	3812

MIX 1

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SCC	SCAEVOLA CRASSIFOLIA	600 mm	TUBE	1135

MIX 2

Key	Botanic Name	Spacing	Pot	Qty.
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MIX 3

Key	Botanic Name	Spacing	Pot	Qty.
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Key	Botanic Name	Spacing	Pot	Qty.
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JUP	JUNCUS PALLIDUS	400 mm	TUBE	1266
LEE	LEPIDOSPERMA EFFUSUM	400 mm	TUBE	1266
LEL	LEPIDOSPERMA LONGITUDINALE	400 mm	TUBE	1266
SCS	SCHOENUS SUBFASCICULARIS	400 mm	TUBE	1266

MIX 5

Key	Botanic Name	Spacing	Pot	Qty.
ASA	ACACIA SALIGNA 'GREEN MULCH'	900 mm	TUBE	208
HPU	HEMIANDRA PUNGENS	900 mm	TUBE	208
LBI	LECHENAULTIA BILOBA	900 mm	TUBE	208
MPA	MYOPORUM PARVIFOLIUM	900 mm	TUBE	208
TBA	THRYPTOMENE BAECKEACEA	900 mm	TUBE	208

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LEGEND:

GARDEN BED
IRRIGATED
MULCH: 75mm IMPORTED ENVIROMULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

SWALE GARDEN BED
UN-IRRIGATED
NO MULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

TUBESTOCK PLANTING
UN-IRRIGATED
MULCH: 75mm IMPORTED ENVIROMULCH
SOIL CONDITIONER: 15mm C-WISE HORTICULTURE

TURF GRASSING:
SPECIES: KIKUYU
IRRIGATED
IMPORTED SAND: 100mm TURF SAND

MULCH ONLY:
TYPE: 100mm THICK IMPORTED ENVIROMULCH
SUPPLY & INSTALL

GRASS TREES: SUPPLIED AND INSTALLED BY GRASS TREES AUSTRALIA

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ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE INFORMATION

SOFT WORKS DRAWING

JOB NO. 1001555 L5.103 REV A JULY 2022

1:250 @ A1

0 5 10 15 25m

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414 ROKEBY RD SUBIACO WA 6008
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LANDSPACE PTY LTD ACN 056 538 679

PLAN E

FILE LOCATION: L:\PROJECTS\2010 PROJECTS\10015 ELLENBROOK VILLAGE 8\1001555 ANNIE'S LANDING - STAGE 24 POS\PROJECT\PS DRAWINGS\CONDOCS\1001555_L3 L4 L5 (A).DWG

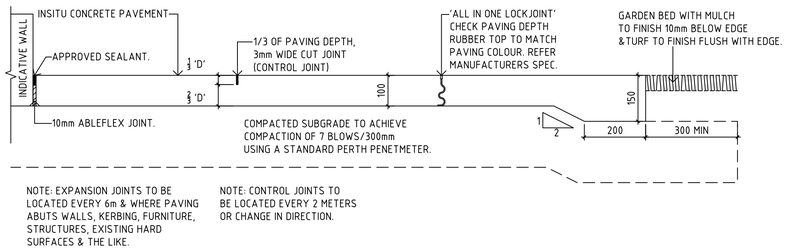
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PLOT DATE: 18/07/2022 12:10:35 PM

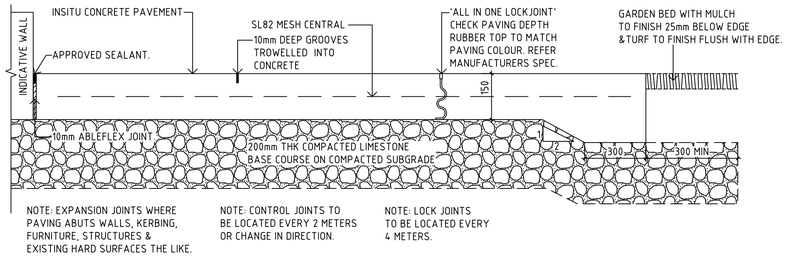
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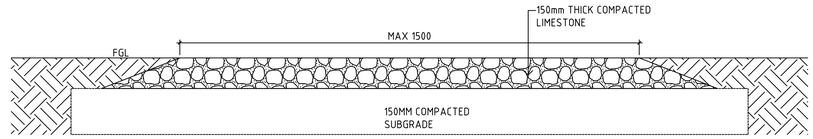
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11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD



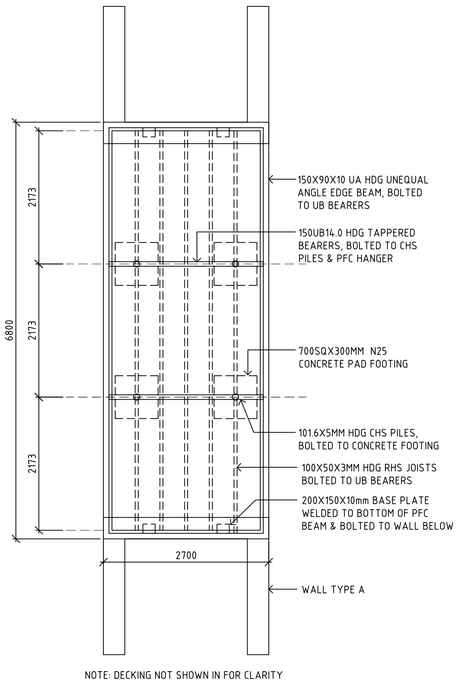
01 – INSITU PAVEMENT TYPICAL DETAIL
1:10



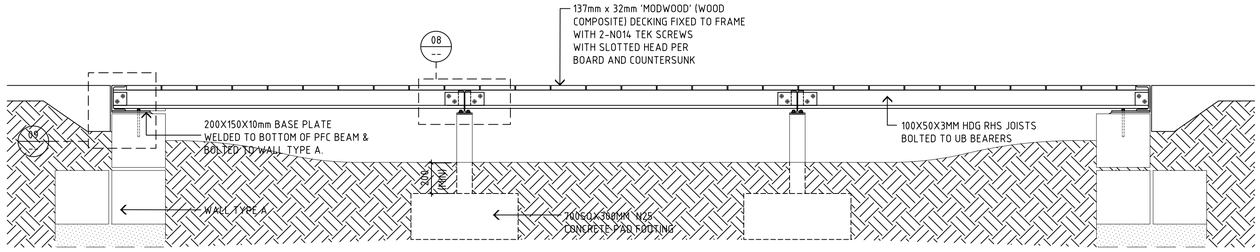
02 – TRAFFICABLE INSITU CONCRETE PAVEMENT TYPICAL DETAIL
1:10



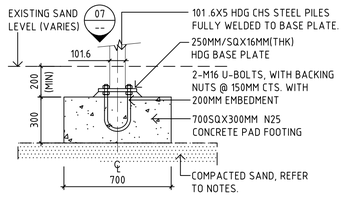
03 – COMPACTED LIMESTONE TRACK TYPICAL DETAIL
1:10



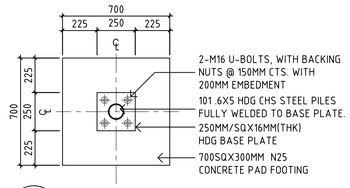
04 – DETAILED PLAN FOOTBRIDGE
1:50



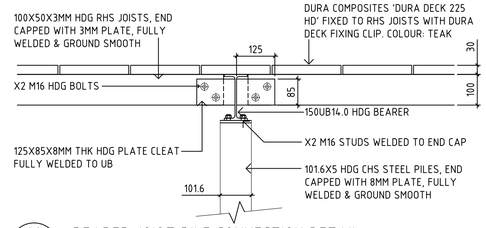
05 – TYPICAL SECTION FOOTBRIDGE
1:20



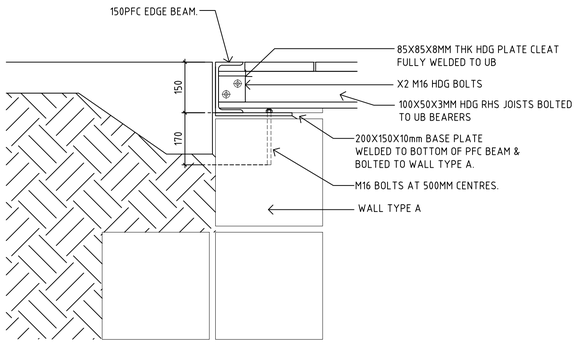
06 – FOOTING DETAIL DECK
1:20



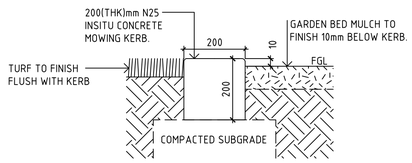
07 – FOOTING DETAIL DECK
1:20



08 – BEARER JOIST PILE CONNECTION DETAIL DECK
1:10
NOTE: ALL NON VISIBLE STEEL WORK BELOW DECKING BOARDS & WATER LEVEL INCLUDING JOISTS, BEARERS & ASS. CLEATS & BOLTS TO BE PAINTED WITH ASPAHLTIC PAINT.



09 – BALUSTRADE/EDGE BEAM DETAIL DECK
1.10



10 – INSITU CONCRETE MOWING KERB (MK) TYPICAL DETAIL
1:10
NOTE: PROVIDE TOOLED/SAWN JOINTS AT MAX 2m C/C. EXPANSION JOINTS MAX 6m C/C TO ALIGN WITH PAVEMENT JOINTS, TYP.

