

DYNAMIC PLANNING AND DEVELOPMENTS

PROPOSED AMENDMENT TO THE SOUTHERN RIVER PRCINCT 3D STRUCTURE PLAN

LOT 1792 HOLMES STREET, SOUTHERN RIVER



Project No. 1015

DECEMBER 2020

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IT IS CERTIFIED THAT AMENDMENT NO. 1 TO THE SOUTHERN RIVER PRECINCT PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON: **4 AUGUST 2022**

Signed for and on behalf of the Western Australian Planning Commission

A handwritten signature in black ink, appearing to read 'P. Rigali', is written over a light grey rectangular background.

an officer of the Commission duly authorised by the Commission pursuant to Section 16 of *the Planning and Development Act 2005* for that purpose.

FIGURES

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1.0 INTRODUCTION

Dynamic Planning and Developments Pty Ltd (DPD) act on behalf of the registered proprietor of Lot 1792 Holmes Street, Southern River (herein referred to as the 'subject site'). DPD has prepared the following report in order to seek support from the City of Gosnells to adopt an amendment to its Southern River Sub-Precinct 3D Local Structure Plan. The intention of the proposed structure plan amendment is to modify the location of the proposed public open space on the subject site in order to assist with drainage and management of sewerage.

The following report will discuss various issues pertinent to the proposal, such as:

- Existing and surrounding land uses;
- Zoning details;
- Strategic planning considerations;
- Statutory planning considerations;
- Justification of the proposed structure plan amendment; and
- Overview of the potential future subdivision.

The subject site is presently designated for residential development at a density of between R30 and R40 under the current Southern River Precinct 3D Local Structure Plan. In addition to the residential development, the subject site is required to provide an area of public open space totalling 5,541sqm of unrestricted area and 1,104sqm of restricted area. It is intended that the proposed amendment will enable development of the subject site in the short term by facilitating an improved drainage/sewer outcome for the ultimate subdivision of the site.

The proposed structure plan amendment is considered to be 'minor' under the provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* since the Amendment:

- a) Does not materially alter the purpose and intent of the structure plan;
- b) Does not change the intended lot/dwelling yield by more than 10 percent;
- c) Does not adversely impact upon the amenity of adjoining landowners or restrict the use and development of adjoining land;
- d) Does not significantly impact the infrastructure provision; and
- e) Does not significantly impact the environment.

In accordance with Schedule 2, Part 4, Clause 29 (3) and Part 5, Clause 45 (3) a minor amendment may not be required to be advertised.

2.0 SITE DETAILS

2.1 Legal Description

The subject site is legally described as “*Lot 1792 on Plan 3315*” and is wholly contained on Volume 2126, Folio 379.

The area of the subject site is approximately 9.7 hectares.

A copy of the Certificate of Title pertinent to the abovementioned lot is contained in **Appendix 1**.

2.2 Regional and Local Context

The site is located within the suburb of Southern River on the south-western boundary of the Municipality of the City of Gosnells. The site is located approximately 21 kilometres south east of the Perth Central Business District, 7 kilometres from the Gosnells Town Centre, 6 kilometres from Armadale Town Centre, 1.6 kilometres from the Canning Vale Shopping Centre, and 2 kilometres from Champion Lakes. The site is additionally well placed in terms of proximity and access to Tonkin Highway via Ranford Road (refer to Figure 1).

The subject site is part of the broader Southern River Sub-Precinct 3D LSP which has a combined area of 15.94ha of rural land, comprising a total of 5 lots and portions of the Forrestdale Main Drain. The LSP area proposes residential development at a density of R30 and R40 and is bounded by Holmes Street to the north-east, Matison Street to the north-west and Passmore Street to the south-east. The subject site within the LSP area fronts Holmes Street and the proposed realignment and is bounded by Lot 9 Holmes Street to the north-west (which is also proposed for residential subdivision), Passmore Street to the south-east and adjoining rural properties to the south-west. Figure 2 below provides an aerial view of the subject site and surrounds.

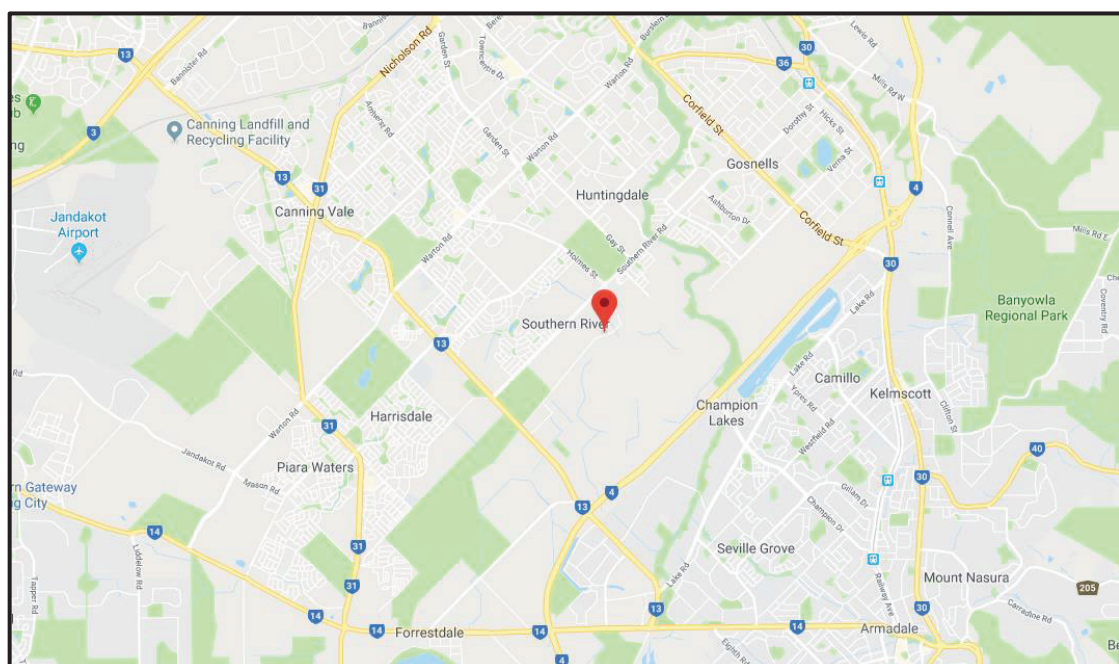


Figure 1 – Regional Context



Figure 2 – Local Context

3.0 STATUTORY AND STRATEGIC PLANNING FRAMEWORK

3.1 State Planning Framework

3.1.1 Metropolitan Region Scheme

The subject site is zoned 'Urban' under the provisions of the Metropolitan Region Scheme (MRS) and is impacted by an 'Other Regional Roads' reservation associated with Holmes Street. The relevant MRS zoning is depicted below in Figure 3.