ANNIES LANDING - STAGE 24 POS
PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION
CONSTRUCTION DETAILS

JOB NO. 1001555 L7.101 REV A JULY 2022
SCALE AS SHOWN

LANDSCAPE ARCHITECTS
414 ROKEBY RD SUBIACO WA 6008
T: (08) 9388 9566 E: mail@plane.com.au
LANDSPACE PTY LTD ACN 056 538 679

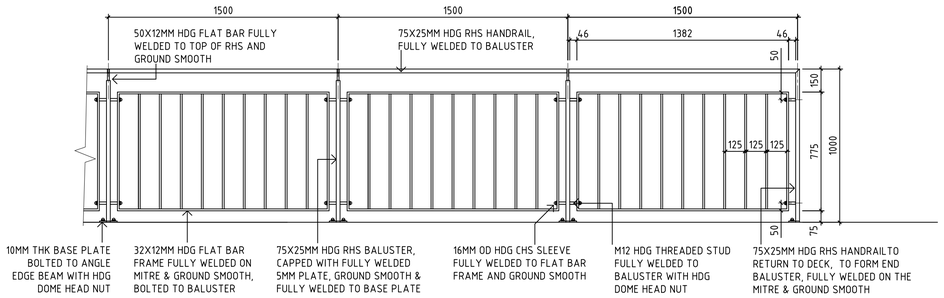
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PLOT DATE: 18/07/2022 12:10:40 PM

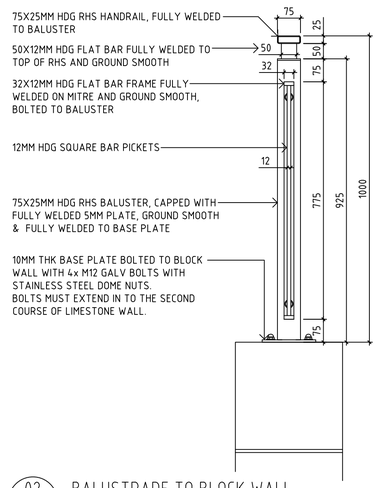
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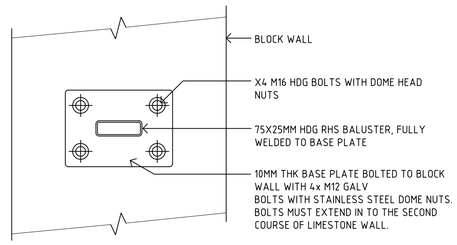
DATE	REV	DESCRIPTION	BY	AP
11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD



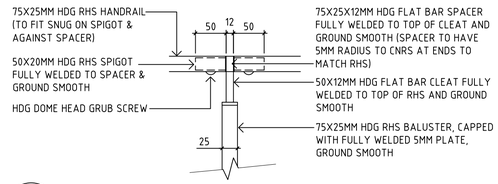
01 -- BALUSTRADE TO BLOCK WALL
ELEVATION
1:20



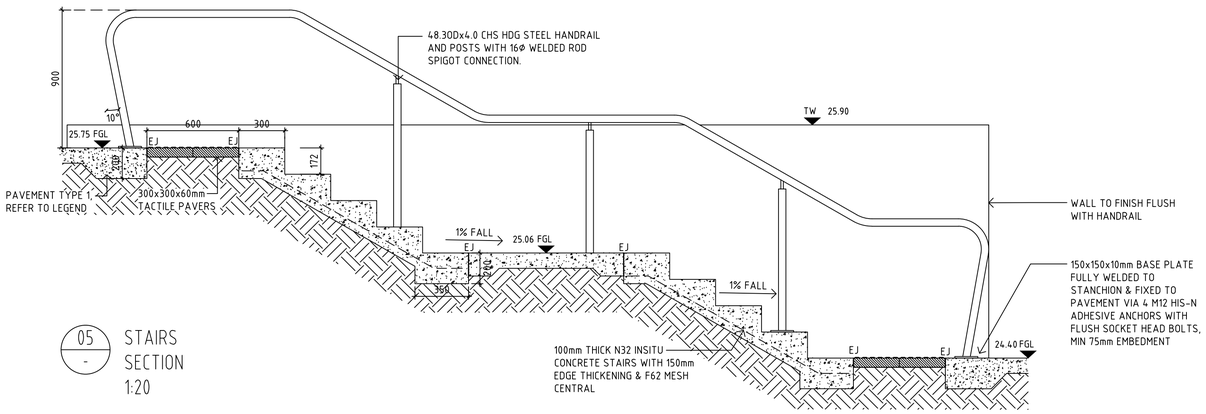
02 -- BALUSTRADE TO BLOCK WALL
DECK
1:10



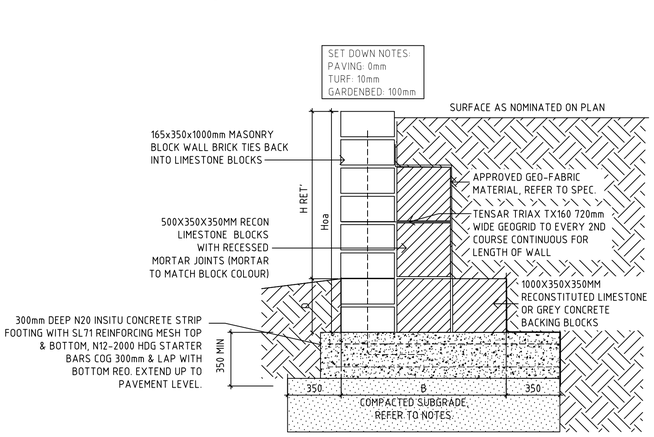
03 -- BALUSTRADE BASE PLATE DETAIL
LAKE DECK
1.5



04 -- HANDRAIL JOINT DETAIL
DECK
1.5



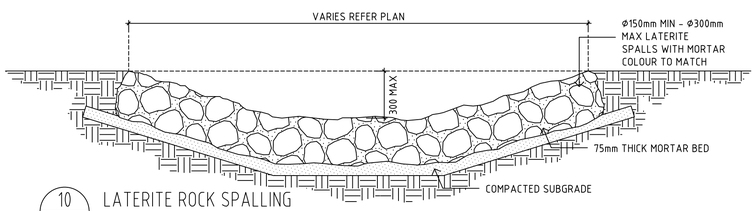
05 -- STAIRS
SECTION
1:20



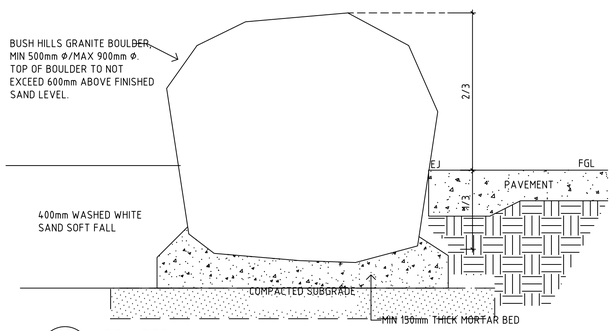
06 -- TYPICAL SECTION - WALL TYPE 1
BLOCK RETAINING WALL
1:20

LIMESTONE RETAINING WALL			
Hoa	H RET'	B	D
530	150	350	200
720	520	720	200
1090	890	720	200
1460	1210	1090	250

NOTE: 'D' TO CONSIST OF CLEAN COMPACTED BACKFILL, GRASS/PLAY SAND/MULCH ETC TO BE PLACED ABOVE 'D' DIMENSION.



10 -- LATERITE ROCK SPALLING
TYPICAL SECTION
1:20



05 -- BOULDER
TYPICAL DETAIL
1:10

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION

CONSTRUCTION DETAILS

JOB NO. 1001555 L7.102 REV A JULY 2022

SCALE AS SHOWN

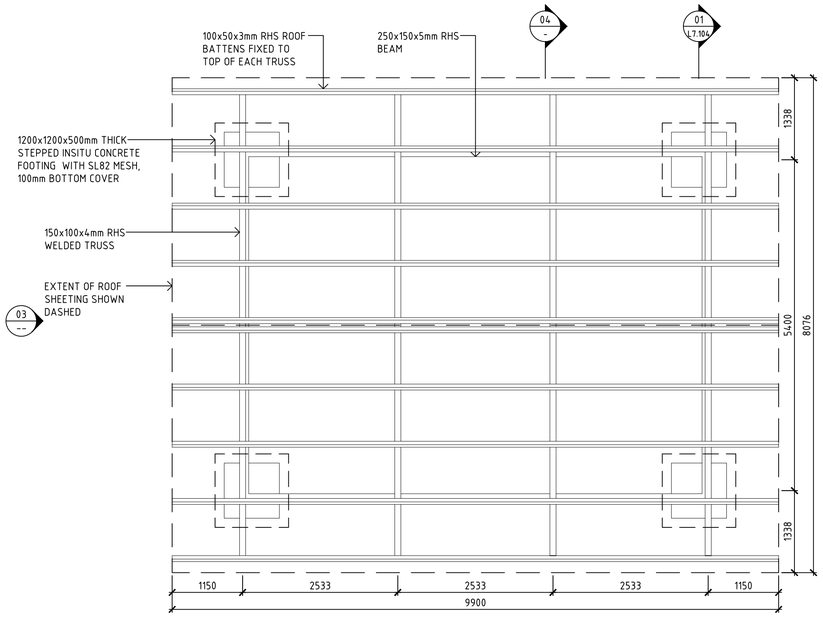
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PLAN E

FILE LOCATION: L:\PROJECTS\2010 PROJECTS\10015 ELLENBROOK VILLAGE 8\1001555 ANNIE'S LANDING - STAGE 24 POS\PROJECT\PS DRAWINGS\CONDOCS\1001555_L7.DWG

PLOTTED BY: TKOCH

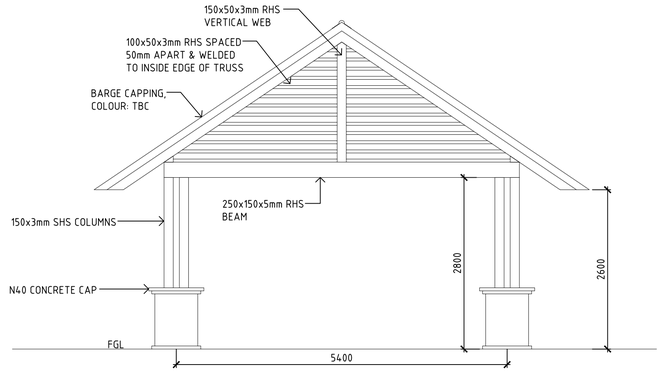
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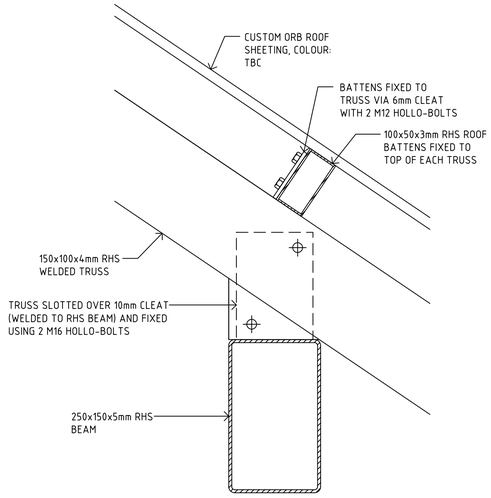
01 - SHADE STRUCTURE PLAN 1:50

02 --

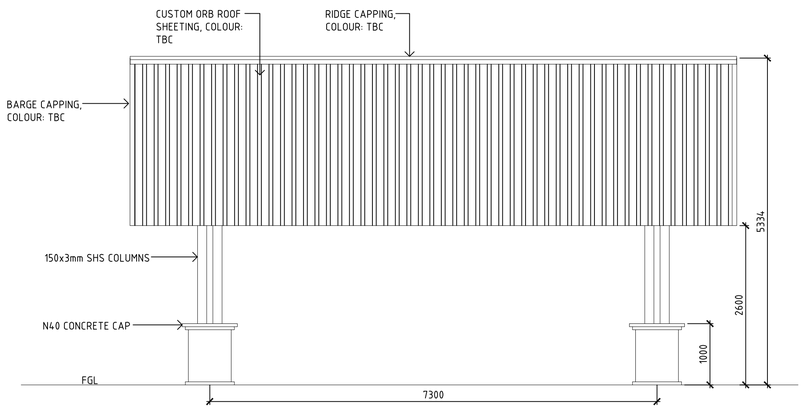
NOTE: ROOF SHEETING NOT SHOWN FOR CLARITY



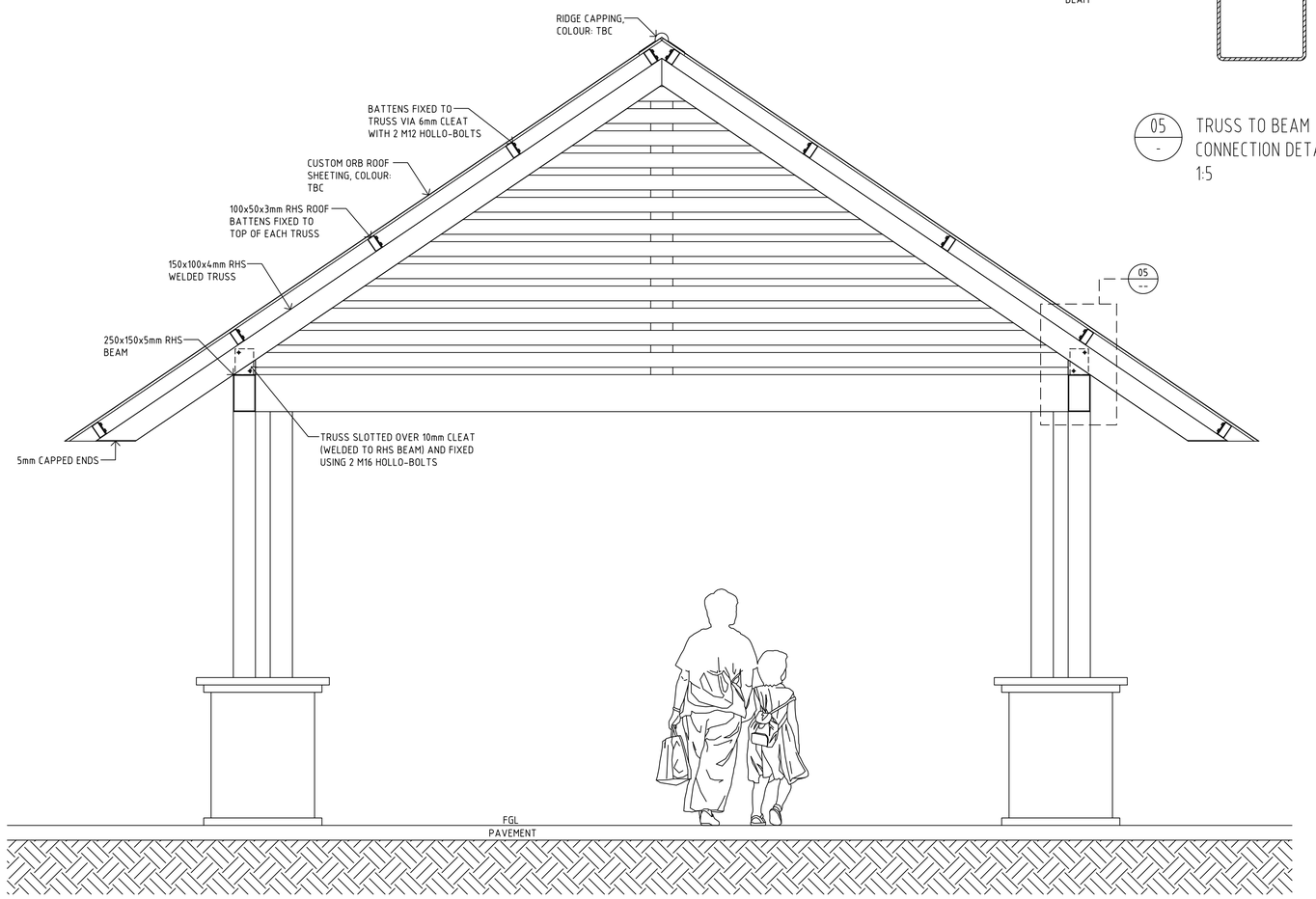
03 - SHADE STRUCTURE ELEVATION 1:50



05 - TRUSS TO BEAM CONNECTION DETAIL 1:5



02 - SHADE STRUCTURE ELEVATION 1:50



04 - SHADE STRUCTURE SECTION 1:20

CERTIFICATION:
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DO NOT SCALE FROM THE DRAWING

DATE	REV	DESCRIPTION	BY	AP
11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION

CONSTRUCTION DETAILS

JOB NO. 1001555 L7.103 REV A JULY 2022

SCALE AS SHOWN

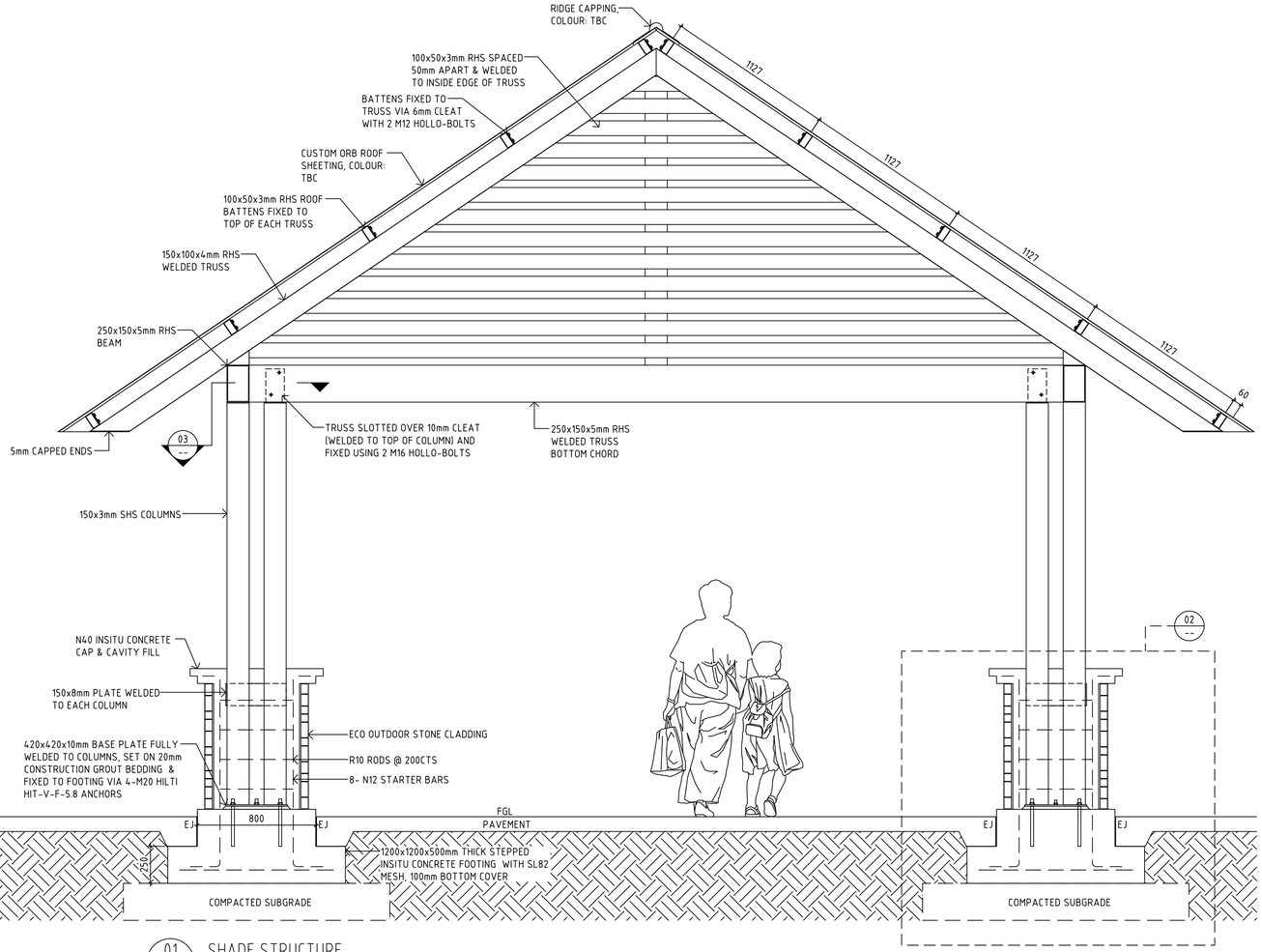
LANDSCAPE ARCHITECTS
414 ROKEBY RD SUBIACO WA 6008
T: (08) 9388 9566 E: mail@plane.com.au
LANDSPACE PTY LTD ACN 056 538 679

PLAN E

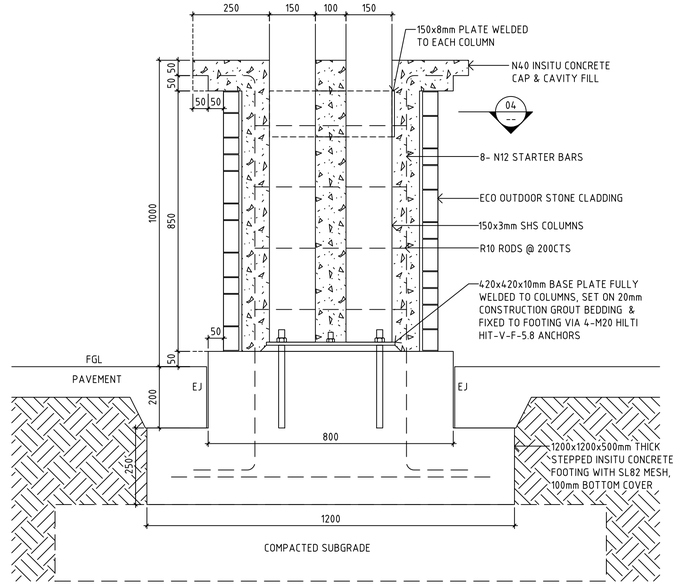
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PLOTTED BY: TKOCH