The proposed 'minor' structure plan amendment to reconfigure the proposed public open space distribution is considered to be consistent with applicable objectives and provisions pertaining to land zoned 'Urban' under the MRS.

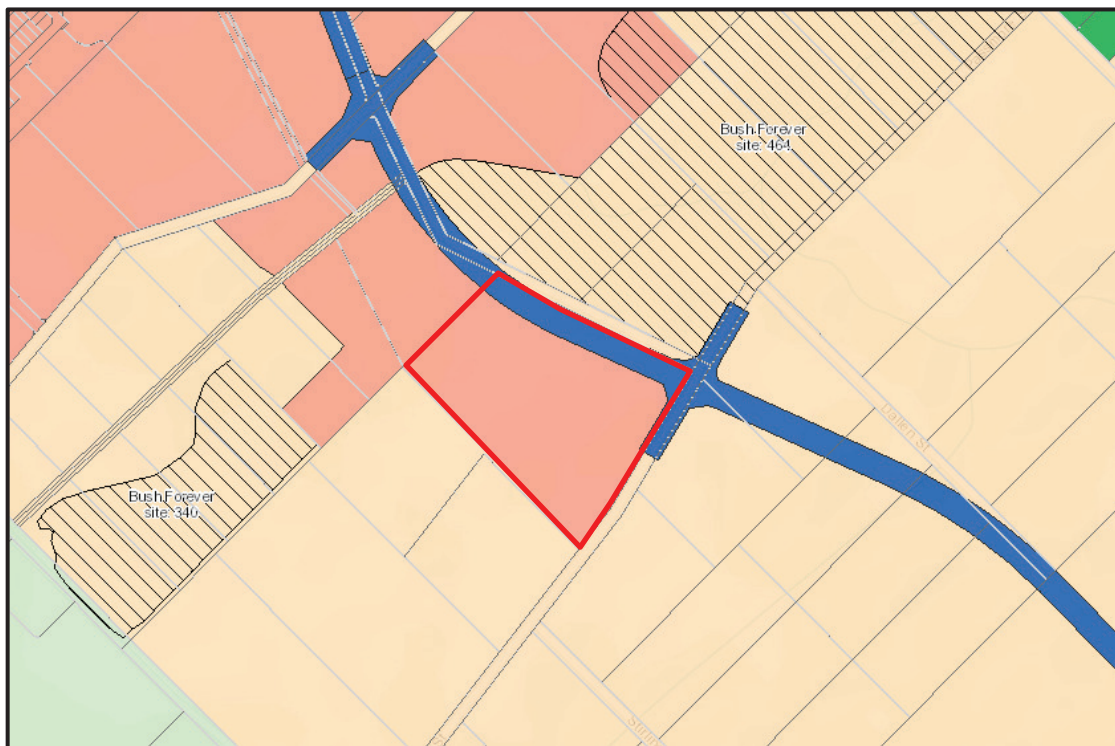


Figure 3 – MRS Extract

3.2 Local Planning Framework

3.2.1 City of Gosnells Local Planning Scheme No. 6

The subject site falls within the area covered by the City of Gosnells Local Planning Scheme No. 6 (LPS6). Under the provisions of LPS6, the subject site is zoned 'Residential Development' as shown in Figure 4 below. The objectives of the 'Residential Development' zone have been outlined below:

- *To provide for the progressive and planned development of future urban areas for residential purposes and for commercial and other uses normally associated with residential development generally in accordance with a Structure Plan.*