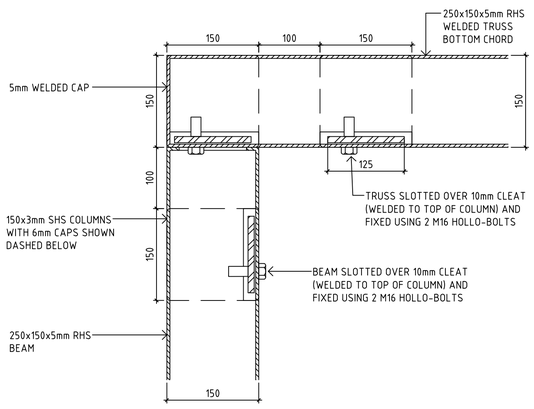
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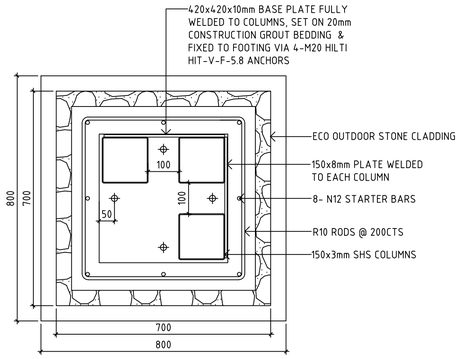
01 SHADE STRUCTURE SECTION
1:20



02 COLUMN PIER SECTION DETAIL
1:10



03 BEAM & TRUSS TO COLUMNS CONNECTION DETAIL
1:5



04 COLUMN PIER SECTION DETAIL
1:10



05 SHADE STRUCTURE PERSPECTIVE
NTS

CERTIFICATION:
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11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION

CONSTRUCTION DETAILS

JOB NO. 1001555 L7.104 REV A JULY 2022

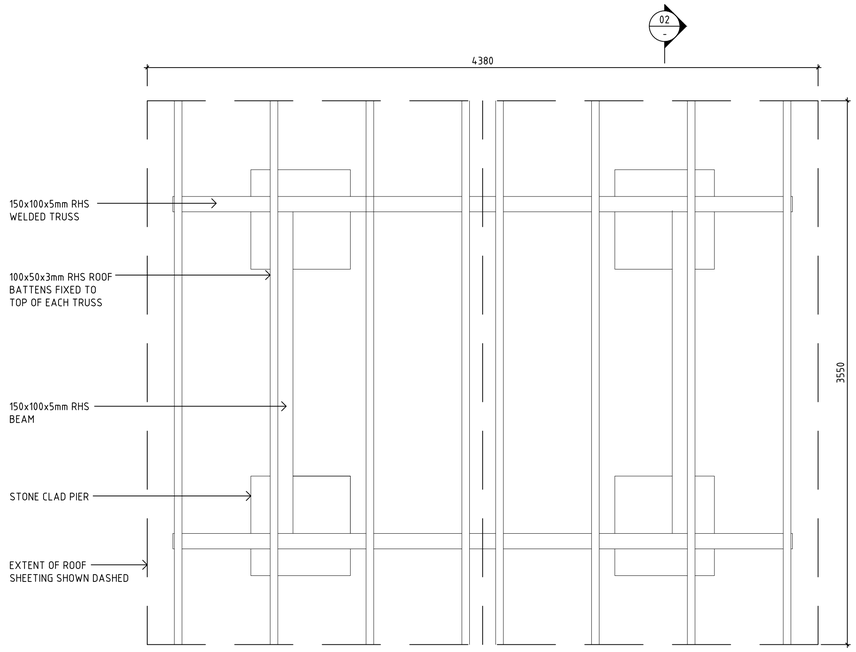
SCALE AS SHOWN

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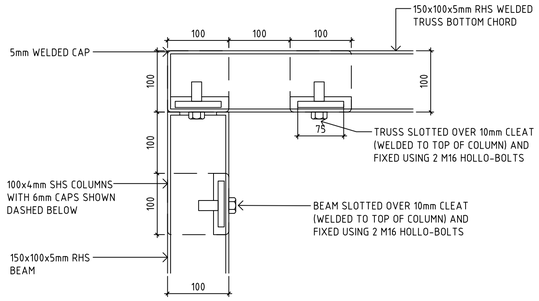
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PLOTTED BY: TKOCH

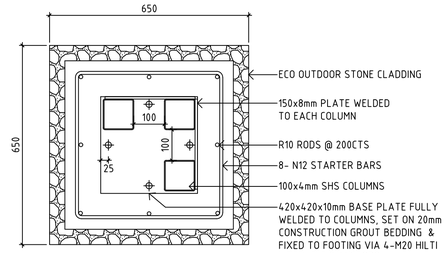
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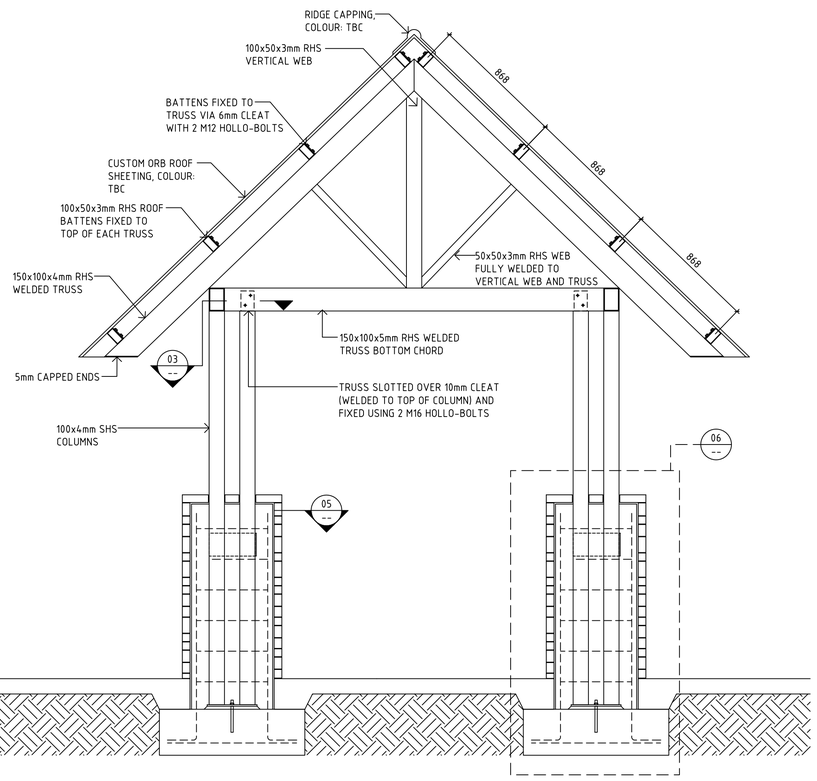
01 - LYNCHGATE PLAN 1:20



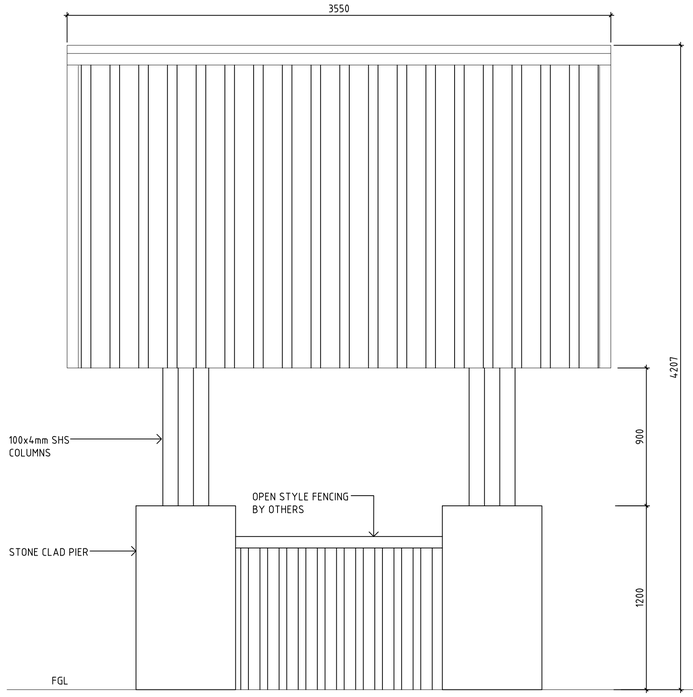
03 - BEAM & TRUSS TO COLUMNS CONNECTION DETAIL 1:5



05 - COLUMN PIER SECTION DETAIL 1:10



02 - LYNCHGATE SECTION 1:20



04 - LYNCHGATE SIDE ELEVATION 1:20

06 - LYNCHGATE COLUMN PIER SECTION DETAIL 1:10

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DATE	REV	DESCRIPTION	BY	AP
11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION

CONSTRUCTION DETAILS

JOB NO. 1001555 L7.105 REV A JULY 2022

SCALE AS SHOWN

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FILE LOCATION: L:\PROJECTS\2010 PROJECTS\10015 ELLENBROOK VILLAGE 8\1001555 ANNIE'S LANDING - STAGE 24 POS\PROJECT\PS DRAWINGS\CONDOCS\1001555_L7.DWG

PLOTTED BY: TKOCH

PLOT DATE: 18/07/2022 12:10:58 PM

GENERAL NOTES

1. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS "REVISED 0 - ISSUED FOR CONSTRUCTION" AND SIGNED AND APPROVED BY THE CERTIFYING CHARTERED PROFESSIONAL ENGINEER.
2. THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT'S DRAWINGS AND SPECIFICATIONS.
3. ALL DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
4. DO NOT SCALE FROM THE DRAWINGS.
5. REFER TO SUPERINTENDENTS DRAWINGS FOR SETTING OUT DETAILS.
6. COMPLY WITH THE LATEST AUSTRALIAN STANDARDS & AMENDMENTS.
7. THE BUILDER SHALL ENSURE THE STABILITY OF STRUCTURE DURING ALL PHASES OF CONSTRUCTION.
8. ALL WALLS, STEPS & PAVEMENTS TO HAVE ANTI-GRAFFITI COATING APPLIED TO ALL EXPOSED SURFACES

CONCRETE

1. ALL CONCRETE SHALL COMPLY WITH AS 3600. CEMENT USED IN ALL CONCRETE SHALL BE NORMAL PORTLAND CEMENT (TYPE GP) EXCEPT FOR 'N' GRADE MIXES.
2. BUILD FORMWORK FROM SUPERINTENDENTS DRAWINGS, CHECK FOR BUILT IN FIXINGS, REBATES, TIES, FLASHINGS, ELECTRICAL FITTINGS AND PLUMBING ETC.
3. COVER TO REINFORCEMENT UNLESS OTHERWISE SHOWN SHALL BE;
   - FOOTINGS 60mm
   - SLABS ON GROUND 40mm
4. COMPACT CONCRETE USING APPROVED INTERNAL VIBRATORS.
5. ALL CONCRETE SHALL BE SUPPLIED BY AN APPROVED PRE-MIX COMPANY AS FOLLOWS:

GRADE	SLUMP	MAX. AGG.	
BLINDING	N15	80MM	20MM
FOOTINGS	N25	80MM	20MM
SLABS ON GROUND	N32	80MM	20MM
CAVITY FILL	N25	200MM	10MM

6. NOTIFY THE SUPERINTENDENT AT LEAST 24 HOURS BEFORE PLACING CONCRETE
7. SLABS ON GROUND TO BE PLACED ON A DAMP-PROOF MEMBRANE (200 MICRON FORTECON PVC FILM, FULLY TAPED) OR CONCRETE BLINDING AS NOTED ON DRAWINGS.
8. CURE ALL CONCRETE IN AN APPROVED MANNER FOR MINIMUM SEVEN (7) DAYS.

GENERAL RETAINING WALL NOTES

1. ALL BLOCKWORK SHALL BE IN ACCORDANCE WITH AS 3700 MASONRY CODE. BLOCKS SHALL HAVE A MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STENGTH (f'uc) OF 15 MPa. MASONRY SHALL HAVE A MINIMUM CHARACTERISTIC COMPRESSIVE STRENGTH (f'mb) OF 6.2 MPa.
2. COMPACT THE NATURAL GROUND, AFTER SITE CLEARANCE HAS BEEN COMPLETED, TO 8 BLOWS PER 300mm TESTED USING A STANDARD PERTH SAND PENETROMETER FOR A DEPTH OF 750mm BELOW THE UNDERSIDE OF FOOTINGS.
3. CONSTRUCT EARTHSIDE BRICK LEAF FIRST PLACE REINFORCEMENT AND COMPLETE OUTER LEAF.
4. MORTAR MIX SHALL BE CLASS M4 TO AS3700:
   1 (CEMENT) : 0.25 (LIME) : 4.5 (SAND) MIX.
5. ALL BUILT STEEL ITEMS SUCH AS BLOCK TIES AND BED REINFORCEMENT SHALL BE GALVANISED IN ACCORDANCE WITH AS3700 REQUIREMENTS.
6. DO NOT CAVITY FILL UNTIL WALL IS AT LEAST 7 DAYS OLD.
7. PROVIDE TEMPORARY PROPPING TO RETAINING WALL WHERE REQUIRED.
8. CAVITY FILL SHALL BE:
   f'c = 25MPa
   AGG = 20mm
   SLUMP = 100mm
9. COMPACT CONCRETE IN CAVITY BY RODDING WITH IMMERSION VIBRATORS. PROP BRICKWORK AS REQUIRED.
10. PROVIDE VERTICAL CONTROL JOINTS IN RETAINING WALLS AT 9000mm MAXIMUM CENTRES.
11. WHERE REQUIRED HAND TAMP OR USE LIGHT RAMMING EQUIPMENT TO COMPACT BACK FILL IN 250mm LAYERS. DO NOT USE HEAVY ROLLING OR COMPACTION EQUIPMENT BEHIND WALL. NO HEAVY MACHINERY TO COME WITHIN HEIGHT 'H' OF WALL FROM REAR FACE. USE ONLY CLEAN SAND BACKFILL BEHIND WALL.

FOOTINGS

1. SOIL CLASSIFICATION IS CLASS 'A' TO AS2870.
2. COMPACT SAND UNDER FOOTINGS & SLAB IN ACCORDANCE WITH THE SITE PREPARATION REQUIREMENTS OUTLINED IN THE GEOTECHNICAL ENGINEERS REPORT & THE STRUCTURAL SPECIFICATION. KEEP A PENETROMETER ON SITE UNTIL ALL FOOTINGS & SLABS ON GROUND HAVE PASSED INSPECTION BY THE ENGINEER.
3. STEP FOOTINGS UNDER ANY PLUMBING PIPES OR CONDUITS MAINTAINING THE SPECIFIED DEPTH AT ALL TIMES.
4. LOCATE FOOTINGS AT A LEVEL NO HIGHER THAN HALF THE CLEAR DISTANCE TO THE NEAREST ADJACENT FOOTING OR OTHER EXCAVATION.
5. UNLESS OTHERWISE NOTED, OBTAIN APPROVAL OF ALL EXCAVATIONS PRIOR TO CONCRETING.
6. BUILDER TO ISSUE CERTIFICATES OF COMPACTION SHOWING COMPLIANCE WITH THE ABOVE REQUIREMENTS.

TIMBER & FINISHES

1. ALL WORKMANSHIP & MATERIALS ARE TO BE IN ACCORDANCE WITH AS 1720 TIMBER STRUCTURES CODE AND TO AS 1684 NATIONAL FRAMING CODE.
2. ALL TIMBER SHALL BE PRIME GRADE F114 AIR DRIED SEASONED & DRESSED BLACKBUTT (Eucalyptus pilularis). ALL NAILS, SCREWS, BOLTS, NUTS & WASHERS TO BE HOT DIPPED GALVANIZED U.O.N.
3. IN ALL BOLTED JOINTS, BOLTS SHALL BE PROVIDED WITH AN OVER SIZED WASHER:
   M12 BOLT - 55ø x 3.0 WASHER
   M16 BOLT - 65ø x 4.0 WASHER
   M20 BOLT - 75ø x 5.0 WASHER
   HOLES FOR BOLTS SHALL BE BOLT DIAMETER PLUS 2mm.
4. SEAL ENDS OF ALL TIMBER MEMBERS IMMEDIATELY AFTER SAWING WITH 'MOBILCER 'M' WAX EMULSION'.
5. RECESSES FOR BOLTS, NUTS, SPLITS, KNOTS, NOTCHES, REBATES, IN ALL TIMBER WORK SHALL BE BRUSHED WITH AN APPROVED TIMBER PRESERVATIVE SUCH AS KOPPERS X.J CLEAR TIMBER PROTECTIVE OR SIMILAR APPROVED.
6. ALL FIXINGS SHALL BE SNUG TIGHTENED DURING CONSTRUCTION. ALLOWANCE SHOULD BE MADE FOR RE-TIGHTENING OF FIXINGS 6 MONTHS AFTER COMPLETION OF THE STRUCTURE.
7. FINISH TO BE INTERGRAIN ULTRA CLEAR EXTERIOR SATIN.

REINFORCEMENT

1. SYMBOLS USED TO INDICATE REINFORCEMENT AS FOLLOWS:
   S - DENOTES GRADE 230S HOT ROLLED DEFORMED BARS TO AS 1302.
   N - DENOTES GRADE 500N DEFORMED BARS TO AS/NZS 4671.
   R - DENOTES GRADE 230R HOT ROLLED PLAIN BARS TO AS/NZS 4671.
   L - DENOTES HARD DRAWN WIRE REINFORCING FABRIC TO AS/NZS 4671.
   W - DENOTES HARD-DRAWN PLAIN WIRE TO AS/ 4671.
2. HOT DIP GALVANISE REINFORCEMENT TO AS/NZS 4680:2006 WHERE NOTED.
3. MINIMUM LAPS REQUIRED:
   FABRICS= 230mm (2 TRANSVERSE BARS),
   N BARS = 50 DIAMETERS,
   R BARS = 50 DIAMETERS U.O.N.
4. CLEAN ALL REINFORCEMENT PRIOR TO PLACING CONCRETE.
5. ENSURE ALL REINFORCEMENT IS ADEQUATELY SUPPORTED ON APPROVED CHAIRS OR CONCRETE BLOCKS.
6. PROVIDE 2-N16 x 2000 LONG RE-ENTRANT BARS (HD GALV) TO RE-ENTRANT CORNERS.
7. CLEAR COVER TO REINFORCEMENT TO BE:
   FOOTINGS 75 BOTTOM AND SIDES, 50 TOP.

STEELWORK & FINISHES

1. ALL STEELWORK SHALL COMPLY WITH AS 4100, AS 1554 AND AS 1163.
2. SUBMIT TWO (2) COPIES OF SIGNED STRUCTURAL SHOP DRAWINGS TO THE SUPERINTENDENT FOR GENERAL REVIEW. DO NOT PROCEED UNTIL REVIEW IS COMPLETE.
3. SITE CHECK ALL DIMENSIONS.
4. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANISED.
5. ALL BOLTS TO BE 4.6/S COMMERCIAL GRADE U.O.N.
6. PROVIDE ALL CLEATS, BRACKETS, WELDING AND HOLING, EVEN IF NOT SHOWN, NECESSARY FOR THE COMPLETION OF THE WORKS.
7. MINIMUM WELDS SHALL BE 6mm CONTINUOUS FILLET WELDS U.O.N.
8. FULLY SEAL ALL HOLLOW SECTIONS USING 5mm PLATES AND INSTALL 16mm DIAMETER BREATHER HOLES AS REQUIRED.
9. CORRECT ALL MEMBER DISTORTIONS BEFORE AND AFTER WELDING AND/OR GALVANISING.
10. STEEL BEAMS TO BE FABRICATED WITH NATURAL CAMBER UP.
11. GROUT UNDER BASE PLATES.
12. SURFACE TREATMENT OF STEELWORK SHALL BE AS FOLLOWS:
    12.1. ALL STEELWORK TO BE HOT DIPPED GALVANISED IN ACCORDANCE WITH TABLE 5.1 OF AS 1650.
    12.2. ALL BELOW GROUND STEELWORK TO BE COATED WITH TWO (2) COATS OF DUREMAX GPE, MINIMUM DFT 250 MICRONS.
13. WEATHERING STEEL GRADE TO BE WR350 (CORTEN), PRE WEATHERED & FINISHED PRIOR TO INSTALLATION.

BLOCKWORK

1. ALL BLOCKWORK & WORKMANSHIP SHALL COMPLY WITH AS 3700 & AS 2699.
2. ALL MASONRY TO HAVE MINIMUM CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH (f'uc) OF 15MPa.
3. MINIMUM MORTAR MIX SHALL BE:
   1 CEMENT : 1 LIME : 6 SAND UON.
4. THE SUB-CONTRACTOR SHALL TAKE PARTICULAR CARE TO ENSURE ALL PERPENDS & BED JOINTS ARE FULLY MORTARED.

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DO NOT SCALE FROM THE DRAWING

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11.07.22	A	ISSUED FOR COUNCIL APPROVAL	TK	KD

ANNIES LANDING - STAGE 24 POS

PREPARED FOR ELLENBROOK MANAGEMENT PTY LTD

LANDSCAPE CONSTRUCTION

CONSTRUCTION NOTES

JOB NO. 1001555 L7.106 REV A JULY 2022

SCALE AS SHOWN

LANDSCAPE ARCHITECTS
414 ROKEBY RD SUBIACO WA 6008
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FILE LOCATION: L:\PROJECTS\2010 PROJECTS\10015 ELLENBROOK VILLAGE 8\1001555 ANNIE'S LANDING - STAGE 24 POS\PROJECT\PS DRAWINGS\CONDOCS\1001555_L7.DWG

PLOTTED BY: TKOCH

PLOT DATE: 18/07/2022 12:11:03 PM

Appendix C Local Development Plan

LOCAL DEVELOPMENT PLAN PROVISIONS:

Unless otherwise defined on this Local Development Plan (LDP), all development shall be in accordance with the City of Swan Local Planning Scheme No. 17, the Residential Design Codes, POL-LP-11 Variation To Deemed To Comply Requirements of the R-Codes - Medium Density Single House Development Standards (R-MD Codes) and/or the Village 7B Annie's Landing Local Structure Plan (DP-18), where relevant.