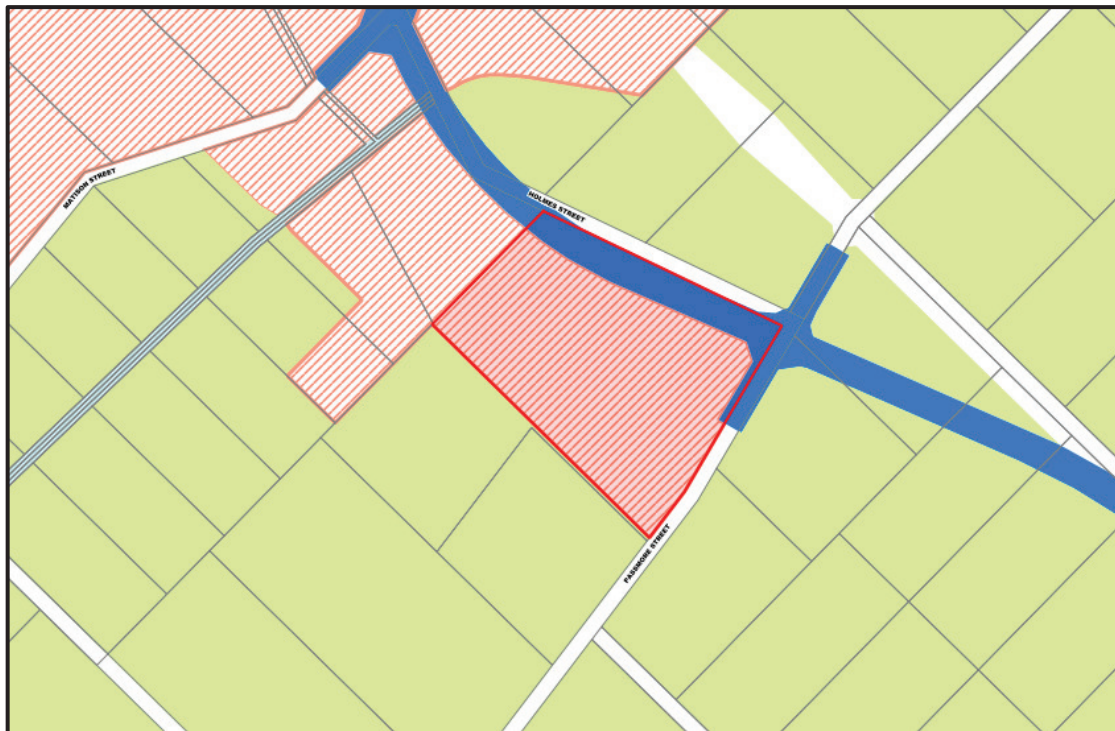


Figure 4 – City of Gosnells LPS6 Extract

In accordance with the applicable 'Residential Development' zoning, the City of Gosnells and subsequently the WAPC have endorsed the Southern River Sub-Precinct 3D Local Structure Plan which is considered to have suitably addressed the abovementioned objectives applicable to the 'Residential Development' zone.

As the proposed amendment relates to the approved structure plan it is considered to be consistent with the provisions of LPS6 so long as the amendment is consistent with the intent of the Southern River Sub-Precinct 3D Local Structure Plan which will be addressed in subsequent sections.

3.2.2 Southern River Sub-Precinct 3D Local Structure Plan

The Southern River Sub-Precinct 3D Local Structure Plan was prepared to guide residential subdivision and development on the subject site and surrounds, which include the following properties:

- Lot 9 Holmes Street, Southern River;
- Lot 8 Holmes Street, Southern River;
- Lot 1792 Holmes Street, Southern River;
- Lot 6 Matison Street, Southern River; and
- Lot 5 Matison Street, Southern River.

The current Southern River Sub-Precinct 3D Local Structure Plan map is contained in **Appendix 2** and illustrated below in Figure 5.

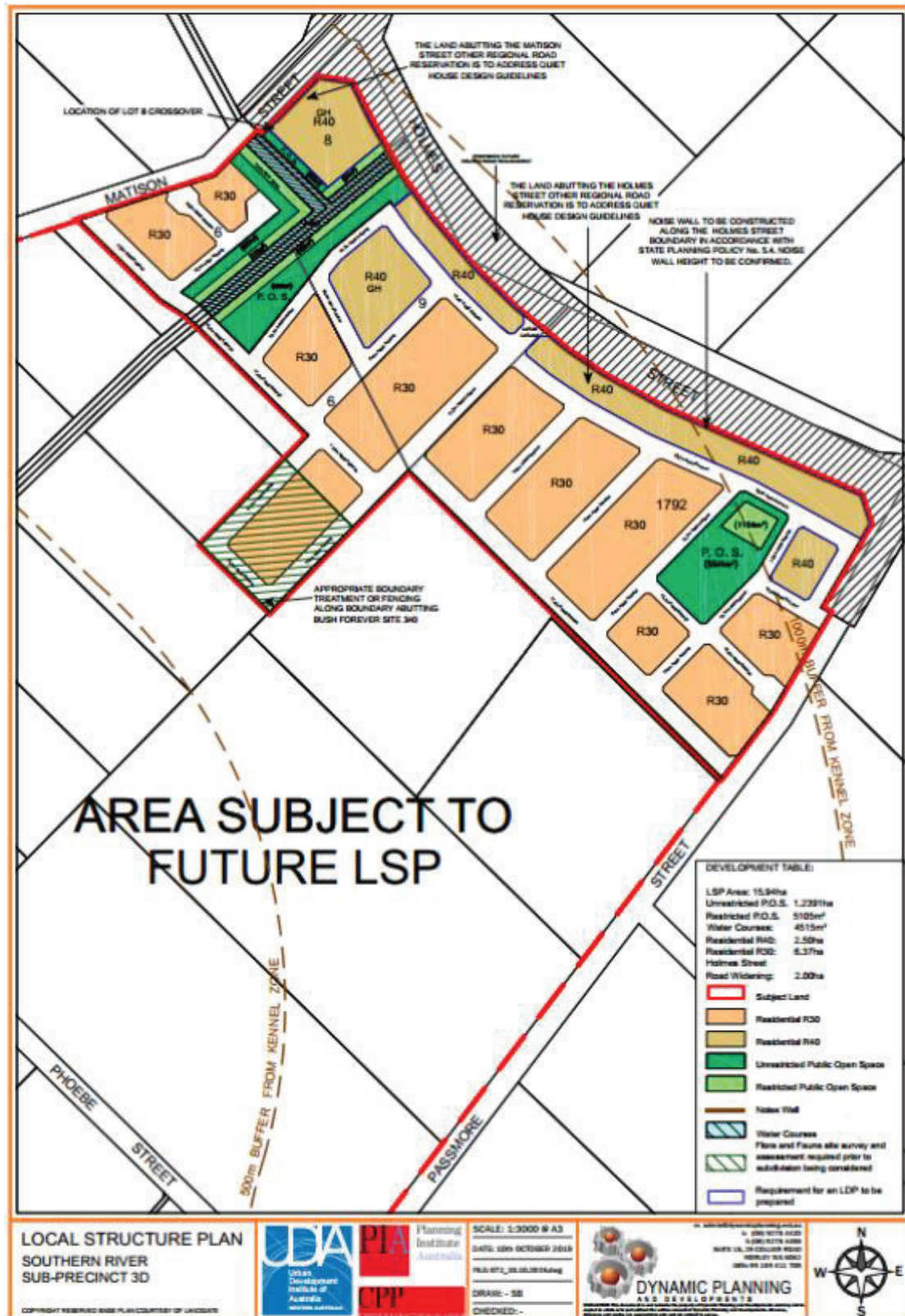


Figure 5 – Southern River Sub-Precinct 3D Local Structure Plan

Development in accordance with the proposed structure plan is in the process of being implemented with various subdivision approvals being granted in recent times. The existing Southern River Sub-Precinct 3D Local Structure Plan proposes residential development to a density of R30 and R40 at the subject site as well as a portion of public open space that is positioned centrally within the subject site. The proposed amendment is in keeping with this vision for the subject site and simply seeks to relocate the proposed public open space in order to improve the proposed drainage/sewerage arrangement for the resultant subdivision.

4.0 AMENDMENT PROPOSAL

The proposed structure plan amendment seeks approval to modify the location of the proposed public open space within the subject site, as depicted on the approved Southern River Sub-Precinct 3D Local Structure Plan map. The details of the proposed modification have been illustrated in the proposed Southern River Sub-Precinct 3D Local Structure Plan Amendment Plan contained in **Appendix 3** and illustrated below in Figure 6.

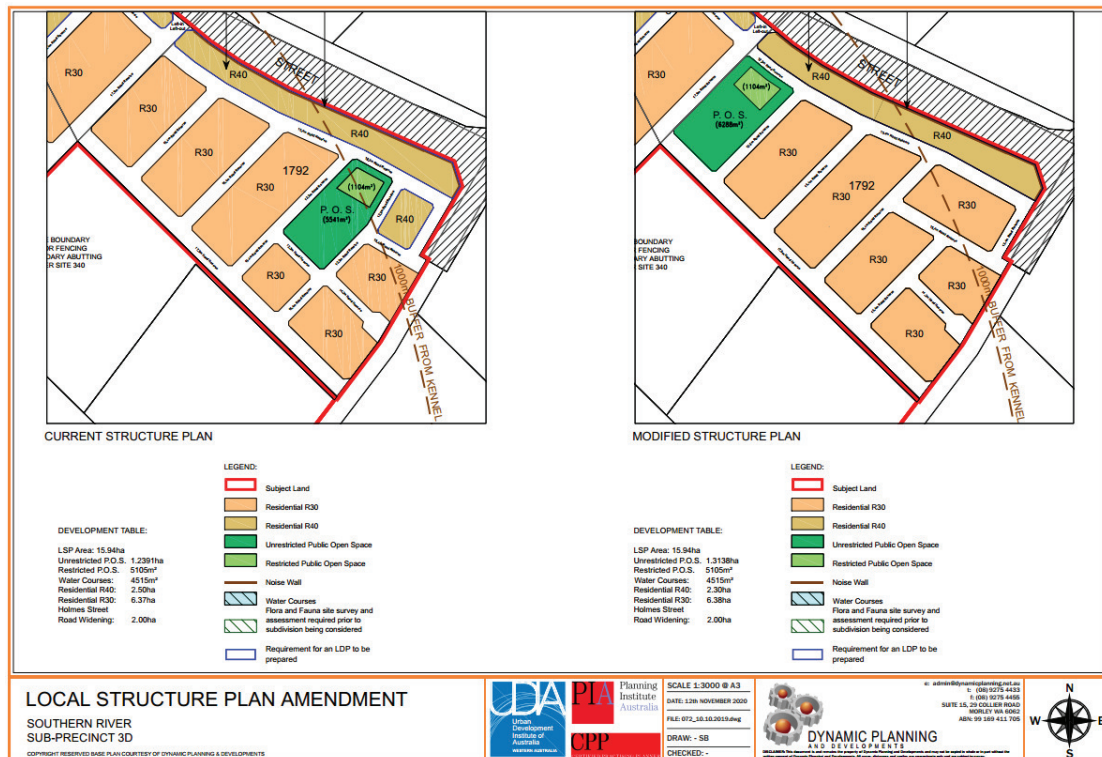


Figure 6 – Proposed Structure Plan Map

The reason for the proposed modification to the location of the public open space is a direct result of the inability to effectively manage and dispose of sewerage under the existing approved Southern River Sub-Precinct 3D Local Structure Plan. At present the approved Local Water Management Strategy proposes to direct sewerage to a new Wastewater Pumping Station (WWPS 'Balannup PS E') within the Della Vedova land to the south. As this area and subsequently the Wastewater Pumping Station is unlikely to be developed in the near future an alternative strategy is necessary to facilitate short term development.

The proposed alternative strategy is to direct sewerage to the existing DN450mm main in the Ambia Development to the north of Matison Street. As part of this strategy, the subject site requires fill levels to rise from the north to the south. A direct result of the additional fill is the public open space in its current location becoming largely unusable. To resolve this issue the proposed public open space is required to be relocated.

With consideration of the proposed amendment, it is noted that the proposed changes will only impact the subject site and actually result in an increase to the applicable public open space area on the subject site. As a result, the proposed changes we are seeking are assumed to be minor in nature and appropriate for adoption by the City of Gosnells.

5.0 SUBDIVISION CONCEPT PLAN

The intent behind the proposed local structure plan amendment is to facilitate a subdivision of the subject site in accordance with the subdivision concept plan contained in **Appendix 4** and pictured below in Figure 7.



Figure 7 – Proposed Subdivision Concept Plan

Should the proposed amendment be approved by the WAPC, it is envisaged that a subdivision application in accordance with the above will follow immediately which is considered to deliver on the intent and vision of the Southern River Sub-Precinct 3D Local Structure Plan and would be consistent with the proposed amendment.

6.0 ENGINEERING CONSIDERATIONS

As previously conveyed, the existing proposed strategy to manage drainage/sewer in the approved Local Water Management Strategy is unable to be implemented in the short term and consequently an alternative strategy is required to enable immediate development of the subject site. The proposed alternative strategy developed by Development Engineering Consultants is to connect the sewer to the existing DN450mm main in the Ambia Development which is located to north of Matison Street.

The implications and benefits of the alternative strategy are detailed in the technical note provided by Development Engineering Consultants which has been included in **Appendix 5** of this submission, with a summary below:

- Ambient levels of the proposed development on the subject site will rise from around RL23.25 on the northern boundary to RL25.72 on the south eastern corner.
- In comparison, the fill levels proposed in the approved LWMS were RL23 on the northern boundary rising to RL24.2. This is some 1.5m lower than the required level for the alternative sewer strategy.
- Due to the change in required fill levels, the usability of the public open space in its existing location is compromised.
- Given the high ground water levels and soil profile at the subject site it is recommended that the proposed drainage basin be connected to the Forrestdale Main Drain to allow overflow.
- The alternative drainage/sewerage strategy has a number of benefits which include:
 1. A larger area of usable public open space;
 2. A more centrally located portion of public open space which is considered to provide additional benefits to the broader structure plan area;
 3. The drainage will cater for more of the area of Lot 1792 with a similar impost on the public open space, particularly with the drainage connection to the Forrestdale Main Drain; and
 4. The relocation of the public open space will have no impact on the available retention of existing vegetation as the previously approved fill levels would have resulted in the clearing of all vegetation.