The residential density codes are as per the applicable endorsed Development Plan.

Unless otherwise varied on this LDP, the relevant density provisions of the R-Codes and POL-LP-11 apply to lots subject of this LDP.

1. Minor variations to the requirements of the R-Codes and this LDP may be approved by the City of Swan.
2. For corner lots, the crossover/garage is to be located the maximum distance from the truncation as possible (subject to engineering constraints).
3. Lots 10563-10579 and Lots 10581-10585 must provide a 1.5m x 1.5m bin pad storage area at the rear of the property. Bin pads must be screened from view from the laneway.



LOCATION PLAN

LEGEND

SETBACKS

- 4.5m MINIMUM FRONT GARAGE SETBACK
- 2.0m MINIMUM FRONT SETBACK
- 1.5m MINIMUM LANEWAY GARAGE SETBACK

GARAGE ACCESS

- PREFERRED GARAGE LOCATION
- NO VEHICLE ACCESS
- BUILDING ORIENTATION TO PRIMARY STREET
- NO HABITABLE DWELLING PERMITTED

CITY OF SWAN
APPROVED
LOCAL DEVELOPMENT PLAN
The development guidelines as shown have been adopted by Council and signed by the Principal Planner.

Patricia Wolcik
Principal Planner / Co-ordinator Statutory Planning
DELEGATED OFFICER
STATUTORY PLANNING

Reference No.: LDP/7/2022
Approval Date: 12 Aug 2022
Expiration Date: 12 August 2032
(unless revoked earlier)

Date ..... CoS Ref: .....

ellenbrook
a full life

CADASTRAL INFORMATION
SOURCE: VERIS
YYMMDD: 200203
DWG REF: annie-200203-trun_pcg84
PROJECTION: PCG84

AERIAL PHOTOGRAPHY
SOURCE: NA
YYMMDD: NA

HATCH | RobertsDay

SIZE A3_ 1:1250

0 metres 12.5 25 37.5 50 62.5

REV	DESCRIPTION	YYMMDD	DRAWN	APPR'D
E	REMOVE LOTS 10557, 10558, 10561, 10562	220801	TD	TT
D	CITY COMMENTS - VEHICLE ACCESS	220630	TD	TT
C	4.5m SETBACK ADDED - POS FACING WEST	220509	SB	TT
B	AS PER CLIENT 23.04.2022	220426	SB	TT
A	BASE EJV VL7B RD1 3288	200330	SB	DRAFT

LOCAL DEVELOPMENT PLAN - STAGE 24
Lot 9330 Maralla Road, Ellenbrook
City of Swan

REF NO. **EJV VL7B** | DRAW NO. **RD1 430** | REV. **E**

DISCLAIMER: ISSUED FOR DESIGN INTENT ONLY. ALL AREAS AND DIMENSIONS ARE SUBJECT TO DETAIL DESIGN AND SURVEY

Document Set ID: 7306508
Version: 1, Version Date: 02/08/2022

Appendix D Civil engineering roadworks plan

MARALLA ROAD

REFER 6023-00-SK16 FOR MARALLA ROAD CROSS SECTION

LIMIT OF PAVEMENT CH 1060 094

MATCHLINE B - JOINS 6023-24-611

MATCHLINE A - JOINS 6023-24-611

KOOMAL WAY

BALMAIN WAY

WINE LANE

DUNNETT DRIVE

LIMIT OF PAVEMENT CH 745 608

LIMIT OF PAVEMENT CH 15 950

CLASS 4 U/S 24.92 750/24.2 12.6 D/S 24.40

REMOVE U/S 24.92 750/208 12.5 D/S 24.86

REMOVE EXISTING BUP AND 3.0m OF EXISTING PIPEWORK. INSTALL NEW JP ON EXISTING DRAINAGE LINE.

U/S 26.20 300/68.5 58.2 D/S 25.35

REMOVE EXISTING BUP AND 4.0m OF EXISTING PIPEWORK. INSTALL NEW JP ON EXISTING DRAINAGE LINE.

INCLUDE Φ150mm SOAKAGE HOLE IN BASE. REFER CW-COS-004 FOR DETAILS.

U/S 24.76 375/179 39.5 D/S 24.54

U/S 24.97 375/154 27.8 D/S 24.79

U/S 24.51 375/195 13.6 D/S 24.44

U/S 24.41 375/168 13.4 D/S 24.33

U/S 26.40 375/300 15.0 D/S 26.35

U/S 26.27 375/100 15.0 D/S 26.12

U/S 24.37 375/197 49.3 D/S 24.12

U/S 24.37 750/39.2 20.4 D/S 23.85

U/S 25.68 375/150 9.0 D/S 25.62

U/S 25.89 300/266 16.0 D/S 25.83

U/S 24.72 300/134 12.1 D/S 24.63

U/S 24.60 300/223 11.1 D/S 24.55

U/S 24.52 300/124 26.1 D/S 24.31

U/S 24.28 300/139 12.5 D/S 24.19

U/S 24.16 300/170 30.5 D/S 23.98

U/S 23.95 300/151 34.7 D/S 23.72

U/S 24.52 300/119 56.0 D/S 24.05

U/S 24.02 300/101 28.2 D/S 23.74

U/S 23.69 300/71 20.6 D/S 23.40

U/S 23.48 300/46 14.9 D/S 23.16

U/S 23.37 300/132 27.7 D/S 23.16

U/S 23.05 375/30.6 5.5 D/S 22.87

SWALE INVERT CH: 76.1 - 25.40

SWALE INVERT CH: 80 - 25.39

SWALE INVERT CH: 100 - 25.30

SWALE INVERT CH: 120 - 25.21

SWALE INVERT CH: 140 - 25.12

SWALE INVERT CH: 160 - 25.03

SWALE INVERT CH: 180 - 24.94

SWALE INVERT CH: 200 - 24.85

SWALE INVERT CH: 220 - 24.76

SWALE INVERT CH: 240 - 24.76

SWALE INVERT CH: 260 - 25.01

SWALE INVERT CH: 263.1 - 25.05

TOP OF SPILLWAY CH: 230.2 - 25.10

KERB OPENING WITH SPOON DRAIN. REFER TO DETAIL ON 6023-24-611. (TYPICAL)

10638 RESERVE FOR CONSERVATION

10608-POS

10590 10591 10592 10593 10594 10598 10599 10600 10601 10602 10603 10605 10606 10607

10557 10558 10559 10562 10563 10564 10565 10566 10567 10568 10569 10570 10571 10572 10573 10574 10575 10576 10577 10578 10579 10581 10582 10583 10584 10585

10421 10422 10423 10424 10425 10433 10434 10435 10436 10437 10438 10439

BOXOUT WIDTH (1-1.5m) 1.2m
300mm
40mm ASPHALT
30mm ASPHALT
EXISTING ASPHALT
EXISTING SUB-BASE
240mm BOXOUT DEPTH
NEW LIMESTONE SUB-BASE

MARALLA ROAD WIDENING

1. POSITRACK OR SIMILAR TO BOX OUT 240mm DEPTH. BUCKET WITH APPROXIMATELY 1-1.5m WIDE.
2. SUBGRADE COMPACTED.
3. 200mm LIMESTONE PLACED AND COMPACTED FOR THE WIDTH OF THE BOXOUT.
4. 40mm ASPHALT PLACED UP TO LEVEL WITH EXISTING. 300mm WIDTH PAST THE EDGE OF 30mm ASPHALT.
5. 30mm ASPHALT SEAL ON SURFACE, 7.2m PAVEMENT WIDTH FROM THE FACE OF KERB ON 9.1m ALIGNMENT

REFER TO DRAWING 6023-24-600 FOR ROADWORKS & DRAINAGE NOTES AND LEGEND

LOT DRAINAGE PIPE INFORMATION

LOT No.	U/S	DIA.	GRADE	LENGTH	D/S
10574	24.50	150	9.4	3.8	24.46
10576	24.33	150	9.4	3.8	24.29
10577	24.21	150	9.7	3.9	24.17
10578	24.21	150	9.7	3.9	24.17
10579	23.90	150	9.4	4.7	23.85

REV	DATE	DRN	CKD	APP	AMENDMENT
4	07.07.22	HVD	MH		POS BASIN DESIGN AMENDED
3	29.06.22	HVD	MH	M. WALLIS	DRAINAGE AMENDED MARALLA ROAD AS SHOWN
2	24.06.22	HVD	MH	M. WALLIS	DRAINAGE AMENDED MARALLA ROAD AS SHOWN
1	16.06.22	HVD	MH	M. WALLIS	DRAINAGE OUTLET AMENDED AS SHOWN
0	28.04.22	HVD	MH	M. WALLIS	REVISED TO COS COMMENTS, ISSUED FOR CONSTRUCTION

N

1:500 0m 10 20 30m

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CLIENT: ELLENBROOK MANAGEMENT PTY. LTD.