With consideration of the abovementioned implications and benefits of the alternative drainage/sewer strategy, the relocation of the proposed public open space is considered to be entirely appropriate and will facilitate delivery of the Southern River Sub-Precinct 3D Local Structure Plan in the short term.

7.0 CONCLUSION

In light of the matters presented in the preceding sections of this report, the proposed amendment to the Southern River Sub-Precinct 3D Local Structure Plan is considered to be entirely appropriate for approval for the following reasons:

1. It represents a very minor change to the existing approved structure plan layout in that:
 - The proposed POS is simply being relocated and increased in size; and
 - The subject site is the only property impacted by the proposed change.
2. The proposed amendment will allow a workable drainage/sewer solution which will enable development in the short term.
3. The proposal is consistent with the provisions of the MRS 'Urban' zoning.
4. The amendment will facilitate a subdivision that delivers on the intent and objectives of the Southern River Sub-Precinct 3D Local Structure Plan.

In this regard we respectfully request that the City of Gosnells and the WAPC resolve to support and approve the proposed amendment, respectively.

File Ref: 201211 1015 LSP Amendment Report.doc

APPENDIX 1
CERTIFICATE OF TITLE

WESTERN



AUSTRALIA

REGISTER NUMBER 1792/P3315	
DUPLICATE EDITION 2	DATE DUPLICATE ISSUED 3/10/2017

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME **2126** FOLIO **379**

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 1792 ON PLAN 3315

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

CRAIG SIMPSON TURNBULL OF 38 GRANT STREET, COTTESLOE
IN 3/7 SHARE
53/53 PTY LTD OF POST OFFICE BOX 225, LEEDERVILLE
IN 4/7 SHARE
AS TENANTS IN COMMON

(T K652885) REGISTERED 10/7/2008

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. K652886 MORTGAGE TO POLICE & NURSES CREDIT SOCIETY LTD REGISTERED 10/7/2008.
2. *M971423 CAVEAT BY PREQUIN SECURITIES PTY LTD LODGED 17/4/2015.
3. *M972090 CAVEAT BY JAMES HAROLD TURNBULL, MARGARET ANNE TURNBULL LODGED 20/4/2015.
4. *N267222 CAVEAT BY MARK HAROLD THOMSON LODGED 3/3/2016.
5. *N705362 MEMORIAL. TAXATION ADMINISTRATION ACT 2003, SECTION 76 (LAND TAX) LODGED 28/8/2017.
6. *N911357 CAVEAT BY MARGARET ANNE TURNBULL, JAMES HAROLD TURNBULL LODGED 1/6/2018.
7. *O050062 CAVEAT BY THE ENTERPRISE DEVELOPMENT FUND II PTE LTD, THE ENTERPRISE FUND III LTD, PRIVATE DEBT ANNUITY PTE LTD LODGED 11/12/2018.
8. *O136409 CAVEAT BY MARK WISSMAN LODGED 23/4/2019.
9. *O159648 CAVEAT BY NEIL RAYMOND CRIBB AS TO THE 4/7 SHARE OF 53/53 PTY LTD ONLY LODGED 27/5/2019.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

END OF PAGE 1 - CONTINUED OVER

Subject to dealing

RECORD OF CERTIFICATE OF TITLE

REGISTER NUMBER: 1792/P3315

VOLUME/FOLIO: 2126-379

PAGE 2

SKETCH OF LAND:

2126-379 (1792/P3315)

PREVIOUS TITLE:

488-185A

PROPERTY STREET ADDRESS:

LOT 1792 HOLMES ST, SOUTHERN RIVER.

LOCAL GOVERNMENT AUTHORITY:

CITY OF GOSNELLS

NOTE 1: L873334 SECTION 138D TLA APPLIES TO CAVEAT L810083

Subject to dealing

APPENDIX 2
CURRENT SOUTHERN RIVER PRECINCT 3D LOCAL STRUCTURE PLAN



DEVELOPMENT TABLE:

LSP Area:	15.94ha
Unrestricted P.O.S.:	1.2391ha
Restricted P.O.S.:	5105m ²
Water Courses:	4515m ²
Residential R40:	2.50ha
Residential R30:	6.37ha
Holmes Street Road Widening:	2.00ha

	Subject Land
	Residential R30
	Residential R40
	Unrestricted Public Open Space
	Restricted Public Open Space
	Noise Wall
	Water Courses
	Flora and Fauna site survey and assessment required prior to subdivision being considered
	Requirement for an LDP to be prepared

LOCAL STRUCTURE PLAN
SOUTHERN RIVER
SUB-PRECINCT 3D

SCALE: 1:3000 @ A3
 DATE: 10th OCTOBER 2019
 FILE: 072_10.10.2019.dwg
 DRAW: - SB
 CHECKED: -

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APPENDIX 3
PROPOSED STRUCTURE PLAN AMENDMENT PLAN



CURRENT STRUCTURE PLAN

- LEGEND:**
- Subject Land
 - Residential R30
 - Residential R40
 - Unrestricted Public Open Space
 - Restricted Public Open Space
 - Noise Wall
 - Water Courses
 - Flora and Fauna site survey and assessment required prior to subdivision being considered
 - Requirement for an LDP to be prepared

DEVELOPMENT TABLE:

LSP Area:	15.94ha
Unrestricted P.O.S.:	1,2391ha
Restricted P.O.S.:	5105m²
Water Courses:	4515m²
Residential R40:	2.50ha
Residential R30:	6.37ha
Holmes Street	
Road Widening:	2.00ha



MODIFIED STRUCTURE PLAN

- LEGEND:**
- Subject Land
 - Residential R30
 - Residential R40
 - Unrestricted Public Open Space
 - Restricted Public Open Space
 - Noise Wall
 - Water Courses
 - Flora and Fauna site survey and assessment required prior to subdivision being considered
 - Requirement for an LDP to be prepared