APPROVED

DESIGNED: HVD

SCALE: 1:500

PROJECT: ELLENBROOK - VILLAGE 8 - STAGE 24

TITLE: ROADWORKS AND STORMWATER DRAINAGE SHEET 1 OF 2

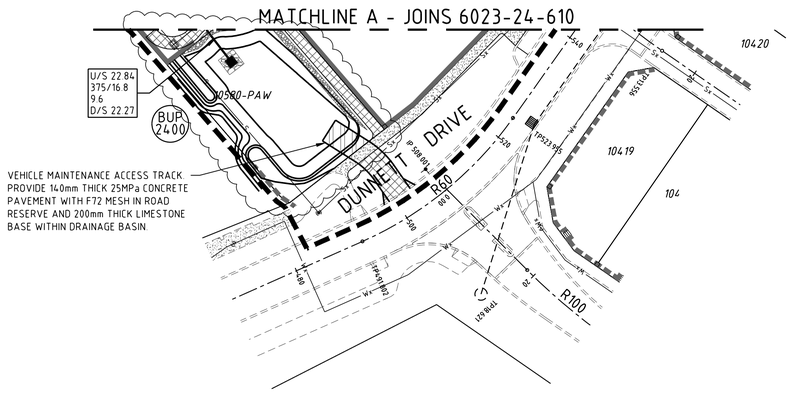
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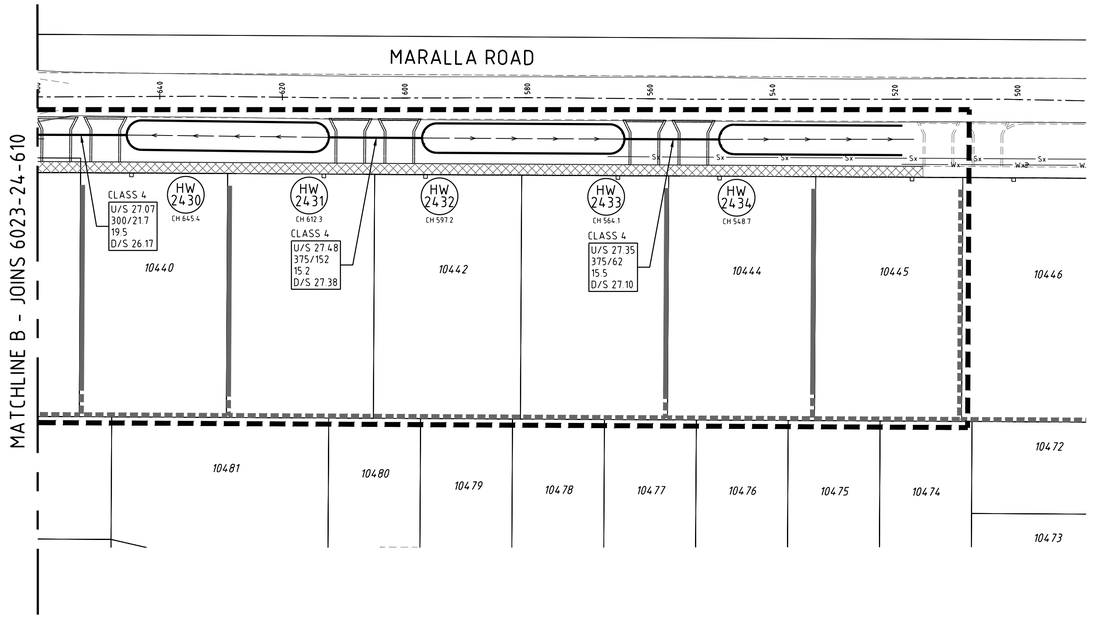
DRAWING No. 6023-24-610

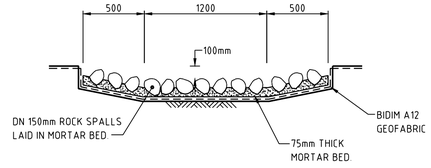
REVISION 4

ORIGINAL SIZE A1

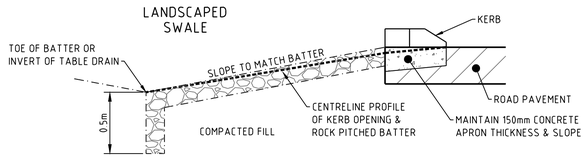
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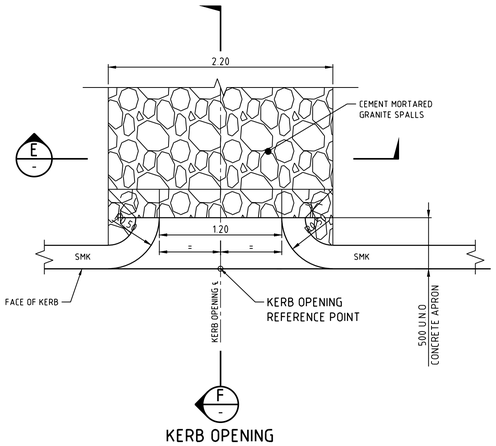




SECTION E
SCALE 1:25

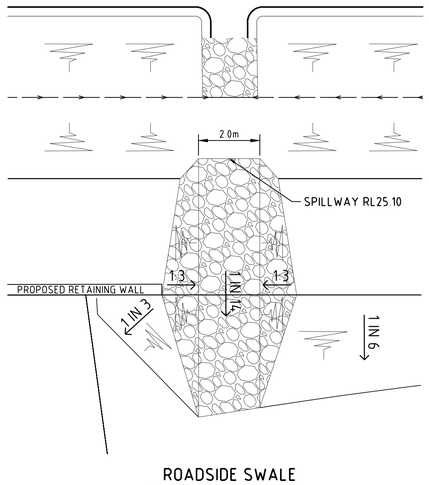


SECTION F
SCALE 1:25



KERB OPENING
TYPICAL DETAIL
SCALE 1:25

KOOMAL WAY



ROADSIDE SWALE
OVERFLOW SPILLWAY
SCaLE 1:100

REFER TO DRAWING 6023-24-600 FOR ROADWORKS & DRAINAGE NOTES AND LEGEND

REV	DATE	DRN	CKD	APP	AMENDMENT
2	07.07.22	HVD	MH		POS BASIN DESIGN AMENDED
1	16.06.22	HVD	MH	M. WALLIS	DRAINAGE OUTLET AMENDED AS SHOWN
0	27.04.22	HVD	MH	M. WALLIS	REVISED TO COS COMMENTS, ISSUED FOR CONSTRUCTION
B	31.03.22	HVD	MH		DRAINAGE BASIN AND ROCK PITCHING DETAIL ADDED
A	31.01.22	HVD	MH		ISSUED FOR PRICING/APPROVAL

N

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1:500 0m 10 20 30m

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APPROVED

DESIGNED: HVD

SCALE: 1:500

PROJECT: ELLENBROOK - VILLAGE 8 - STAGE 24

TITLE: ROADWORKS AND STORMWATER DRAINAGE SHEET 2 OF 2

WAPC No. 157923

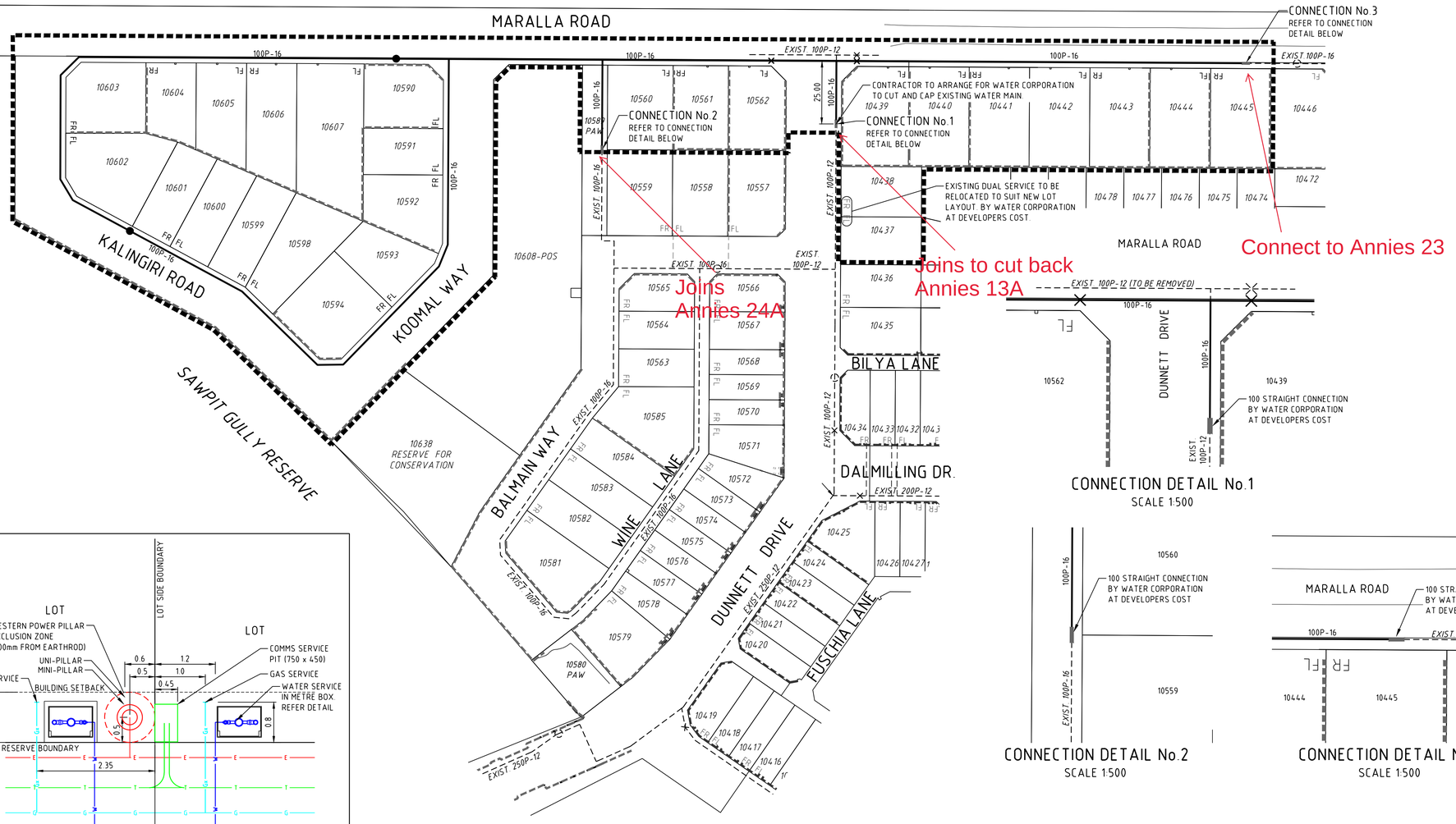
DRAWING No. 6023-24-611

REVISION 2

ORIGINAL SIZE A1

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Appendix E Civil engineering water reticulation plan

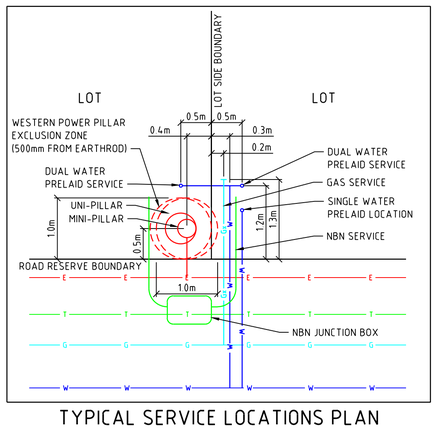


CONNECTION DETAIL No.2
SCALE 1:500

CONNECTION DETAIL No.3
SCALE 1:500

CONNECTION DETAIL No.1
SCALE 1:500

TYPICAL SERVICE LOCATIONS PLAN
FOR WATER IN METRE BOX
NTS



TYPICAL SERVICE LOCATIONS PLAN
NTS

NOTICE TO CONTRACTOR

IT IS THE CONTRACTORS 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 CONTRACTORS 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.

CONTRACTOR'S RESPONSIBILITY

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CO-ORDINATE THE INSTALLATION OF ALL SERVICES WITHIN THE SUBDIVISION. THE CONSULTANT SHOULD ENSURE THAT THERE IS NO CONFLICT BETWEEN THE POSITIONING OF FULLY PRE-LAID WATER SERVICES WITHIN THE LOT AND AND WESTERN POWER UNDERGROUND POWER CONNECTION PILLARS. THE SUPERINTENDENT SHOULD BE CONSULTED IF AMENDMENTS TO FULLY PRE-LAID SERVICES ARE REQUIRED.

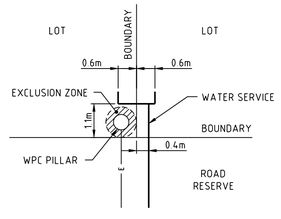
SERVICES

1. ALL WATER MAINS SHALL BE INSTALLED ON 2.1m ALIGNMENT EXCEPT AS OTHERWISE AGREED.
2. FULLY PRE-LAID WATER SERVICES TO BE INSTALLED IN ACCORDANCE WITH W.C. WATER RETICULATION DESIGN STANDARD No 63 VERSION 3 REVISION 14, SEPTEMBER 2018 AND READ IN CONJUNCTION WITH W.C. STANDARD ARRANGEMENT DRG No.'s BD 62-8-15 AND BD62-8-24
3. WATER SERVICE LOCATIONS SHALL BE IN ACCORDANCE WITH THE GUIDELINES FOR POSITIONING CONTAINED IN DRG No. BD62-8-14C.
4. WHERE POSSIBLE LOTS ARE ARRANGED IN PAIRS WITH A DUAL SERVICE PIPE ENTERING THE RIGHT HAND SIDE OF THE PAIR OF LOTS AND SPLITTING LEFT AND RIGHT TO SUPPLY EACH PAIR OF METERS.
5. WHERE SHORT AND LONG SINGLE SERVICES ARE INDICATED THE SERVICE PIPE AND METER SHOULD, IF POSSIBLE, BE LOCATED AT THE LEFT HAND SIDE BOUNDARY OF LOTS.
6. FOR A STRAIGHT ROAD RESERVE, SERVICE PIPES SHALL BE ALIGNED AT RIGHT ANGLES TO FRONT BOUNDARIES, RATHER THAN TO THE SUPPLY WATER MAINS.
7. WHERE THERE IS A BEND IN THE ROAD RESERVE AT THE SIDE BOUNDARY, THE SERVICE PIPE SHALL BE POSITIONED PARALLEL TO THE LINE BISECTING THE ANGLE.
8. FL AND FR (FULLY PRELAID LEFT & RIGHT) INDICATES THE SIDE OF THE LOT WHEN VIEWED FROM THE ROAD FRONTAGE WHICH IS SELECTED FOR ITS METER LOCATION.
9. FULLY PRE-LAID WATER SERVICES INSTALLED IN STAIR LANDINGS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD WATER CORPORATION DRG No. BD62-2-9.

LEGEND

DESCRIPTION	SYMBOL
RETICULATION AREA BOUNDARY	
PROPOSED MAINS	
PROPOSED VALVE (No. = 5)	
PROPOSED HYDRANT (No. = 1)	
PROPOSED PRELAID LONG SERVICE	
CHANGE IN PIPE SIZE	
TEMPORARY BLANK END AND FLUSHING POINT (No. = 1)	TBE
CONNECTION BY WATER CORPORATION (No. = 6)	
EXISTING MAIN, HYDRANT AND VALVE	
FUTURE MAIN, HYDRANT AND VALVE	
PROPOSED RETAINING WALL	
EXISTING RETAINING WALL	
FUTURE RETAINING WALL	
DEFERRED SERVICE	'D'
SERVICE LAID IN PREVIOUS STAGE TO BE RELEASED IN THIS STAGE	⊛
SERVICE LAID IN THIS STAGE FOR RELEASE IN FUTURE STAGE	✳

SERVICES	QTY (No.)
PRELAID SHORT DUAL	10
PRELAID LONG DUAL	0
PRELAID SHORT SINGLE	5
PRELAID LONG SINGLE	0
TOTAL	15
TOTAL NUMBER OF LOTS SERVED	25
NUMBER OF DEFERRED SERVICES	0
EXTENSION	**QTY (m)**
63 MDPE	0.0
100 P-16	854.0
150 P-16	0.0
200 P-16	0.0



TYPICAL WATER SERVICE
ADJACENT TO WPC PILLAR
N.T.S.

MSWA RETICULATION SUBMISSION

This plan is accepted as being in accordance with the endorsed Concept Plan:

LQ79-100-001-01A

Compliance with relevant design standards and manuals remains the responsibility of the Design Engineer.

No works are to commence on site until start-up meeting requirements have been made with the relevant Asset Inspector. Refer to the Developers' Manual for contact details.

OA05-103-001-01A

FILE: 138405944

REV	DATE	DRN	CKD	APP	AMENDMENT
0	15.07.22	HVD	MH		ISSUED FOR WATER CORPORATION APPROVAL AND CONSTRUCTION
A	16.06.22	HVD	MH	M. WALLIS	ISSUED FOR PRICING/APPROVAL

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CLIENT: ELLENBROOK MANAGEMENT PTY. LTD.
APPROVED
DESIGNED: HVD
SCALE: 1:500 1:1000
PROJECT: ELLENBROOK - VILLAGE 8 - STAGE 24B
TITLE: WATER RETICULATION PLAN
WAPC No.: 157923
DRAWING No.: 6023-24B-500
REVISION: 0
ORIGINAL SIZE: A1

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Appendix F Vegetation plot photos and descriptions

Plot 1	
Vegetation classification	Class A Forest
Description / justification	Trees 10-30 m high at maturity, dominated by Eucalypts, multi-tiered structure comprising tall canopy layer, shrubby middle layer and grass/herb/sedge understorey



Photo ID: 1a



Photo ID: 1b

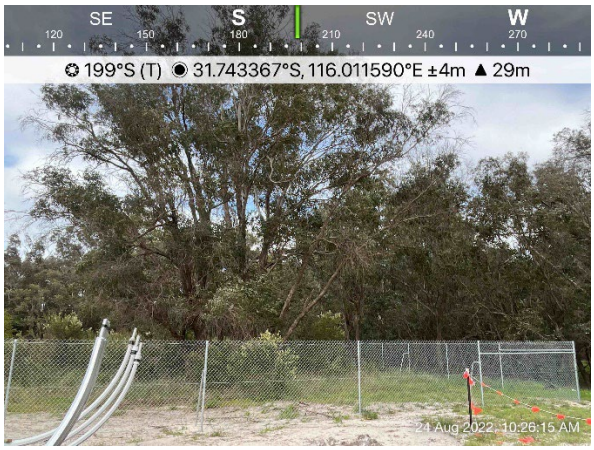


Photo ID: 1c

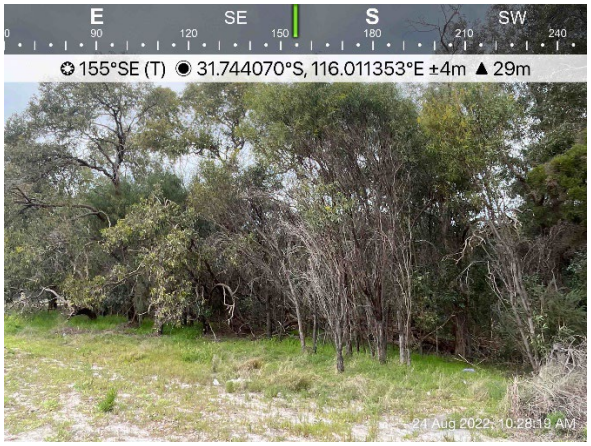


Photo ID: 1d



Photo ID: 1e



Photo ID: 1f

Plot 2	
Vegetation classification	Class B Woodland (Downslope >0–5°)
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: 2a



Photo ID: 2b



Photo ID: 2c

Plot 3	
Vegetation classification	Class B Woodland (Flat/upslope)
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: 3a

Plot 4	
Vegetation classification	Class D Scrub
Description / justification	Vegetation with a continuous horizontal and vertical structure, greater than 2 m high at maturity



Photo ID: 4a

Plot 5	
Vegetation classification	Class G Grassland
Description / justification	Grassland at maturity, greater than 100 mm in height



Photo ID: 5a

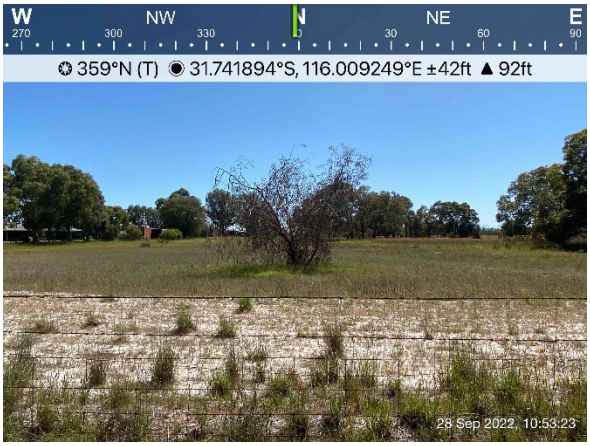


Photo ID: 5b



Photo ID: 5c



Photo ID: 5d

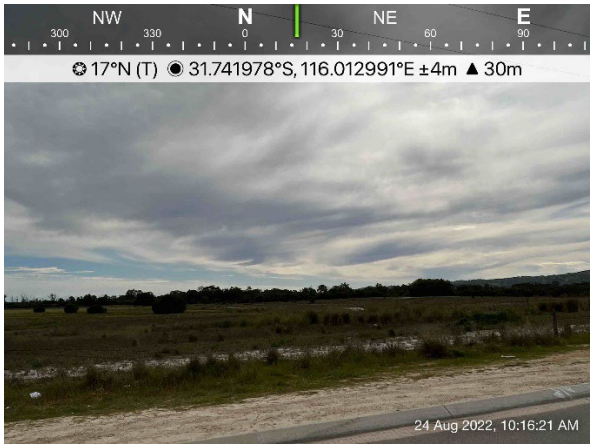


Photo ID: 5e



Photo ID: 5f

Plot 5	
 **Photo ID:** 5g	

Plot 6	
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: 6a



Photo ID: 6b



Photo ID: 6c



Photo ID: 6d



Photo ID: 6e



Photo ID: 6f

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Document Status

Report version	Rev No.	Purpose	Author	Reviewed and Approved for Issue	
				Name	Date
Final Report	Rev 0	Issued for use: to facilitate subdivision clearance and future lot sales/building approvals	Olivia Johnston	Zac Cockerill (BPAD 37803, Level 2)	14 October 2022
Final Report	**Rev 1**	**Issued for use: updated to include Stage 24C Lots 10602 & 10603**	**Zac Cockerill (BPAD 37803, Level 2)**	**Zac Cockerill (BPAD 37803, Level 2)**	**27 October 2022**



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