DEVELOPMENT TABLE:

LSP Area:	15.94ha
Unrestricted P.O.S.:	1,3138ha
Restricted P.O.S.:	5105m²
Water Courses:	4515m²
Residential R40:	2.30ha
Residential R30:	6.38ha
Holmes Street	
Road Widening:	2.00ha

LOCAL STRUCTURE PLAN AMENDMENT

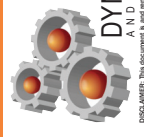
SOUTHERN RIVER
SUB-PRECINCT 3D

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Version: 1, Version Date: 11/01/2021



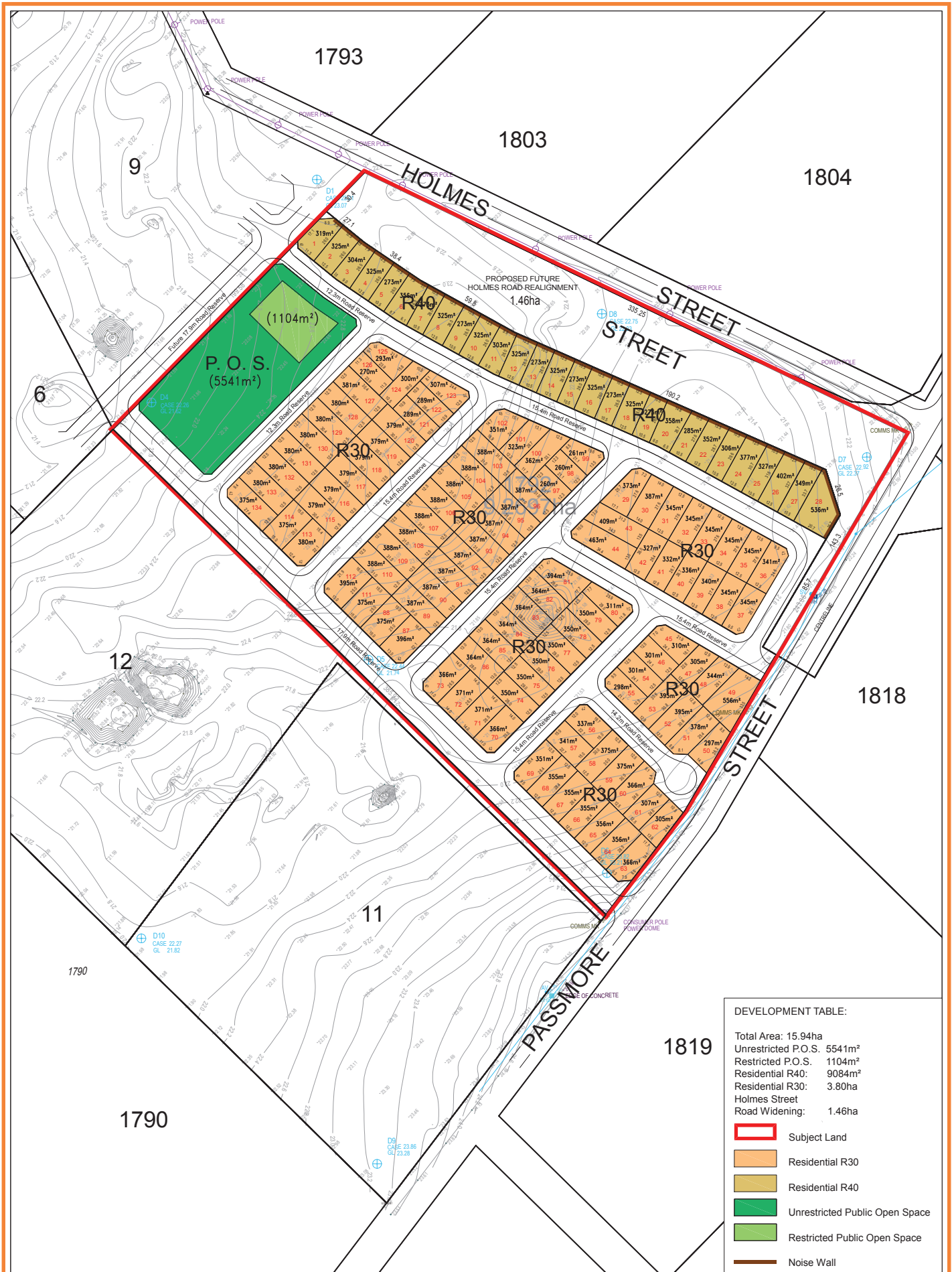
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APPENDIX 4
SUBDIVISION CONCEPT PLAN



DEVELOPMENT TABLE:	
Total Area:	15.94ha
Unrestricted P.O.S.:	5541m ²
Restricted P.O.S.:	1104m ²
Residential R40:	9084m ²
Residential R30:	3.80ha
Holmes Street	
Road Widening:	1.46ha
	Subject Land
	Residential R30
	Residential R40
	Unrestricted Public Open Space
	Restricted Public Open Space
	Noise Wall

PROPOSED SUBDIVISION
LOT 1792 HOLMES STREET
SOUTHERN RIVER

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UDA Urban Development Institute of Australia WESTERN AUSTRALIA

PIA Planning Institute Australia

CPP CERTIFIED PRACTISING PLANNER

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APPENDIX 5
ENGINEERING TECHNICAL NOTE



DEVELOPMENT
ENGINEERING
CONSULTANTS

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Facsimile: (08) 9481 1700
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Suite 3/123A Colin Street
West Perth WA 6005
Our Ref: SRVBGO00
SRvBGo00ServRep231120

**LOT 1792 HOLMES ROAD PTY LTD
LOT 1792 HOLMES ROAD, SOUTHERN RIVER (WAPC 158 602)
ENGINEERING SERVICES REPORT**

1. Introduction:

The subject site is approximately 9.7 hectares in size and is located on the north Western corner of the intersection between Passmore Street and Holmes Street in Southern River.

The land was approved for subdivision under WAPC approval 158 602 in October 2019.

As part of the Structure planning for the site, a Local Water Management Scheme was prepared by Bioscience in conjunction with Shawmac engineers. The approved LWMS in the City's website is dated September 2017 but the version date appears to be after the subdivision approval dated 2nd December 2019.

It is to be ultimately developed into 134 residential lots plus a 5541sqm area of POS.

The purpose of this report is to review the drainage strategy for the site to and examine the advantages of relocation of the POS area further north as per the attached.

2. Drainage Strategy:

2.1 Earthworks and Drainage Strategy in Structure Plan Report

The LWMS proposed a drainage strategy that involved two catchments, one to the south, annotated "Catchment CA" and the other consisting of some 10,500 cubic metres of on line storage within the Forrestdale Main Drainage (FMD) channel which is proposed to be widened to provide the additional storage. The basin for Catchment CA is located within Lot 1792 which is the subject of this report.

The strategy outlined within the LWMS was predicated on the sewerage for the site being directed to a new Wastewater Pumping Station (WWPS "Balannup PS E") located within the Della Vedova land to the south. This area is unlikely to be developed in the near future and hence to facilitate the short term development of Lot 1792, a strategy to sewer the land to the existing DN450mm main in the Ambia Development north of Matison Street has been proposed. This has resulted in the requirement for fill levels to rise from the north to the south, essentially at a grade of 1 in 200 to mirror the minimum grade of the sewer.

2.2 Comparison of Fill Levels

Based on the amended sewer strategy, the ambient levels of the proposed development of Lot 1792 will rise from around RL23.25 on the northern boundary of the site to RL25.72mAHD on the south eastern corner.

In comparison, the LWMS proposed fill levels at around RL23.00mAHD on the northern boundary of the site, but grading flatter to the south eastern corner at

RL24.20mAHD, being some 1.5m lower than the required level with the amended sewer strategy.

2.3 Implications on POS and levels of Surrounding Roads

The level in the vicinity of the level of the POS shown in the approved structure plan was around RL23.40mAHD, in comparison to the level required by the amended sewer strategy of RL24.5-25.0mAHD – some 1.0m to 1.5m higher.

The base of the drainage basin in the POS as part of the LWMS as proposed to be set at RL22.20mAHD which has set to be 0.5m higher than the maximum calculated groundwater levels (MGL) as outlined in the structure plan report. This is some 1.0m higher than the existing level and necessitates filling the whole of the POS area.

In summary in the structure plan the base of the basin was proposed to be 1.2m below the road levels, whereas in the revised strategy the base of the basin is between 2.2 and 2.7m below the road. Allowing for a 1 in 6 batter, this will reduce the useability of the POS area in its current location as a result of between 6.0m and 9.0m around the periphery of the open space being lost in batters.

2.4 Other Drainage Constraints

The LWMS proposed that the basin CA was not connected to the FMD and instead relied on the “free draining” nature of the soil to dispose of the drainage by soakage. The report also provided commentary on the high groundwater levels and indicated that there was an “expression of groundwater” in various locations on the site. Based on the MGL contours within the report, which are shown in Attachment 1 of this report, such an “expression” was likely to occur at the POS location proposed in the structure plan.

Given the high groundwater levels, in conjunction with clay underlying the sand layers, it is recommended that the basin should be connected to the FMD to allow overflow under peak flow conditions.

3. Proposal to Relocate the Basin North

Given the increased fill levels and the desire to connect the basin to the FMD, it is recommended that the basin is relocated north to the northern boundary of Lot 1792. The LWMS split the area for Lot 1792 with part of the site draining to Basin CA and the remainder draining to the FMD “on line” basin. By relocating the basin north, this will allow the whole of Lot 1792 to be directed to that basin and reduce the volume required and the associated implication on the POS within the FMD area.

The general design levels based on the revised sewerage strategy for the proposed site to the north is between RL24.00mAHD and 23.00mAHD. Based on the MGL levels in the LWMS the peak groundwater level at the amended POS location is around RL21.3mAHD meaning the base of the basin could be set at RL21.80mAHD. That means that maximum depth of the basin would then be reduced to 1.2 to 2.2m depth.

Apart from the greater proportion of useable POS, the additional advantages to relocation of the basin are as follows:

- The POS would be more central to the structure plan area and given that a substantial portion of the POS abutting the FMD will be taken up with drainage purpose, it will provide a more central useable hub.

- The drainage will cater for more of the area of Lot 1792 with a similar impost on the POS, particularly with the drainage connection to FMD.
- Given the original proposal required around 1.0m minimum of fill across the POS area, there was little opportunity to save existing vegetation. An inspection of the site has also indicated that there is little vegetation of value in the POS that would warrant protection. There is also little vegetation of value in the amended POS location hence there is no environmental loss in making the change.

4. Recommendation

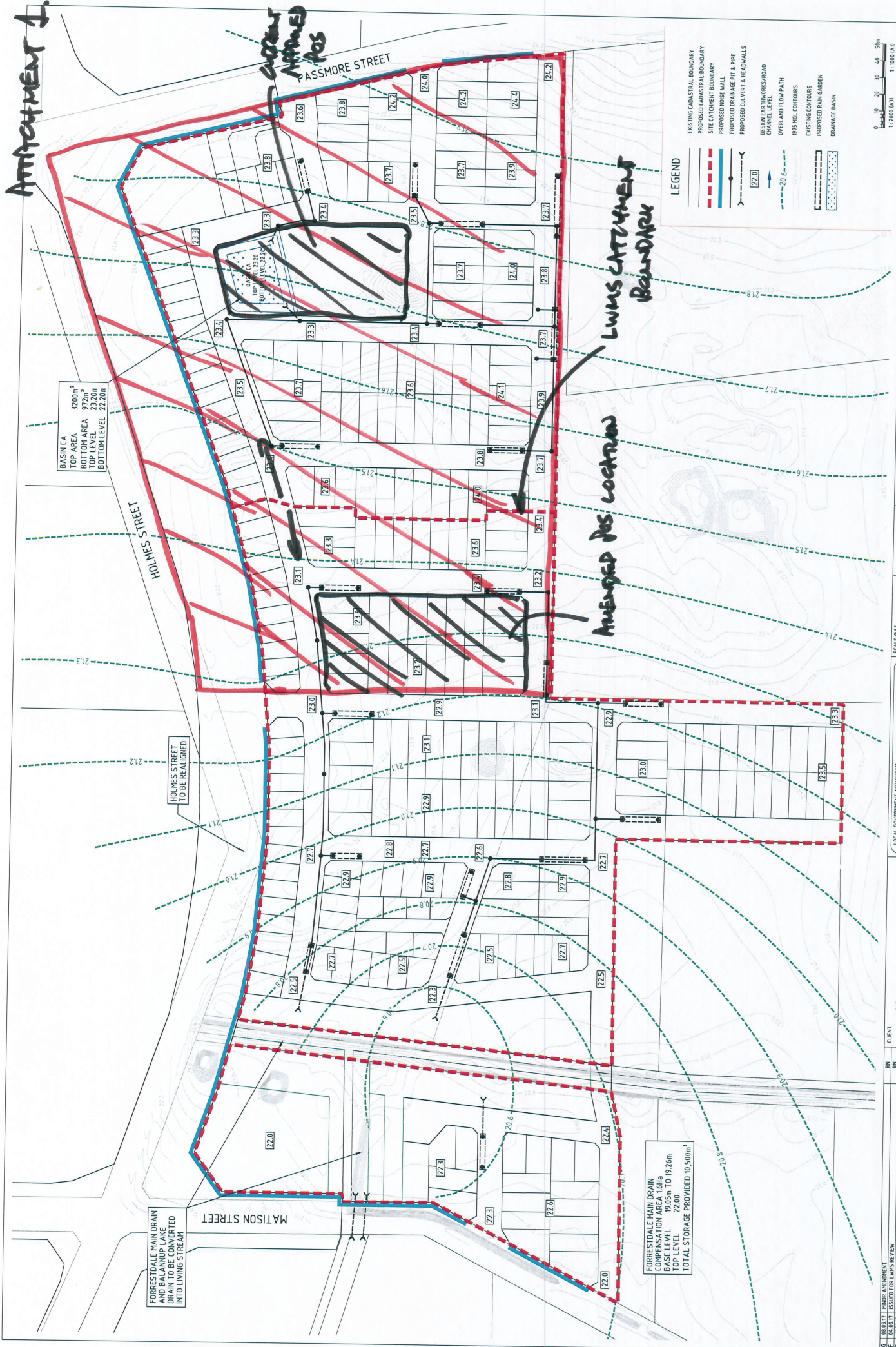
It is recommended as follows:

- Basin CA and the associated POS to be relocated north to the northern boundary of Lot 1792 as per the proposal outlined in Attachment 1.
- The outflow from Basin CA in its amended location be connected to the FMD to limit water rise and minimize the basin size to accord with similar areas to those outlined in the approved LWMS.
- That an Addendum to the LWMS be prepared to support the amendment.

DEVELOPMENT ENGINEERING CONSULTANTS PTY LTD

THIS REPORT IS DATED 24TH NOVEMBER 2020

Attachment 1



BASIN CA
 TOP AREA 3200m²
 BOTTOM AREA 972m²
 TOP LEVEL 23.20m
 BOTTOM LEVEL 22.20m

HOLMES STREET
 TO BE REALIGNED

FORRESTDALE MAIN DRAIN
 AND BALANUP LANE
 DRAIN TO BE CONVERTED
 INTO LIVING STREET

FORRESTDALE MAIN DRAIN
 COMPENSATION AREA 166m²
 BASE LEVEL 19.05m TO 19.26m
 TOP LEVEL 22.00
 TOTAL STORAGE PROVIDED 10,500m³

LEGEND

- EXISTING CADASTRAL BOUNDARY
- PROPOSED CADASTRAL BOUNDARY
- SITE CATCHMENT BOUNDARY
- PROPOSED DRAINAGE FIT & PIPE
- PROPOSED DRAINAGE FIT & HEADWALLS
- DESIGN EARTHWORKS/ROAD CHANNEL LEVEL
- OVERLAND FLOW PATH
- 1975 MSL CONTOURS
- EXISTING CONTOURS
- PROPOSED RAIN GARDEN
- DRAINAGE BASIN

<p>DATE DRAWN: 30.10.15 DESIGNED: RNF DRAWN: CFM CHECKED: RNI APPROVED: BH</p>		<p>DRAWING NUMBER: 1201008-202 REV: G</p>
<p>1ST FLOOR: 998 ALBANY HIGHWAY EAST VICTORIA PARK PERTH WA 6100 P 9 430 0000 E info@gosnell.com.au</p>		<p>CITY OF GOSNELLS SOUTHERN RIVER PRECINCT 3D EARTHWORKS PLAN</p>
<p>SCALE PLAN: HORIZ: 1:1000 DATUM: HORIZONTAL: PC04 VERTICAL: AHD</p>		<p>CONSULTING CIVIL AND TRAFFIC ENGINEERS</p>
<p>LOCAL GOVERNMENT AUTHORITY</p>		<p>CITY OF GOSNELLS</p>
<p>DYNAMIC PLANNING AND DEVELOPMENT</p>		<p>CLIENT</p>
<p>G 08.05.17: MINOR AMENDMENT</p>	<p>RNI</p>	<p>APPROVED</p>
<p>F 04.04.17: ISSUED FOR LWMS REVIEW</p>	<p>RNI</p>	<p>ISSUE AND REVISION HISTORY</p>
<p>D 28.03.17: ISSUED TO CITY FOR REVIEW</p>	<p>RNI</p>	<p>ISSUED TO CITY FOR REVIEW</p>
<p>C 22.03.16: ISSUED TO D.O.W.</p>	<p>RNI</p>	<p>ISSUED TO D.O.W.</p>
<p>B 18.11.15: MINOR AMENDMENTS</p>	<p>RNI</p>	<p>MINOR AMENDMENTS</p>
<p>A 15.05.15: ISSUED FOR LWMS REVIEW</p>	<p>RNI</p>	<p>ISSUED FOR LWMS REVIEW</p>
<p>REV: DATE</p>	<p>DESCRIPTION</p>	<p>APPROVED</p>